

TIL-TEK Antennae





Quality

Quality Management System (QMS):

As a leading supplier of communications solutions to a global marketplace, TIL-TEK is committed to achieving the highest possible quality in all of its products and services. Both our Manufacturing and Research & Development facilities in Canada are ISO 9001:2000 compliant and have been certified since 1996.

Quality is one of the cornerstones of customer value along with innovation, cost and service/support. All product leaves the plant having gone through a rigorous process with a final verification stamp indicating conformance to that process. TIL-TEK is an ISO 9001:2000 registered company. This worldwide standard covers our entire operation of the company from order entry to shipping, from product design to production. Quality will never be compromised either over the long term or for short term convenience.

TIL-TEK's Quality Management System (QMS) provides the guidance and controls for an effective process management system. By implementing and maintaining the QMS, we will consistently provide product that meets customer and applicable regulatory requirements.

Quality Policy:

TIL-TEK will strive to provide our customer with products and services that ensure a high level of customer loyalty and satisfaction. We are committed to a Quality Management System that supports and encourages a culture of customer focus, teamwork, continuous improvement and standards of excellence.

Quality Objectives:

Management has ensured its quality objectives are established and communicated within the company. The Quality Objectives are measureable and consistent with TIL-TEK's Quality Policy and include the requirements needed for planning product realization.

TIL-TEK is committed to:

- * Customer loyalty and satisfaction.
- * Product quality, delivery and service.
- * Continuous improvement of the Quality Management System.
- * Teamwork and standards of excellence.







The specifications on our product data sheets are for reference purposes only and may change at any time without prior notice. For exact specifications, the factory or an authorized representative should be contacted.

TIL-TEK products are warranted against defects in material and workmanship under normal use for a period of three years from the date of shipment from the factory. Authorization must be obtained from TIL-TEK prior to returning a product for warranty service and the product must be returned to TIL-TEK with all transportation charges prepaid. See RMA policy for details.

Warranty repair or replacement without charge will be made only after inspection at the factory shows a defect in material or workmanship. TIL-TEK will pay the return transportation charges, but all other expenses including duty, taxes, storage and all other transaction fees shall be paid by the customer. The warranty period shall not be extended beyond its original term with respect to any part or parts repaired or replaced by TIL-TEK.

TIL-TEK is in no event liable for consequential damages or other costs of any nature resulting from the use of the products it manufactures. TIL-TEK is not liable for replacement from the use of any products damaged by lightning. TIL-TEK is not liable for delays in or inability to fulfill contractual obligations when the causes thereof are beyond the reasonable control of TIL-TEK. TIL-TEK neither assumes nor authorizes any person to assume for it, any obligation or liability other than as herein expressly stated.

This limited warranty is in lieu of all other warranties, either expressed or implied.



Return Material Authorization (RMA) Policy

TIL-TEK products are warranted against defects in material and workmanship under normal use for a period of three years from the date of shipment from the factory. A RMA number must be obtained from TIL-TEK prior to returning a product for warranty service. The product must be returned to TIL-TEK with all transportation charges prepaid.

Defective Antenna: Provided an antenna is found to be defective under the terms of the warranty, TIL-TEK will repair, replace and return the antenna at no charge to the customer.

<u>No Fault Found:</u> If, after evaluation, the antenna is found to still meet TIL-TEK's electrical and mechanical specifications:

- 1) The customer shall incur an evaluation charge of 25% of the list price or a minimum fee of \$80.00 CDN.
- 2) The customer is responsible to incur the return freight. The antenna will be returned via freight collect.

<u>Note:</u> If an advance replacement is sent and the returned antenna found to have no fault, the customer will be invoiced for the new replacement and will incur the freight to have the antenr returned to them.





Products

	TA-700 Series	698
	TA-800 Series	806
	TA-900 Series	901
	TA-1400 Series	1425-
	TA-1800 Series	1850-
	TA-1880 Series	1880-
	TA-2100 Series	2150-
	TA-2300 Series	2300-
	TA-2400 Series	2400-
	TA-2500 Series	2485-
	TA-3400 Series	3400-
	TA-4900 Series	4940-
	TA-5200 Series	5250-
	TA-5400 Series	5470-
	TA-5700 Series	5725-

- 3-806 MHz
- 6-960 MHz
- -940 MHz
- -1535 MHz
- -1990 MHz
- -1930 MHz
- -2700 MHz
- 2500 MHz
 - 2483 MHz
 - 2690 MHz
 - -3700 MHz
- -4990 MHz
- 5875 MHz
- 5875 MHz
- -5875 MHz



TA-703 Adjustable Sector

698 - 806 MHz

The TA-703 is a medium gain field adjustable sector for use in the 698-806 MHz licensed band. The patented side panel design allows the user to choose a 65, 90, or 110 degree azimuth pattern to optimize coverage. The excellent front to back ratio and side lobe reduction minimizes inter-sector interference. The robust design and versatility ensure superior performance and weatherability.

Electrical Specifications

Frequency Range: 698 - 806 MHz Gain: 13 dBi (11dBd) @ 65°, 12 dBi (10dBd) @ 90° 11 dBi (9dBd) @ 110º

VSWR: 1.5:1 max. Front to Back Ratio: 22dB@65°, 20dB@90° 18dB@110º

Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 65, 90, 110 degrees E-Plane Beamwidth: 21 degrees **Cross Pol. Discrimination:** 25 dB typical Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 48 in. (1220 mm) Width: 13 in. (330 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 35 lb. (15.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 269 lb. (122.1 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Irridited aluminum Reflector: Irridited aluminum Radome: Grav UV stabilized ASA Clamps: HDG steel



E-Plane

www.tiltek.com

Form 2006-703



TA-711 Adjustable Sector 698-806 MHz



The TA-711 is a high gain field adjustable sector for use in the 698-806 MHz licensed band. The patented adjustable side panel design allows the user to choose a 65, 90, or 120 degree azimuth pattern to easily optimize sectoral coverage, while the excellent front to back ratio and side lobe reduction minimizes possible inter-sector interference. The extremely robust design and versatility ensure superior performance and weatherability.

Electrical Specifications

Frequency Range: 698-806 MHz Gain: 13.75 dBd @ 65°. 12.75 dBd @ 90° 12.25 dBd @ 120°

VSWR: 1.5:1 Front to Back Ratio: 25dB@65º&90º, 20dB@120º Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 65, 90, 120 degrees E-Plane Beamwidth: 10 degrees Cross Pol. Discrimination: 25 dB typical Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 96 in. (2438 mm) Width: 13 in. (330 mm) Depth: 8.0 in. (203 mm) Weight (incl. Clamps): 62 lb. (28 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 538 lb. (244 kg) Mechanical Tilt: 0 - 6 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Irridited aluminum Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel







TA-803 Adjustable Sector 806-896, 824-896, 890-960 MHz

The TA-803 adjustable sector is a broadband dipole array, enclosed in an aluminum base with an ASA UV stabilized radome for superior performance and weatherability. Extremely low side lobes, an adjustable azimuth pattern and up to 15 degrees of mechanical downtilt make this a remarkably versatile antenna.

Electrical Specifications

Frequency Range: 806-896, 824-896, 890-960 MHz Gain: 12.5 dBd @ 60°, 11 dBd @ 90°

10.75 dBd @ 105°,10.5 dBd @ 120°

VSWR: 1.5:1 max. 1.35:1 typical
Front to Back Ratio: 25 dB min. 30 dB typical
Polarization: Vertical
Power Rating: 500 Watts
H-Plane Beamwidth: 60, 90, 105, 120 degrees
E-Plane Beamwidth: 18 degrees
Electrical Downtilt: 0°, 4°, 6°, 8°, 10°, 18°
Cross Pol. Discrimination: 20 dB min.
Impedance: 50 ohms nominal
Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 48 in. (1220 mm) Width: 13 in. (330 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 34 lb. (15.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 269 lb. (122.1 kg) Mechanical Tilt: 0 - 15 degrees (w/ TMC-104) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel





www.tiltek.com

(613) 258-5928

Form 2006-803

2005-02-15



TA-803-33 Sector 806-896, 824-896, 890-960 MHz



The TA-803-33 sector is a fixed pattern version of the TA-803 adjustable sector. It is enclosed in an aluminum base and has an ASA UV stabilized radome for superior performance. Extremely low side lobes and up to 15 degrees of mechanical downtilt make this antenna very useful for narrow coverage applications such as CDMA systems where interference between sites can be a particular problem.

Electrical Specifications

Mechanical Specifications

Frequency Range: 806-896, 824-896, 890-960 MHz Gain: 15 dBd VSWR: 1.5:1 max. 1.35:1 typical Front to Back Ratio: 30 dB min. Polarization: Vertical Power Rating: 500 Watts H-Plane Beamwidth: 33 degrees E-Plane Beamwidth: 18 degrees Electrical Downtilt: 0°, 4°, 6°, 8°, 10°, 18° Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

180

H-Plane

Length: 48 in. (1220 mm) Width: 29.6 in. (751.8 mm) Depth: 12 in. (305 mm) Weight (incl. Clamps): 43 lb. (19.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 580 lb. (263 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel





(613) 258-5928 Form 2006-803-33

dB



TA-803-45 Sector 806-896, 824-896, 890-960 MHz



The TA-803-45 sector is a fixed pattern version of the TA-803 adjustable sector. It is enclosed in an aluminum base and has an ASA UV stabilized radome for superior performance. Extremely low side lobes and up to 15 degrees of mechanical downtilt make this antenna very useful for narrow coverage applications such as CDMA systems where interference between sites can be a particular problem.

Electrical Specifications

Mechanical Specifications

Frequency Range: 806-896, 824-896, 890-960 MHz Gain: 14 dBd VSWR: 1.5:1 max. 1.35:1 typical Front to Back Ratio: 30 dB min. Polarization: Vertical Power Rating: 500 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 18 degrees Electrical Downtilt: 0°, 4°, 6°, 8°, 10°, 18° Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

180

dB

H-Plane

Length: 48 in. (1220 mm) Width: 19 in. (483 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 36 lb. (16.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 396 lb. (180 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel





(613) 258-5928 Specifications subject to change without notice Form 2006-803-45

2005-02-15



TA-807 Dual Band Directional Panel 824-896 / 1850-1990 MHz



The TA-807 is a dual band vertically or horizontally polarized directional panel antenna. The antenna consists of two dipole arrays and a cross band coupler enclosed in a UV stabilized ASA radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 824-896 / 1850-1990 MHz Gain: 7.5 +/- 0.5 dBd @ 824-896 MHz 16.5 +/- 0.5 dBi @ 1850-1990 MHz VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. / 28 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 60° @ 824-896 MHz 21° @ 1850-1990 MHz E-Plane Beamwidth: 64° @ 824-896 MHz 22° @ 1850-1990 MHz Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: 7/16 DIN female Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 18 in. (457 mm) Width: 18 in. (457 mm) Depth: 4.5 in. (114 mm) Weight (incl. Clamps): 12 lb. (5.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 140 lb. (63.6 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1 - 3.5 in. (25.4 - 88.9 mm)

Materials

Radiating Elements:Plated Copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel

H-Plane @ 824-896 MHz



H-Plane @ 1850-1990 MHz



E-Plane @ 824-896 MHz



E-Plane @ 1850-1990 MHz





TA-811 Adjustable Sector 806-896, 824-896, 890-960 MHz



The TA-811 adjustable sector is a high gain broadband dipole array enclosed in an aluminum base and has an ASA UV stabilized radome for superior performance and weatherability. Extremely low side lobes, an adjustable azimuth pattern and up to 6 degrees of mechanical downtilt make this a remarkably versatile antenna.

Electrical Specifications

Frequency Range: 806-896, 824-896, 890-960 MHz Gain: 15.5 dBd @ 60°, 14 dBd @ 90°

13.75 dBd @ 105°, 13.5 dBd @ 120° VSWR: 1.5:1 max. 1.35:1 typ. Front to Back Ratio: 25 dB min. 30 dB typ. Polarization: Vertical Power Rating: 500 Watts H-Plane Beamwidth: 60, 90, 105, 120 degrees E-Plane Beamwidth: 8.5 degrees Electrical Downtilt: 0°, 2°, 4°, 5°, 6°, 10°, 13°, 15° Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 96 in. (2438 mm) Width: 13 in. (330 mm) Depth: 8.0 in. (203 mm) Weight (incl. Clamps): 62 lb. (28 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 538 lb. (244 kg) Mechanical Tilt: 0 - 6 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel





TIL-TEK Antennae Inc.

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(613) 258-5928 Form 2006-811

2005-02-15

Specifications subject to change without notice



TA-811-33 Sector 806-896, 824-896, 890-960 MHz

The TA-811-33 is a fixed pattern version of the TA-811 adjustable sector. It is enclosed in an aluminum base and has an ASA UV stabilized radome for superior performance and weatherability. Extremely low side lobes and up to 15 degrees of electrical downtilt make this a remarkably versatile antenna.

Electrical Specifications

Frequency Range: 806-896, 824-896, 890-960 MHz Gain: 17 dBd @ 33° VSWR: 1.5:1 max. 1.35:1 typical Front to Back Ratio: 25 dB min. 30 dB typical Polarization: Vertical Power Rating: 500 Watts H-Plane Beamwidth: 33 degrees E-Plane Beamwidth: 8.5 degrees Electrical Downtilt: 0°, 2°, 4°, 5°, 6°, 10°, 13°, 15° Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 96 in. (2438 mm) Width: 30 in. (762 mm) Depth: 13 in. (330 mm) Weight (incl. Clamps): 72 lb. (33 kg) Rated Wind Velocity: 125 mph (201 km/h) Hor. Thrust at rated wind: 1121 lb. (508 kg) Mechanical Tilt: 0 degrees fixed Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

E-Plane

Radiating Elements: Irridited aluminum Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG and EDZ steel





1.3



TA-811-45 Sector 806-896, 824-896, 890-960 MHz

The TA-811-45 is a fixed pattern version of the TA-811 adjustable sector. It is enclosed in an aluminum base and has an ASA UV stabilized radome for superior performance and weatherability. Extremely low side lobes and up to 6 degrees of mechanical downtilt make this a remarkably versatile antenna.

Electrical Specifications

Frequency Range: 806-896, 824-896, 890-960 MHz Gain: 17 dBd @ 45° VSWR: 1.5:1 max. 1.35:1 typical Front to Back Ratio: 25 dB min. 30 dB typical Polarization: Vertical Power Rating: 500 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 8.5 degrees Electrical Downtilt: 0°, 2°, 4°, 5°, 6°, 10°, 13°, 15° Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 96 in. (2438 mm) Width: 19 in. (483 mm) Depth: 8.2 in. (208 mm) Weight (incl. Clamps): 62 lb. (28 kg) Rated Wind Velocity: 120 mph (193 km/h) Hor. Thrust at rated wind: 792 lb. (359 kg) Mechanical Tilt: 0 - 6 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel







TA-814 Bidirectional 806-866, 824-896, 890-960 MHz



The TA-814 bidirectional antenna is used to provide coverage along service corridors where omnidirectional coverage is either not required or not desired. The antenna mounts to the side of a tower or pipe, therefore eliminating the need for tower top space. Low side lobes and up to 6 degrees of electrical downtilt makes this antenna useful for many applications.

Electrical Specifications

Frequency Range: 806-866, 824-896, 890-960 MHz Gain: 9.5 dBd bidirectional VSWR: 1.5:1 max. 1.35:1 typical Polarization: Vertical Power Rating: 500 Watts H-Plane Beamwidth: 60 degrees each side E-Plane Beamwidth: 18 degrees Electrical_Downtilt: 0, 4, 6 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Length: 48 in. (1220 mm) Width: 6 in. (152 mm) Depth: 13 in. (330 mm) Weight (incl. Clamps): 40 lb. (18.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 270 lb. (123 kg) Mechanical Tilt: 0 - 6 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Irridited aluminum Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel



E-Plane





1.2



TA-817 Adjustable Sector 806-866, 824-896, 890-960 MHz

The TA-817 adjustable sector is a broadband dipole array enclosed in an aluminum base and has an ASA UV stabilized radome for superior performance and weatherability. Low side lobes, an adjustable azimuth pattern and up to 8 degrees of mechanical downtilt make this a remarkably versatile antenna.

Electrical Specifications

Frequency Range: 806-866, 824-896, 890-960 MHz Gain: 14.5 dBd @ 60°, 13 dBd @ 90°

12.75 dBd @ 105°, 12.5 dBd @ 120° VSWR: 1.5:1 max. 1.35:1 typical Front to Back Ratio: 25 dB min. 30 dB typical Polarization: Vertical

Power Rating: 500 Watts H-Plane Beamwidth: 60, 90, 105, 120 degrees

E-Plane Beamwidth: 10 degrees Electrical Downtilt: 0, 5 degrees Cross Pol. Discrimination: 25 dB min.

Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

H-Plane



Length: 76 in. (1930 mm) Width: 13 in. (330 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 45 lb. (20.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 429 lb. (195 kg) Mechanical Tilt: 0 - 8 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel







Form 2006-817



TA-824-4-45 Dual Polarized Sector

806-866, 824-896, 872-960 MHz



The TA-824-4-45 is a dual slant polarized 45 degree sectoral antenna. The antenna is intended for use where multiple antennas may not be practical. It consists of a broadband dipole array on an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 806-866, 824-896, 872-960 MHz Gain: 2 x 14 dBd co-polarized VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Dual slant +45 and -45 Power Rating: 500 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 19 degrees Electrical Downtilt: 0°,4°,6°,8°,9°,12°,15°,18° Port to Port Isolation: 30 dB Impedance: 50 ohms nominal Termination: 2 x N female (7/16 optional)

Mechanical Specifications

Length: 48 in. (1220 mm) Width: 19.25 in. (489 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 36 lb. (16.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 401 lb. (182 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Irridited aluminum Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel

Typical mid band values. (For details , contact factory)

Azimuth









TA-824-4-65 Dual Polarized Sector

824-896, 872-960 MHz



The TA-824-4-65 is a dual slant polarized 65 degree sectoral antenna. The antenna is intended for use where multiple antennas may not be practical. It consists of a broadband dipole array on an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 824-896, 872-960 MHz Gain: 2 x 12.5 dBd co-polarized VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Dual slant +45 and -45 Power Rating: 500 Watts H-Plane Beamwidth: 65 degrees E-Plane Beamwidth: 19 degrees Electrical Downtilt: 0°,4°,6°,8°,9°,12°,15°,18° Port to Port Isolation: 30 dB Impedance: 50 ohms nominal Termination: 2 x N female (7/16 optional)

Mechanical Specifications

Length: 48 in. (1220 mm) Width: 13 in. (330 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 27 lb. (12.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 270 lb. (123 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel

Typical mid band values. (For details , contact factory)

Azimuth









TA-824-4-90 Dual Polarized Sector

824-896 MHz



The TA-824-4-90 is a dual slant polarized 90 degree sectoral antenna. The antenna is intended for use where multiple antennas may not be practical. It consists of a broadband dipole array on an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 824-896 MHz Gain: 2 x 10.5 +/- 0.5 dBd co-polarized VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Dual slant +45 and -45 Power Rating: 500 Watts H-Plane Beamwidth: 90 degrees E-Plane Beamwidth: 18 degrees Electrical Downtilt: 0°, 4°, 6° Port to Port Isolation: 25 dB Impedance: 50 ohms nominal Termination: 2 x N female (7/16 optional)

Typical mid band values. (For details , contact factory)

Azimuth

Mechanical Specifications

Length: 48 in. (1220 mm) Width: 13.5 in. (343 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 29 lb. (13.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 274 lb. (124.2 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel

Elevation





1.3



TA-853 Dual Band Omnidirectional

824 - 896 / 1850 - 1990 MHz



The TA-853 is a vertically polarized 2.5 dBd / 7.5 dBi dual band omnidirectional antenna. The antenna consists of two dipole arrays and a cross band coupler enclosed in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 824 - 896 / 1850 - 1990 MHz Gain: 2.5 dBd (824-896 MHz) 7.5 dBi (1850-1990 MHz) VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 65 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 35 degrees (824-896 MHz) 16 degrees (1850-1990 MHz) Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: Radiating Section: 42 in. (1067 mm) Base Section: 12 in. (305 mm) Total: 54 in. (1372 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 17 lb. (7.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 35 lb. (16 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:CopperRadome:Gray UV stabilized fiberglassClamps:EDZ steel

E-Plane

824-896 MHz

1850-1990 MHz





TA-925 Panel 902-928 MHz



The TA-925 is a vertically or horizontally polarized directional panel antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 902-928 MHz Gain: 7.8 +/- 0.5 dBd VSWR: 1.5:1 max. Front to Back Ratio: 20 dB Polarization: Vertical or Horizontal Power Rating: 50 Watts H-Plane Beamwidth: 55 degrees E-Plane Beamwidth: 58 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 12 in. (302.8 mm) Width: 12 in. (302.8 mm) **Depth:** 2.7 in. (68.6 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 63 lb. (28.6 kg) Mechanical Tilt: 0 +/- 10 degrees Mounting (O.D.): 1.75 - 3.25 in. (44.5 - 85 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





H-Plane





The TA-926H-4-120 is a horizontally polarized 120 degree sectoral antenna. It consists of a broadband dipole array on an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 902-928 MHz Gain: 9 dBd +/- 0.5 dBd VSWR: 1.5:1 max. Front to Back Ratio: 18 dB min Polarization: Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 19° E-Plane Beamwidth: 115° **Cross Pol. Discrimination:** 20 dB min Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications Length: 48 in. (1220 mm)

Width: 21 in. (533.4 mm) **Depth:** 8 in (203 mm) Weight (incl. Clamps): 29 lb. (13.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 437 lb. (198.2 kg) Mechanical Tilt: 0 - 13 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

TA-926H-4-120 Sector 902-928 MHz

> Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: EDZ steel

H-Plane





E-Plane

70

1.2



TA-926VH-4-90 Dual Polarized Sector

902-928 MHz



The TA-926VH-4-90 is a dual polarized 90 degree sectoral antenna. The antenna incorporates separate vertically and horizontally polarized sections which can be used separately or simultaneously dependent upon transceiver characteristics. It consists of a broadband dipole array on an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Mechanical Specifications

Length: 48 in. (1220 mm)

Width: 13.5 in. (343 mm)

Frequency Range: 902-928 MHz Gain: 2 x 10.0 dBd co-polarized VSWR: 1.5:1 max. Front to Back Ratio: Vpol:20 dB min./Hpol:15 dB min. Polarization: Dual Vpol & Hpol Power Rating: 200 Watts Azimuth Beamwidth: Vpol: 90° / Hpol: 85° Elevation Beamwidth: Vpol: 17° / Hpol: 19° Cross Pol. Discrimination: 20 dB min. Electrical Downtilt: 0° Port to Port Isolation: 30 dB typ. Impedance: 50 ohms nominal Termination: 2 x N female

Depth: 8 in. (203 mm) Weight (incl. Clamps): 25 lb. (11.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 280 lb. (127.0 kg) Mechanical Tilt: 0 - 13 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel





Hpol Azimuth



Vpol Elevation



Hpol Elevation





TA-926VH-4-120 Dual Polarized Sector

902-928 MHz



The TA-926VH-4-120 is a dual polarized 120 degree sectoral antenna. The antenna incorporates separate vertically and horizontally polarized sections which can be used separately or simultaneously dependent upon transceiver characteristics. It consists of a broadband dipole array on an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Mechanical Specifications

Frequency Range: 902-928 MHz Gain: 2 x 9 dBd co-polarized VSWR: 1.5:1 max. Front to Back Ratio: Vpol:20 dB min./Hpol:19 dB min. Polarization: Dual Vpol & Hpol Power Rating: 200 Watts Azimuth Beamwidth: Vpol: 120° / Hpol: 115° Elevation Beamwidth: Vpol: 17° / Hpol: 19° Cross Pol. Discrimination: 20 dB min. Electrical Downtilt: 0° Port to Port Isolation: 30 dB typ. Impedance: 50 ohms nominal Termination: 2 x N female

Typical mid band values. (For details , contact factory)

Length: 48 in. (1220 mm) Width: 21 in. (533.4 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 29 lb. (13.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 438 lb (198.7 kg) Mechanical Tilt: 0 - 13 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: EDZ steel



Hpol Azimuth



Vpol Elevation



Hpol Elevation



1.2



TA-926VH-8-120 Dual Polarized Sector

902-928 MHz



The TA-926VH-8-120 is a dual polarized 120 degree sectoral antenna. The antenna incorporates separate vertically and horizontally polarized sections which can be used separately or simultaneously dependent upon transceiver characteristics. It consists of a broadband dipole array on an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Mechanical Specifications

Length: 76 in. (1930 mm)

Frequency Range: 902-928 MHz Gain: 2 x 11 dBd co-polarized VSWR: 1.5:1 max. Front to Back Ratio: Vpol:20 dB min./Hpol: 16.5 dB min. Polarization: Dual Vpol & Hpol Power Rating: 200 Watts Azimuth Beamwidth: Vpol: 120° / Hpol: 115° Elevation Beamwidth: Vpol: 120° / Hpol: 11° Cross Pol. Discrimination: 20 dB Electrical Downtilt: 0° Port to Port Isolation: 30 dB Impedance: 50 ohms nominal Termination: 2 x N female

Typical mid band values. (For details , contact factory)

 Width:
 19.6 in. (498 mm)

 Depth:
 8 in. (203 mm)

 Weight (incl. Clamps):
 50 lb. (22.7 kg)

 Rated Wind Velocity:
 125 mph (200 km/h)

 Hor. Thrust at rated wind:
 645 lb. (292.5 kg)

 Mechanical Tilt:
 0 - 7.5 degrees

 Mounting (O.D.):
 1.75 - 4.5 in. (44.5 - 102 mm)

Materials

 Radiating Elements:
 Plated copper on PCB

 Reflector:
 Irridited aluminum

 Radome:
 Gray UV stabilized ASA

 Clamps:
 EDZ steel



Hpol Azimuth



Vpol Elevation



Hpol Elevation





TA-952 Omnidirectional 901-940 MHz

The TA-952 is a 9.5 dBd omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 901-940 MHz Gain: 9.5 dBd VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 500 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 5 +/- 0.5 degrees Cross Pol. Discrimination: 20 dB Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 184 in. (4674 mm) Diameter: 2.25 in. (57.2 mm) Weight (Incl. Clamps): 30 lb. (13.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 118 lb. (53.6 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Copper Radome: Gray UV stabilized ASA Clamps: HDG steel





TA-1403 Panel 1425-1535 MHz

The TA-1403 is a medium gain 11 dBi panel antenna. The antenna consists of a broadband dipole enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1425-1535 MHz Gain: 11 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 250 Watts H-Plane Beamwidth: 48 degrees E-Plane Beamwidth: 52 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Length: 14 in. (356 mm) Width: 12 in. (305 mm) **Depth:** 4 in. (102 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 73 lb. (33.2 kg) Mounting (O.D.): 1.9 in. (48.3 mm)

Materials

Radiating Elements: Irridited aluminum Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel





1.0



TA-1404 Adjustable Sector

1425-1535 MHz



The TA-1404 is a vertically polarized adjustable sectoral antenna. The antenna consists of a broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1425-1535 MHz Gain: 15 dBi @ 60°, 13 dBi @ 90° 12 dBi @ 120°, 10.5 dBi @ 160°

VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. 25 dB typical Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 60, 90, 120, 160 degrees E-Plane Beamwidth: 16 degrees Electrical Downtilt: 0, 2, 4, 6 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 40 in. (1016 mm) Width: 8 in. (203 mm) Depth: 6 in. (152 mm) Weight (incl. Clamps): 25 lb. (11.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 139 lb. (63 kg) Mechanical Tilt: 0 - 15 degrees (optional) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel







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Form 2006-1404

2002-08-07

Specifications subject to change without notice



TA-1404-40 Sector 1425-1535 MHz

The TA-1404-40 is a vertically polarized 40 degree sectoral antenna. The antenna consists of a broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1425-1535 MHz Gain: 16.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. 25 typical Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 40 degrees E-Plane Beamwidth: 16 degrees Electrical Downtilt: 0, 2, 4, 6 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

180

dB

H-Plane

Mechanical Specifications

Length: 40 in. (1016 mm) Width: 11.5 in. (292 mm) Depth: 6 in. (152 mm) Weight (incl. Clamps): 25 lb. (11.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 199 lb. (90 kg) Mechanical Tilt: 0 - 15 degrees (optional) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Irridited aluminumReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel

E-Plane



Form 2006-1404-40

2002-08-08



TA-1406 Panel 1425-1535 MHz

The TA-1406 is a medium gain vertically or horizontally polarized panel antenna. The antenna was designed specifically for rural point to multipoint systems and as such has relatively wide beamwidths. It is designed for severe weather conditions. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1425-1535 MHz Gain: 17 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 30 degrees E-Plane Beamwidth: 18 degrees Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 24 in. (610 mm) Width: 17 in. (432 mm) Depth: 5.5 in. (140 mm) Weight (incl. Clamps): 10 lb. (4.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 159 lb. (72 kg) Mounting (O.D.): 1.9 in. (48.3 mm)

Materials

Radiating Elements: Irridited aluminum Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel



180

E-Plane



90



TA-1436 Grid Parabolic

1425-1535 MHz



The TA-1436 is a grid parabolic antenna with a broadband dipole horn feed which is sealed for superior weatherability. The antenna is extremely rugged and is designed to provide superior performance in any conditions. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1425-1535 MHz Gain: 21 dBi VSWR: 1.35:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 250 Watts H-Plane Beamwidth: 14 degrees E-Plane Beamwidth: 16 degrees Cross Pol. Discrimination: 25 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Diameter: 38.5 in. (978 mm) Weight (Incl. clamps): 40 lb. (18.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 177 lb. (80.5 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Aluminum Reflector: Irridited aluminum Clamps: HDG steel

Typical mid band values. (For details , contact factory)

H-Plane

E-Plane





1.1



TA-1448 Grid Parabolic

1425-1535 MHz



The TA-1448 is a grid parabolic antenna with a broadband dipole horn feed which is sealed for superior weatherability. The antenna is extremely rugged and is designed to provide superior performance in any conditions. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1425-1535 MHz Gain: 23.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 250 Watts H-Plane Beamwidth: 11 degrees E-Plane Beamwidth: 12 degrees Cross Pol. Discrimination: 30 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Diameter: 50.5 in. (1283 mm) Weight (Incl. clamps): 50 lb. (22.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 304 lb. (138.2 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Aluminum Reflector: Irridited aluminum Clamps: HDG steel

Typical mid band values. (For details , contact factory)

H-Plane







TA-1450 Omnidirectional

1425-1535 MHz



The TA-1450 is a 10 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1425-1535 MHz Gain: 10 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 8 degrees Electrical Downtilt: 0, 2, 4 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 67.5 in. (1714.5 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 18 lb. (8.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 48 lb. (21.8 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:CopperRadome:Gray UV stabilized fiberglassClamps:HDG steel





TA-1450-2 Omnidirectional

1425-1535 MHz

The TA-1450-2 is a 12 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 1425-1535 MHz Gain: 12 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 4 degrees Electrical Downtilt: 0, 2 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Mechanical Specifications

Length: 136 in. (3455 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 28 lb. (12.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 88 lb. (40 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:CopperRadome:Gray UV stabilized fiberglassClamps:HDG steel

Typical mid band values. (For details , contact factory)





TA-807 Dual Band Directional Panel 824-896 / 1850-1990 MHz



The TA-807 is a dual band vertically or horizontally polarized directional panel antenna. The antenna consists of two dipole arrays and a cross band coupler enclosed in a UV stabilized ASA radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 824-896 / 1850-1990 MHz Gain: 7.5 +/- 0.5 dBd @ 824-896 MHz 16.5 +/- 0.5 dBi @ 1850-1990 MHz VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. / 28 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 60° @ 824-896 MHz 21° @ 1850-1990 MHz E-Plane Beamwidth: 64° @ 824-896 MHz 22° @ 1850-1990 MHz Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: 7/16 DIN female Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 18 in. (457 mm) Width: 18 in. (457 mm) Depth: 4.5 in. (114 mm) Weight (incl. Clamps): 12 lb. (5.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 140 lb. (63.6 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1 - 3.5 in. (25.4 - 88.9 mm)

Materials

Radiating Elements:Plated Copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel

H-Plane @ 824-896 MHz



H-Plane @ 1850-1990 MHz



E-Plane @ 824-896 MHz



E-Plane @ 1850-1990 MHz





TA-853 Dual Band Omnidirectional

824 - 896 / 1850 - 1990 MHz



The TA-853 is a vertically polarized 2.5 dBd / 7.5 dBi dual band omnidirectional antenna. The antenna consists of two dipole arrays and a cross band coupler enclosed in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 824 - 896 / 1850 - 1990 MHz Gain: 2.5 dBd (824-896 MHz) 7.5 dBi (1850-1990 MHz) VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 65 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 35 degrees (824-896 MHz) 16 degrees (1850-1990 MHz) Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: Radiating Section: 42 in. (1067 mm) Base Section: 12 in. (305 mm) Total: 54 in. (1372 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 17 lb. (7.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 35 lb. (16 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:CopperRadome:Gray UV stabilized fiberglassClamps:EDZ steel

E-Plane

824-896 MHz

1850-1990 MHz




TA-1806-16-33 Sector 1850-1990 MHz

The TA-1806-16-33 is a vertically polarized 33 degree sectoral antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The use of 16 radiating elements allows for precise pattern control including upper sidelobe reduction and null fill. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1850-1990 MHz Gain: 18.25 dBi VSWR: 1.43:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 33 +/- 2.5 degrees E-Plane Beamwidth: 7.8 +/- 1 degrees Electrical Downtilt: 2, 5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal 3rd Order I.M. (2x20W): -147 dBc Termination: 7/16 DIN female (N optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 50 in. (1270 mm) Width: 12.3 in. (312 mm) Depth: 5.2 in. (133 mm) Weight (incl. Clamps): 21 lb. (9.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 356 lb. (162 kg) Mechanical Tilt: 0 - 15° (in 1° increments) Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel







TA-1806-16-45 Sector

1850-1990 MHz



The TA-1806-16-45 is a vertically polarized 45 degree sectoral antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The use of 16 radiating elements allows for precise pattern control including upper sidelobe reduction and null fill. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1850-1990 MHz Gain: 17 dBi VSWR: 1.43:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 45 +/- 3 degrees E-Plane Beamwidth: 7.8 +/- 1 degrees Electrical Downtilt: 2, 5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal 3rd Order I.M. (2x20W): -147 dBc Termination: 7/16 DIN female (N optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 50 in. (1270 mm) Width: 9.7 in. (246 mm) Depth: 3.75 in. (95 mm) Weight (incl. Clamps): 19 lb. (8.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 280 lb. (127 kg) Mechanical Tilt: 0 - 15° (in 1° increments) Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel







TA-1806-16-62 Sector

1850-1990 MHz



The TA-1806-16-62 is a vertically polarized 62 degree sectoral antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The use of 16 radiating elements allows for precise pattern control including upper sidelobe reduction and null fill. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1850-1990 MHz Gain: 16.5 dBi VSWR: 1.43:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 62 +/- 3 degrees E-Plane Beamwidth: 7.8 +/- 1 degrees Electrical Downtilt: 2, 5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal 3rd Order I.M. (2x20W): -147 dBc Termination: 7/16 DIN female (N optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 50 in. (1270 mm) Width: 6.5 in. (165 mm) Depth: 3.75 in. (95 mm) Weight (incl. Clamps): 14 lb. (6.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 141 lb. (64.1 kg) Mechanical Tilt: 0 - 15° (in 1° increments) Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel

E-Plane







TA-1806-16-90 Sector

1850-1990 MHz



The TA-1806-16-90 is a vertically polarized 90 degree sectoral antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The use of 16 radiating elements allows for precise pattern control including upper sidelobe reduction and null fill. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1850-1990 MHz Gain: 15 dBi VSWR: 1.43:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 250 Watts H-Plane Beamwidth: 90 +/- 3 degrees E-Plane Beamwidth: 7.8 +/- 1 degrees Electrical Downtilt: 2, 5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal 3rd Order I.M. (2x20W): -147 dBc Termination: 7/16 DIN female (N optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 50 in. (1270 mm) Width: 6.5 in. (165 mm) Depth: 3.8 in. (96.5 mm) Weight (incl. Clamps): 14 lb. (6.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 141 lb. (64.1 kg) Mechanical Tilt: 0 - 15° (in 1° increments) Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel







TA-1807-8-60 Dual Polarized Sector

1850-1990 MHz



The TA-1807-8-60 is a dual slant polarized 60 degree sectoral antenna. The antenna is intended for use where multiple antennas may not be practical. It consists of a broadband patch array on an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1850-1990 MHz Gain: 17 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB Polarization: +/- 45 degrees (slant) Power Rating: 250 Watts Azimuth Beamwidth: 60 degrees Elevation Beamwidth: 7.5 degrees Cross Pol. Discrimination: 15 dB min. Electrical Downtilt: 0, 2, 5 degrees Port to Port Isolation: 30 dB min. 3rd Order I.M. (2x20W): -147 dBc Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 43 in. (1092 mm) Width: 6 in. (152.4 mm) Depth: 1.85 in. (46.9 mm) Weight (incl. Clamps): 10 lb. (4.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 117 lb (53.1 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.90 - 4.5 in. (48 - 114 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and steel







TA-1809 Directional Panel

1850-1990 MHz



The TA-1809 consists of a printed broadband dipole array enclosed in an aluminum base with a UV stabilized ASA radome for superior weatherability. It was designed for applications such as PCS repeater sites which require medium gain and low sidelobes. It can be mounted for either vertical or horizontal polarization. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1850-1990 MHz Gain: 18 dBi VSWR: 1.5:1 max Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 250 Watts H-Plane Beamwidth: 21 +/- 1 degrees E-Plane Beamwidth: 22 +/- 1 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal 3rd Order I.M. (2x20W): -147 dBc Termination: 7/16 DIN female (N-optional)

Typical mid band values. (For details , contact factory)

H-Plane



Length: 18 in. (457 mm) Width: 18 in. (457 mm) Depth: 2.25 in. (57 mm) Weight (incl. Clamps): 11 lb. (5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 140 lb. (63.6 kg) Mechanical Tilt: 0 - 15 degrees (optional) Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel







TA-1850 Omnidirectional

1850-1990 MHz

The TA-1850 is a 10 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1850-1990 MHz Gain: 10 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 200 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 8 degrees Electrical Downtilt: 0, 2, 4 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 DIN optional)

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 57 in. (1448 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 17 lb. (7.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 37 lb. (16.8 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Copper Radome: Gray UV stabilized fiberglass Clamps: HDG steel





TA-1850-2 Omnidirectional 1850-1990 MHz

The TA-1850-2 is a 12 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical. **Electrical Specifications** Frequency Range: 1850-1990 MHz Gain: 12 dBi VSWR: 1.5:1 max.

Polarization: Vertical Power Rating: 200 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 4 degrees Electrical Downtilt: 0, 2 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 DIN optional)

Mechanical Specifications

Length: 100.5 in. (2553 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 20 lb. (9.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 65 lb. (29.5 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Copper Radome: Gray UV stabilized fiberglass Clamps: HDG steel

Typical mid band values. (For details , contact factory)





TA-1881-4-120 Sector

1880-1930 MHz



The TA-1881-4-120 is a vertically polarized 120 degree sectoral antenna designed for DECT and PCS applications requiring medium gain and a relatively broad vertical radiation pattern. The printed circuit radiating assembly and transmission lines are enclosed in an aluminum cavity with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1880-1930 MHz Gain: 10.5 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 10 Watts H-Plane Beamwidth: 120 degrees E-Plane Beamwidth: 18 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Length: 20.2 in. (513 mm) Width: 4 in. (102 mm) Depth: 3.6 in. (92 mm) Weight (incl. Clamps): 3 lb. (1.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 35 lb. (15.9 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

E-Plane

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel

Typical mid band values. (For details , contact factory)

H-Plane







TA-1882-2-60 Sector 1850-1990 MHz



The TA-1882-2-60 is a vertically polarized 60 degree sectoral antenna, designed for DECT and PCS applications requiring lower gain and a relatively broad vertical radiation pattern. The printed circuit radiating assembly and transmission lines are enclosed in an aluminum cavity with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1850-1990 MHz Gain: 12 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 200 Watts H-Plane Beamwidth: 60 degrees E-Plane Beamwidth: 25 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Length: 11.8 in. (300 mm) Width: 6.7 in. (170 mm) Depth: 3.6 in. (92 mm) Weight (incl. Clamps): 2 lb. (0.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 46 lb. (21 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

E-Plane

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel

Typical mid band values. (For details , contact factory)

H-Plane







TA-1882-2-85 Sector

1880-1930 MHz



The TA-1882-2-85 is a vertically polarized 85 degree sectoral antenna, designed for DECT and PCS applications requiring lower gain and a relatively broad vertical radiation pattern. The printed circuit radiating assembly and transmission lines are enclosed in an aluminum cavity with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1880-1930 MHz Gain: 10.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB Polarization: Vertical Power Rating: 200 Watts H-Plane Beamwidth: 85 degrees E-Plane Beamwidth: 25 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Length: 11.8 in. (300 mm) Width: 4.2 in. (102 mm) Depth: 3.6 in. (92 mm) Weight (incl. Clamps): 2 lb. (0.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 18 lb. (8.2 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

E-Plane

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel

Typical mid band values. (For details , contact factory)

H-Plane







TA-1882-4-60 Sector 1880-1930 MHz



The TA-1882-4-60 is a vertically polarized 60 degree sectoral antenna, designed for DECT and PCS applications requiring medium gain and a relatively narrow vertical radiation pattern. The printed circuit radiating assembly and transmission lines are enclosed in an aluminum cavity with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 1880-1930 MHz Gain: 15 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB Polarization: Vertical Power Rating: 200 Watts H-Plane Beamwidth: 60 degrees E-Plane Beamwidth: 14.5 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 23.2 in. (589 mm) Width: 6.25 in. (161 mm) Depth: 3.6 in. (92 mm) Weight (incl. Clamps): 2 lb. (0.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 85 lb. (38.6 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel









TA-2104-12-90 Sector 2150-2350 or 2500-2700 MHz

The TA-2104-12-90 is a broadband vertically polarized 90 degree sectoral antenna. It was designed specifically for applications requiring superior functionality to maximize overall system performance. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2150-2350 or 2500-2700 MHz Gain: 16.5 +/- 1 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical Power Rating: 200 Watts H-Plane Beamwidth: 85° min. E-Plane Beamwidth: 85° min. Electrical Downtilt: 0.5° +/- 0.5° Cross Pol. Discrimination: 20 dB (0° - 90°) 28 dB (90° - 135°) 32 dB (135°-180°)

Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 49 in. (1245 mm) Width: 17 in. (432 mm) Depth: 5 in. (127 mm) Weight (incl. Clamps): 22 lb. (10.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 238 lb. (108 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements:Tin plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized plasticClamps:Aluminum and HDG steel









TA-2104-16-90 Sector 2150-2350 or 2500-2700 MHz

The TA-2104-16-90 is a broadband vertically polarized 90 degree sectoral antenna. It was designed specifically for applications requiring superior functionality to maximize overall system performance. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2150-2350 or 2500-2700 MHz Gain: 17.5 +/- 1 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical Power Rating: 200 Watts H-Plane Beamwidth: 85° min. E-Plane Beamwidth: 5° min. Electrical Downtilt: 0.5° +/- 0.5° Cross Pol. Discrimination: 20 dB (0° - 90°) 28 dB (90° - 135°) 32 dB (135°-180°)

Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications Length: 64 in. (1626 mm)

Width: 17 in. (432 mm) Depth: 5 in. (127 mm) Weight (incl. Clamps): 28 lb. (12.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 316 lb. (143 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements:Tin plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized plasticClamps:Aluminum and HDG steel







TA-2105H-10-45 Sector 2150-2350 / 2500-2700 MHz



The TA-2105H-10-45 is a horizontally polarized 45 degree sectoral antenna. It was designed specifically for applications requiring superior functionality to maximize overall system performance. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2150-2350 / 2500-2700 MHz Gain: 17 dBi min. VSWR: 1.5:1 max. Front to Back Ratio: 30 dB (-67° to +67°) Polarization: Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 11° +/- 1.5° E-Plane Beamwidth: 40° +/- 5° Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 38.5 in. (978 mm) Width: 18 in. (457 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 22 lb. (10 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 300 lb. (136 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel









TA-2105H-12-90 Sector 2150-2350 or 2500-2700 MHz

The TA-2105H-12-90 is a broadband horizontally polarized 90 degree sectoral antenna. It was designed specifically for applications requiring superior functionality to maximize overall system performance. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2150-2350 or 2500-2700 MHz Gain: 16 +/- 1 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 7° min. E-Plane Beamwidth: 85° min. Electrical Downtilt: 0.5° +/- 0.5° Cross Pol. Discrimination: 20 dB (0° - 90°) 28 dB (90° - 135°) 32 dB (135°-180°)

Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

E-Plane

Mechanical Specifications

Length: 49 in. (1245 mm) Width: 17 in. (432 mm) Depth: 5 in. (127 mm) Weight (incl. Clamps): 23 lb. (10.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 238 lb. (108 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized plastic Clamps: Aluminum and HDG steel









TA-2105H-16-90 Sector 2150-2350 or 2500-2700 MHz

The TA-2105H-16-90 is a broadband horizontally polarized 90 degree sectoral antenna. It was designed specifically for applications requiring superior functionality to maximize overall system performance. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2150-2350 or 2500-2700 MHz Gain: 17.5 +/- 1 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 5° min. E-Plane Beamwidth: 85° min. Electrical Downtilt: 0.5° +/- 0.5° Cross Pol. Discrimination: 20 dB (0° - 90°) 28 dB (90° - 135°) 32 dB (135°-180°)

Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 64 in. (1626 mm) Width: 17 in. (432 mm) Depth: 5 in. (127 mm) Weight (incl. Clamps): 28 lb. (12.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 316 lb. (143 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized plastic Clamps: Aluminum and HDG steel



H-Plane





TA-2107 Panel 2150-2350 MHz

The TA-2107 is a vertically or horizontally polarized panel antenna, designed specifically for applications requiring superior functionality to maximize overall system performance. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2150-2350 MHz Gain: 17 dBi min. VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 20° +/- 2° E-Plane Beamwidth: 20° +/- 2° Cross Pol. Discrimination: 30 dB (+/-34° to +/-45°) 35 dB (+/-45° to +/-180°) Impedance: 50 ohms nominal

Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

Side Length: 18 in. (457 mm)

Mechanical Specifications

Diagonal Length: 25.25 in. (641 mm) Width: 18 in. (457 mm) Depth: 5.1 in. (130 mm) Weight (incl. Clamps): 13 lb. (5.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 83 lb. (37.6 kg) Mechanical Tilt: 0 - 10 degrees Mounting (O.D.): 1.0 - 3.5 in. (25.4 - 89 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel

E-Plane





H-Plane



TA-2304 Adjustable Sector 2300-2500 MHz



The TA-2304 is a vertically polarized sectoral antenna which has adjustable side panels for 60-160 degree azimuth patterns. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 15 dBi @ 60°, 13 dBi @ 90°

12 dBi @ 120°, 10.5 dBi @ 160° VSWR: 1.5:1 max.

Front to Back Ratio: 20 dB min.(15 dB @160°) Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 60, 90, 120, 160 degrees E-Plane Beamwidth: 14.5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 43 lb. (19.5 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel





TIL-TEK Antennae Inc.

www.tiltek.com

Form 2006-2304



TA-2304-45 Sector 2300-2500 MHz



The TA-2304-45 is a vertically polarized sectoral antenna with a fixed 45 degree pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 16 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 14.5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 6.5 in. (165 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 43 lb. (19.5 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel







TA-2304-180 Sector 2300-2500 MHz



The TA-2304-180 is a vertically polarized sectoral antenna with a fixed 180 degree pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 10 dBi VSWR: 1.5:1 max. Front to Back Ratio: 15 dB min. Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 180 degrees E-Plane Beamwidth: 14.5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 43 lb. (19.5 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel









TA-2304-2 Adjustable Sector 2300-2500 MHz



The TA-2304-2 is a vertically polarized sectoral antenna which has adjustable side panels for 60, 90, 120, and 160 degrees azimuth patterns. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 17.5 dBi @ 60°, 15.5 dBi @ 90° 14.5 dBi @ 120°, 13 dBi @ 160° VSWR: 1.5:1 Front to Back Ratio: 20 dB min. Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 60, 90, 120, 160 degrees E-Plane Beamwidth: 7.2 degrees Electrical Downtilt: 0, 2 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 DIN optional)

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 40 in. (1016 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated Copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel

E-Plane





TIL-TEK Antennae Inc.

www.tiltek.com

Form 2006-2304-2



TA-2304-2-45 Sector 2300-2500 MHz

The TA-2304-2-45 is a vertically polarized sectoral antenna with a fixed 45 degree pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 18.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 7.2 degrees Electrical Downtilt: 0, 2 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 DIN optional)

Typical mid band values. (For details , contact factory)

180

dB

90

H-Plane

Mechanical Specifications

Length: 40 in. (1016 mm) Width: 6.5 in (165 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel





TA-2304-2-180 Sector 2300-2500 MHz

The TA-2304-2-180 is a vertically polarized sectoral antenna with a fixed 180 degree pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 12.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 15 dB Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 180 degrees E-Plane Beamwidth: 7.2 degrees Electrical Downtilt: 0, 2 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 DIN optional)

Typical mid band values. (For details , contact factory)

180

dB

90

H-Plane

70

Mechanical Specifications

Length: 40 in. (1016 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel





TA-2304-4 Adjustable Sector 2300-2500 MHz



The TA-2304-4 is a vertically polarized high gain sectoral antenna which can be ordered with adjustable side panels for 60-160 degree patterns. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Mechanical Specifications

Frequency Range: 2300-2500 MHz Gain: 20 dBi @ 60°, 18.5 dBi @ 90°

17 dBi @ 120°, 15.5 dBi @ 160° VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 60, 90, 120, 160 degrees E-Plane Beamwidth: 3.7 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)



Length: 71 in. (1803 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 153 lb. (69 kg) Mechanical Tilt: 0 - 10 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel





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Form 2006-2304-4



TA-2304-4-45 Sector 2300-2500 MHz

The TA-2304-4-45 is a vertically polarized high gain 45 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 21 dBi VSWR: 1.5:1 Front to Back Ratio: 30 dB Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 3.7 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 71 in. (1803 mm) Width: 6.5 in. (165 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 153 lb. (69 kg) Mechanical Tilt: 0 - 10 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel



E-Plane



Form 2006-2304-4-45



TA-2304-4-180 Sector 2300-2500 MHz

The TA-2304-4-180 is a vertically polarized high gain 180 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 15 dBi VSWR: 1.5:1 max. Front to Back Ratio: 15 dB Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 180 degrees E-Plane Beamwidth: 3.7 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Length: 71 in. (1803 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 153 lb. (69 kg) Mechanical Tilt: 0 - 10 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel



E-Plane





TA-2305H Sector 2300-2500 MHz

The TA-2305H is a horizontally polarized 100 degree sectoral antenna with 11 dBi of gain. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 11 dBi VSWR: 1.5:1 max. Front to Back Ratio: 16 dB Polarization: Horizontal Power Rating: 50 Watts H-Plane Beamwidth: 18 degrees E-Plane Beamwidth: 100 degrees Cross Pol. Discrimination: 19 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 DIN optional)

Typical mid band values. (For details , contact factory)

E-Plane

Mechanical Specifications

Length: 40 in. (1016 mm) Width: 8 in. (203 mm) Depth: 4.75 in. (121 mm) Weight (incl. Clamps): 16 lb. (7.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 93 lb. (42.3 kg) Mechanical Tilt: 0 - 15 degrees (optional) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel









TA-2305H-2 Sector 2300-2500 MHz

The TA-2305H-2 is a horizontally polarized 100 degree sectoral antenna with 14 dBi of gain. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 14 +/- 0.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 18 dB Polarization: Horizontal Power Rating: 50 Watts H-Plane Beamwidth: 8.5 degrees E-Plane Beamwidth: 100 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female (7/16 DIN optional)

Typical mid band values. (For details , contact factory)

Depth: 4.75 in. (121 mm)

Weight (incl. Clamps): 16 lb. (7.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 93 lb. (42.3 kg) Mechanical Tilt: 0 - 15 degrees (optional) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Mechanical Specifications

Length: 40 in. (1016 mm)

Width: 8 in. (203 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel









TA-2308 Panel 2300-2500 MHz



The TA-2308 is a vertically or horizontally polarized panel antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 17 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB Polarization: Vertical or Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 22 degrees E-Plane Beamwidth: 22 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Length: 12.75 in. (324 mm) Width: 13.6 in. (345 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 7 lb. (3.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 75 lb. (34.0 kg) Mechanical Tilt: 0 +/- 11 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





The TA-2311 is a vertically or horizontally polarized yagi antenna. The antenna consists of a printed broadband yagi enclosed in a UV stabilized ASA radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

TA-2311 Yagi 2300-2500 MHz

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 11.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 15 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 47 degrees E-Plane Beamwidth: 42 degrees Cross Pol. Discrimination: 15 dB Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Length: 10.5 in. (267 mm) Diameter: 3 in. (76 mm) Weight (Incl. Clamps): 2 lb. (0.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 9 lb. (4 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel











TA-2318 Solid Parabolic

2300-2500 MHz



TA-2318



TA-2318R

The TA-2318 is an 18 inch diameter solid parabolic antenna. The antenna feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-2318R) is also available for extreme weather conditions.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 19 dBi VSWR: 1.35:1 (1.5:1 for TA-2318R) Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 18 degrees E-Plane Beamwidth: 20 degrees Cross Pol. Discrimination: 25 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Diameter: 19.25 in. (489 mm) Depth: 8 in. (204 mm) Weight (Incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 136 lb. (61.8 kg) with radome: 60 lb. (31.4 kg) Mechanical Tilt: 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel

E-Plane



Form 2006-2318 2006-05-10



TA-2324 Solid Parabolic

2300-2500 MHz



TA-2324



TA-2324R

The TA-2324 is a 24 inch diameter solid parabolic antenna. The antenna feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-2324R) is also available for extreme weather conditions.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 21 dBi VSWR: 1.35:1 max. Front to Back Ratio: 28 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 13.5 degrees E-Plane Beamwidth: 15 degrees Cross Pol. Discrimination: 25 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Diameter: 25.25 in. (641 mm) Depth: 8 in. (204 mm) Weight (Incl. Clamps): 20 lb. (9.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 234 lb. (106.4 kg) with radome: 120 lb. (54.4 kg) Mechanical Tilt: 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel

E-Plane





TA-2336 Grid Parabolic

2300-2500 MHz



The TA-2336 is a grid parabolic antenna with a broadband dipole horn feed which is sealed for superior weatherability. The antenna is at DC ground to aid in lightning protection. This antenna is extremely rugged and is designed to provide superior performance in any conditions.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 24.5 dBi VSWR: 1.35:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 9 degrees E-Plane Beamwidth: 10 degrees Cross Pol. Discrimination: 30 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Diameter: 38.5 in. (978 mm) Weight (Incl. clamps): 40 lb. (18.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 177 lb. (80.5 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Aluminum Reflector: Irridited aluminum Clamps: HDG steel

Typical mid band values. (For details , contact factory)

H-Plane

E-Plane





Form 2006-2336



TA-2348 Grid Parabolic 2300-2500 MHz

The TA-2348 is a grid parabolic antenna with a broadband dipole horn feed which is sealed for superior weatherability. The antenna is at DC ground to aid in lightning protection. This antenna is extremely rugged and is designed to provide superior performance in any conditions.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 27 dBi VSWR: 1.35:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 6.8 degrees E-Plane Beamwidth: 7.5 degrees Cross Pol. Discrimination: 30 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Diameter: 50.5 in. (1283 mm) Weight (Incl. clamps): 50 lb. (22.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 304 lb. (138.2 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Aluminum Reflector: Irridited aluminum Clamps: HDG steel

Typical mid band values. (For details , contact factory)

H-Plane







TA-2350 Omnidirectional 2300-2500 MHz

The TA-2350 is a 10 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is made differently depending on the electrical downtilt (T0 / T2 / T4) which has an effect on certain specifications as noted below. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 10 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 8 degrees Electrical Downtilt: 0, 2, 4 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 48 in. (1219 mm) / 70 in. (1778 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 15 lb. (6.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 31 lb. (14.1 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Copper / Plated copper Radome: Gray UV stabilized fiberglass Clamps: HDG steel




TA-2350-2 Omnidirectional 2300-2500 MHz



The TA-2350-2 is a 12 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 2300-2500 MHz Gain: 12 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 4 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Length: 80 in. (2032 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 18 lb. (8.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 52 lb. (23.6 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Copper Radome: Gray UV stabilized fiberglass Clamps: HDG steel





TA-2304-2-DAB

Medium Power Adjustable Sector

2330-2345 MHz

The TA-2304-2-DAB is a medium power vertically polarized sectoral antenna specifically designed for Digital Audio Broadcast transmission. The antenna is designed to provide field adjustable azimuth beamwidths of 45, 60, 90, 120, or 160 degrees by use of side panels. The antenna elements are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2330-2345 MHz
Gain: 17 dBi @ 45°, 16 dBi @ 60°, 14 dBi @ 90° 13 dBi @ 120°, 11.5 dBi @ 160°
VSWR: 1.3:1 max.
Front to Back Ratio: 15 dB @ 180°+/- 35°
Polarization: Vertical
Power Rating: 200 W avg., 800 W peak
H-Plane Beamwidth: 45°, 60°, 90°, 120°, 160°
E-Plane Beamwidth: 7.5 degrees
Cross Pol. Discrimination: 15 dB
Impedance: 50 ohms nominal
Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 39.5 in. (1003 mm) Width: 6.5 in. (165 mm) with 45° side panels 5.0 in. (127 mm) without 45° side panels Depth: 3.5 in. (89 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) with 45° side panels: 113 lb. (51 kg) Mechanical Tilt: +5° to -15° Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Tin Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel



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Form 2006-2304-2-DAB

Specifications subject to change without notice



TA-2304-2-DAB-H

High Power Adjustable Sector

2330-2345 MHz

The TA-2304-2-DAB-H is a high power vertically polarized sectoral antenna specifically designed for Digital Audio Broadcast transmission. The antenna is designed to provide field adjustable azimuth beamwidths of 45, 60, 90, 120, or 160 degrees by use of side panels. The antenna elements are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2330-2345 MHz Gain: 18 dBi @ 45°, 17 dBi @ 60°, 15 dBi @ 90° 14 dBi @ 120°, 13 dBi @ 160° VSWR: 1.3:1 max. Front to Back Ratio: 15 dB min. Polarization: Vertical Power Rating: 2000 W avg., 8000 W peak H-Plane Beamwidth: 45°, 60°, 90°, 120°, 160° E-Plane Beamwidth: 7 degrees Cross Pol. Discrimination: 20 dB Impedance: 50 ohms nominal

Typical mid band values. (For details , contact factory)

Termination: 7/8" EIA Flange



Mechanical Specifications

Length: 39.4 in. (1001 mm) Width: 6.5 in. (165 mm) with 45° side panels 5.0 in. (127 mm) without 45° side panels Depth: 9.0 in. (228.6 mm) Weight (incl. Clamps): 31 lb. (14.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) with 45° side panels: 111 lb. (50.4 kg) Mechanical Tilt: 0° +/- 11.5° Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Stainless and HDG steel





TA-2304-DAB

Medium Power Adjustable Sector

2330-2345 MHz

The TA-2304-DAB is a medium power vertically polarized sectoral antenna specifically designed for Digital Audio Broadcast transmission. The antenna is designed to provide field adjustable azimuth beamwidths of 45, 60, 90, 120, or 160 degrees by use of side panels. The antenna elements are at DC ground to aid in lightning protection. **Electrical Specifications** Frequency Range: 2330-2345 MHz Gain: 15dBi @45°, 14dBi @60°, 12.5dBi @90° 12dBi @120°, 10.5dBi @160° VSWR: 1.4:1 max. Front to Back Ratio: 20 dB @ 180° +/- 35° Polarization: Vertical Power Rating: 200 W avg., 800 W peak H-Plane Beamwidth: 45°, 60°, 90°, 120°, 160° E-Plane Beamwidth: 15 degrees Cross Pol. Discrimination: 15 dB

Typical mid band values. (For details , contact factory)

Impedance: 50 ohms nominal

Termination: 7/16 DIN female



Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 6.5 in. (165 mm) with 45° side panels 4.9 in. (124 mm) without 45° side panels Depth: 3.5 in. (89 mm) Weight (incl. Clamps): 6 lb. (2.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb. (20 kg) with 45° side panels: 56 lb. (25 kg) Mechanical Tilt: +5° to -15° Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Irridited aluminum and HDG steel



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Form 2006-2304-DAB



TA-2305-2-DAB-H

High Power Adjustable Sector

2305-2360 MHz

The TA-2305-2-DAB-H is a high power vertically polarized sectoral antenna specifically designed for Digital Audio Broadcast transmission. The antenna is designed to provide field adjustable azimuth beamwidths of 45, 60, 90, 120, or 160 degrees by use of side panels. The antenna elements are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2305-2360 MHz Gain: 18 dBi @ 45°, 17 dBi @ 60°, 15 dBi @ 90° 14 dBi @ 120°, 13 dBi @ 160° VSWR: 1.3:1 max. Front to Back Ratio: 15 dB min. Polarization: Vertical Power Rating: 2000 W avg., 8000 W peak H-Plane Beamwidth: 45°, 60°, 90°, 120°, 160° E-Plane Beamwidth: 7 degrees Cross Pol. Discrimination: 20 dB Impedance: 50 ohms nominal Termination: 7/8" EIA Flange

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 39.4 in. (1001 mm) Width: 6.5 in. (165 mm) with 45° side panels 5.0 in. (127 mm) without 45° side panels Depth: 9.0 in. (228.6 mm) Weight (incl. Clamps): 31 lb. (14.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) with 45° side panels: 111 lb. (50.4 kg) Mechanical Tilt: 0° +/- 11.5° Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

 Radiating Elements:
 Tin Plated copper on PCB

 Reflector:
 Irridited aluminum

 Radome:
 Gray UV stabilized ASA

 Clamps:
 Stainless and HDG steel





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Form 2006-2305-2-DAB-H



TA-2324-LHCP

Circularly Polarized Solid Parabolic

2330-2345 MHz



The TA-2324-LHCP is a left hand circular polarized solid parabolic intended specifically as a receive antenna for satellite signals. An optional shroud is available to further reduce the front to back ratio to 40 dB for improved interference perfomance. The antenna elements are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2330-2345 MHz Gain: 21 dBic VSWR: 1.3:1 max. Front to Back Ratio: 25 dB @ 180° +/- 35° 40 dB opt. @ 180° +/- 35° Polarization: Left Hand Circular Power Rating: 200 Watts Elevation Beamwidth: 13.5 degrees Axial Ratio: 2.5 dB Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Diameter: 26 in. (660 mm) Weight (Incl. clamps): 26 lb. (12.7 kg) with 3" shroud: 31 lb. (14.06 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 127 lb. (57.6 kg) Mechanical Tilt: +25° to +60° Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Painted Aluminum Radome: Grav ASA UV stabilized Clamps: HDG steel

Elevation





TA-2335-DAB-H **High Power Sector** 2330-2345 MHz



The TA-2335-DAB-H is a high power vertically polarized sectoral antenna specifically designed for Digital Audio Broadcast transmission. The antenna is also designed to provide a shaped azimuth beamwidth of 95 degrees by use of shaped reflector phasing enabling multi-sector applications. The antenna elements are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2330-2345 MHz Gain: 15 dBi VSWR: 1.4:1 min. Front to Back Ratio: 20 dB Polarization: Vertical Power Rating: 1000 W avg. 4000 W peak H-Plane Beamwidth: 95° @ -3dB, 120° @ -10 E-Plane Beamwidth: 7 degrees Cross Pol. Discrimination: 20 dB Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 38 in. (965 mm) Width: 21 in. (533 mm) Depth: 8 in. (203 mm) Weight (incl. Clamps): 33 lb. (15 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 344 lb. (156 kg) Mechanical Tilt: +5° to -15° Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Gold-plated copper on PCE Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel







1.1



TA-2350-DAB

Medium Power Omnidirectional

2330-2345 MHz

The TA-2350-DAB is a medium power vertically polarized omnidirectional antenna specifically designed for Digital Audio Broadcast transmission. The antenna consists of a phased corporately fed broadband dipole array which is configured to provide electrical beam downtilt and null fill. The antenna elements are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2330-2345 MHz Gain: 10 dBi VSWR: 1.4:1 max. Polarization: Vertical Power Rating: 200 W avg., 800 W peak H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 8 degrees Electrical_Downtilt: 2, 4, 6 degrees Cross Pol. Discrimination: 20 dB min. Null Fill -20 dB (1st Null) Impedance: 50 ohms nominal Termination: 7/16 DIN female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 70 in. (1778 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 15 lb. (6.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 31 lb. (14 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Nickel plated copper arrayRadome:Gray UV stabilized fiberglassClamps:HDG steel





TA-2350-DAB-H

High Power Omnidirectional

2330-2345 MHz



The TA-2350-DAB-H is a high power vertically polarized omnidirectional antenna specifically designed for Digital Audio Broadcast transmission. The antenna consists of a phased corporately fed broadband dipole array which is configured to provide electrical beam downtilt and null fill. The antenna elements are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2330-2345 MHz Gain: 10 dBi VSWR: 1.4:1 max. Polarization: Vertical Power Rating: 2000 W avg., 8000 W peak H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 8 degrees Electrical_Downtilt: 2, 4, 6 degrees Cross Pol. Discrimination: 13 dB Null Fill -20 dB (1st Null) Impedance: 50 ohms nominal Termination: 7/8" EIA Flange

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 64 in. (1625 mm) Diameter: 8 in. (203 mm) Weight (Incl. Clamps): 49 lb. (22.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 148 lb. (67 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Tin-plated copper on PCBRadome:Gray UV stabilized fiberglassClamps:HDG steel



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1.0



TA-2355-DAB-H

High Power Omnidirectional

2305-2360 MHz



The TA-2355-DAB-H is a high power vertically polarized omnidirectional antenna specifically designed for Digital Audio Broadcast transmission. The antenna consists of a phased corporately fed broadband dipole array which is configured to provide electrical beam downtilt and null fill. The antenna elements are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2305-2360 MHz Gain: 10 dBi VSWR: 1.4:1 max. Polarization: Vertical Power Rating: 2000 W avg., 8000 W peak H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 8 degrees Electrical_Downtilt: 2, 4, 6 degrees Cross Pol. Discrimination: 13 dB Null Fill: -20 dB (1st Null) Impedance: 50 ohms nominal Termination: 7/8" EIA Flange

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 64 in. (1625mm) Diameter: 8 in. (1625mm) Weight (Incl. Clamps): 49 lb. (22.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 148 lb. (67 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102mm)

Materials

 Radiating Elements:
 Tin-plated copper on PCB

 Radome:
 Gray UV stabilized fiberglass

 Clamps:
 HDG steel



1.2



LANtenna Series TA-2304-ISM Adjustable Sector 2400-2483 MHz



The TA-2304-ISM is a vertically polarized sectoral antenna which has adjustable side panels for 60-160 degree azimuth patterns. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 15 dBi @ 60°, 13 dBi @ 90°

12 dBi @ 120°, 10.5 dBi @ 160° VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min.(15 dB @160°) Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 60, 90, 120, 160 degrees E-Plane Beamwidth: 14.5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 43 lb. (19.5 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel





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Form 2006-2304-ISM

2003-01-10



LANtenna Series TA-2304-45-ISM Sector 2400-2483 MHz



The TA-2304-45-ISM is a vertically polarized sectoral antenna with a fixed 45 degree pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 16 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 14.5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 6.5 in. (165 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 43 lb. (19.5 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel



E-Plane



TIL-TEK Antennae Inc.



LANtenna Series TA-2304-180-ISM Sector 2400-2483 MHz



The TA-2304-180-ISM is a vertically polarized sectoral antenna with a fixed 180 degree pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 10 dBi VSWR: 1.5:1 max. Front to Back Ratio: 15 dB min. Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 180 degrees E-Plane Beamwidth: 14.5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Length: 20.5 in. (521 mm)

Mechanical Specifications

Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 43 lb. (19.5 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel







LANtenna Series TA-2304-2-ISM Adjustable Sector 2400-2483 MHz



The TA-2304-2-ISM is a vertically polarized sectoral antenna which has adjustable side panels for 60-160 degree azimuth patterns. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 17.5 dBi @ 60°, 15.5 dBi @ 90°

14.5 dBi @ 120°, 13 dBi @ 160° VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 60, 90, 120, 160 degrees E-Plane Beamwidth: 7.2 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)



Mechanical Specifications

Length: 40 in. (1016 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel





TIL-TEK Antennae Inc.

www.tiltek.com

(613) 258-5928

Form 2006-2304-2-ISM

2003-01-10



LANtenna Series TA-2304-2-45-ISM Sector 2400-2483 MHz



The TA-2304-2-45-ISM is a vertically polarized sectoral antenna with a fixed 45 degree pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 18.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 7.2 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Width: 6.5 in (165 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel







LANtenna Series TA-2304-2-180-ISM Sector 2400-2483 MHz



The TA-2304-2-180-ISM is a vertically polarized sectoral antenna with a fixed 180 degree pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 12.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 15 dB Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 180 degrees E-Plane Beamwidth: 7.2 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Length: 40 in. (1016 mm)

Mechanical Specifications

Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel







TIL-TEK Antennae Inc.



LANtenna Series TA-2304-4-ISM Adjustable Sector 2400-2483 MHz



The TA-2304-4-ISM is a vertically polarized high gain sectoral antenna which can be ordered with adjustable side panels for 60-160 degree patterns. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Mechanical Specifications

Frequency Range: 2400-2483 MHz Gain: 20 dBi @ 60°, 18.5 dBi @ 90°

17 dBi @ 120°, 15.5 dBi @ 160° VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 60, 90, 120, 160 degrees E-Plane Beamwidth: 3.7 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)



Length: 71 in. (1803 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 153 lb. (69 kg) Mechanical Tilt: 0 - 10 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and HDG steel





TIL-TEK Antennae Inc.

www.tiltek.com

Form 2006-2304-4-ISM



LANtenna Series TA-2304-4-45-ISM Sector 2400-2483 MHz

The TA-2304-4-45-ISM is a vertically polarized high gain 45 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 21 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 45 degrees E-Plane Beamwidth: 3.7 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

 Width:
 6.5 in. (165 mm)

 Depth:
 4.6 in. (117 mm)

 Weight (incl. Clamps):
 12 lb. (5.5 kg)

 Rated Wind Velocity:
 125 mph (200 km/h)

 Hor.
 Thrust at rated wind:
 153 lb. (69 kg)

 Mechanical Tilt:
 0 - 10 degrees (optional)
 Mounting (O.D.):
 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel









LANtenna Series TA-2304-4-180-ISM Sector 2400-2483 MHz

The TA-2304-4-180-ISM is a vertically polarized high gain 180 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 15 dBi VSWR: 1.5:1 max. Front to Back Ratio: 15 dB Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 180 degrees E-Plane Beamwidth: 3.7 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Length: 71 in. (1803 mm)

Mechanical Specifications

Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 153 lb. (69 kg) Mechanical Tilt: 0 - 10 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel









LANtenna Series TA-2404-2-90 Sector 2400-2483 MHz



The TA-2404-2-90 is a vertically polarized 90 degree sectoral antenna. It was designed specifically for wireless data and point-to-multipoint radio applications. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions (icing, salt, air, acid rain, etc.) and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 10 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB typical Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 90 degrees E-Plane Beamwidth: 30 degrees Cross Pol. Discrimination: 12 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 12.6 in. (320 mm) Width: 4.62 in. (117 mm) Depth: 3.9 in. (100 mm) Weight (incl. Clamps): 2.2 lb. (1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 25 lb. (11.4 kg) Mechanical Tilt: 0 +/- 45 degrees Mounting (O.D.): 1.0 - 2.0 in. (25 - 50 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and Stainless steel

H-Plane







LANtenna Series TA-2404-2-160 Sector 2400-2483 MHz



The TA-2404-2-160 is a vertically polarized 160 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection, and includes both wall and pipe mounting for increased flexibility during deployment.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 8 +/- 0.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 11 dB min Polarization: Vertical Power Rating: 85 Watts H-Plane Beamwidth: 160 degrees E-Plane Beamwidth: 35 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Length: 7.5 in (295 mm) Width: 4.75 in. (187 mm) Depth: 2.56 in. (101 mm) Weight (incl. Clamps): 2 lb. (0.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 10 lb. (4.5 kg) Mechanical Tilt: 0+/-30 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Stainless steel









LANtenna Series TA-2404-4-60 Sector 2400-2483 MHz



The TA-2404-4-60 is a vertically polarized 60 degree sectoral antenna. It was designed specifically for wireless data and point-to-multipoint radio applications. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions (icing, salt air, acid rain, etc.) and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 13.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB @ 180°+/- 30° Polarization: Vertical Power Rating: 25 Watts H-Plane Beamwidth: 60 degrees E-Plane Beamwidth: 15 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 20.5 in. (520 mm) Width: 5.1 in. (129 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 2.5 lb. (1.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb. (20 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel







Form 2006-2404-4-60

1.0



LANtenna Series TA-2404-4-90 Sector 2400-2483 MHz



The TA-2404-4-90 is a vertically polarized 90 degree sectoral antenna. It was designed specifically for wireless data and point-to-multipoint radio applications. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions (icing, salt air, acid rain, etc.) and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 12 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB @ 180°+/- 30° Polarization: Vertical Power Rating: 25 Watts H-Plane Beamwidth: 90 degrees E-Plane Beamwidth: 15 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 20.5 in. (520 mm) Width: 5.1 in. (129 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 2.5 lb. (1.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb. (20 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel







TIL-TEK Antennae Inc.

H-Plane



LANtenna Series TA-2404-8-120 Sector 2400-2483 MHz



The TA-2404-8-120 is a vertically polarized 120 degree sectoral antenna. It was designed specifically for wireless data and point-to-multipoint radio applications. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions (icing, salt air, acid rain, etc.) and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 14 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB typical Polarization: Vertical Power Rating: 100 Watts H-Plane Beamwidth: 120 degrees E-Plane Beamwidth: 7 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 40 in. (1016 mm) Width: 5.1 in. (129 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 7.5 lb. (3.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 87 lb. (39.5 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 50 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel



E-Plane



1.0



LANtenna Series TA-2405H-2-45 Sector 2400-2483 MHz



The TA-2405H-2-45 is a high gain 45 degree horizontally polarized sectoral antenna consisting of a broadband dipole array mounted on a solid aluminum reflector and covered with a weatherproof radome. The antenna was designed for operation under severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 17 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB typical Polarization: Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 8 degrees E-Plane Beamwidth: 45 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 40 in. (1016 mm) Width: 4.9 in. (124 mm) Depth: 3.5 in. (89 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 84 lb. (38.1 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements:Tin plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:HDG steel



H-Plane





LANtenna Series TA-2405H-2-60 Sector 2400-2483 MHz

The TA-2405H-2-60 is a high gain 60 degree horizontally polarized sectoral antenna consisting of a broadband dipole array mounted on a solid aluminum reflector and covered with a weatherproof radome. The antenna was designed for operation under severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 16 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB typical Polarization: Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 8 degrees E-Plane Beamwidth: 60 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 40 in. (1016 mm) Width: 4.7 in. (124 mm) Depth: 3.5 in. (89 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 84 lb. (38.1 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel









LANtenna Series TA-2405H-4-60 Sector 2400-2483 MHz



The TA-2405H-4-60 is a horizontally polarized 60 degree sectoral antenna. It was designed specifically for wireless data and point-to-multipoint radio applications. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions (icing, salt air, acid rain, etc.) and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 13.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB @ 180°+/- 30° Polarization: Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 16 degrees E-Plane Beamwidth: 60 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

E-Plane

Mechanical Specifications

Length: 20.5 in. (520 mm) Width: 5.1 in. (129 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 2.5 lb. (1.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb. (20 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel









LANtenna Series TA-2405H-4-90 Sector 2400-2483 MHz



The TA-2405H-4-90 is a horizontally polarized 90 degree sectoral antenna. It was designed specifically for wireless data and point-to-multipoint radio applications. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions (icing, salt air, acid rain, etc.) and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 12 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB @ 180°+/- 30° Polarization: Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 16 degrees E-Plane Beamwidth: 90 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

E-Plane

Mechanical Specifications

Length: 20.5 in. (520 mm) Width: 7.8 in. (198 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 2.5 lb. (1.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 69 lb. (31 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel







1.0



LANtenna Series TA-2407P Panel 2400-2483 MHz

The TA-2407P is a compact, light-weight, vertically polarized panel antenna intended for mounting onto the back of a laptop computer for special applications in the ISM band. The antenna consists of a printed patch array enclosed in a black painted aluminum cavity with a black UV stabilized ASA radome.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 14 +/- 1 dBi VSWR: 2:1 max. Front to Back Ratio: 25 dB min. (azimuth) Polarization: Vertical Power Rating: 20 Watts H-Plane Beamwidth: 27 +/- 2 degrees E-Plane Beamwidth: 36 +/- 2 degrees Cross Pol. Discrimination: 13 dB min. Impedance: 50 ohms nominal Termination: SMA female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 8 in. (203 mm) Width: 11 in. (279.4 mm) Depth: 0.44 in. (11 mm) Weight (incl. Clamps): 0.7 lb. (0.32 kg) Rated Wind Velocity: N/A Hor. Thrust at rated wind: N/A Mechanical Tilt: N/A Mounting (O.D.): N/A

Materials

Radiating Elements: Copper Reflector: Painted aluminum Radome: Textured Black ABS Clamps: Hook & Loop Velcro







LANtenna Series TA-2408 Panel 2400-2483 MHz



The TA-2408 is a vertically or horizontally polarized panel antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 17 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB typical Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 22 degrees E-Plane Beamwidth: 22 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 12.75 in. (324 mm) Width: 13.6 in. (345 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 7 lb. (3.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 75 lb. (34.0 kg) Mechanical Tilt: 0 +/- 11 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel







LANtenna Series TA-2411 Yagi 2400-2483 MHz



The TA-2411 is a vertically or horizontally polarized yagi antenna. The antenna consists of a printed broadband yagi enclosed in a UV stabilized ASA radome for superior weatherability. It is designed for wireless data in the ISM band and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 11.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 15 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 47 degrees E-Plane Beamwidth: 42 degrees Cross Pol. Discrimination: 15 dB Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Length: 10.5 in. (267 mm) Diameter: 3 in. (76 mm) Weight (Incl. Clamps): 2 lb. (0.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 9 lb. (4 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel

E-Plane









TIL-TEK Antennae Inc.



LANtenna Series TA-2418 Solid Parabolic 2400-2483 MHz



TA-2418



TA-2418R

The TA-2418 is an 18 inch diameter solid parabolic antenna. The antenna feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-2418R) is also available for extreme weather conditions.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 19 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 18 degrees E-Plane Beamwidth: 20 degrees Cross Pol. Discrimination: 25 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Diameter: 19.25 in. (489 mm) Depth: 8 in. (204 mm) Weight (Incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 136 lb. (61.8 kg) with radome: 60 lb. (31.4 kg) Mechanical Tilt: 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





LANtenna Series TA-2424 Solid Parabolic 2400-2483 MHz



TA-2424



TA-2424R

The TA-2424 is a 24 inch diameter solid parabolic antenna. The antenna feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-2424R) is also available for extreme weather conditions.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 21 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 13.5 degrees E-Plane Beamwidth: 15 degrees Cross Pol. Discrimination: 25 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Diameter: 25.25 in. (489 mm) **Depth:** 8.0 in. (204 mm) Weight (Incl. Clamps): 20 lb. (9.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 234 lb. (106.4 kg) with radome: 120 lb (54.4 kg) Mechanical Tilt: 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





LANtenna Series TA-2436 Grid Parabolic 2400-2483 MHz



The TA-2436 is a grid parabolic antenna with a broadband dipole horn feed which is sealed for superior weatherability. The antenna is at DC ground to aid in lightning protection. This antenna is extremely rugged and is designed to provide superior performance in any conditions.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 24.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 9 degrees E-Plane Beamwidth: 10 degrees Cross Pol. Discrimination: 30 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Diameter: 38.5 in. (978 mm) Weight (Incl. clamps): 40 lb. (18.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 177 lb. (80.5 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Aluminum Reflector: Irridited aluminum Clamps: HDG steel

Typical mid band values. (For details , contact factory)

H-Plane







LANtenna Series TA-2448 Grid Parabolic 2400-2483 MHz



The TA-2448 is a grid parabolic antenna with a broadband dipole horn feed which is sealed for superior weatherability. The antenna is at DC ground to aid in lightning protection. This antenna is extremely rugged and is designed to provide superior performance in any conditions.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 27 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB typical Polarization: Vertical or Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 8.6 degrees E-Plane Beamwidth: 7.5 degrees Cross Pol. Discrimination: 30 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Diameter: 50.5 in. (1283 mm) Weight (Incl. clamps): 50 lb. (22.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 304 lb. (138.2 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Aluminum Reflector: Irridited aluminum Clamps: HDG steel

Typical mid band values. (For details , contact factory)

H-Plane







LANtenna Series TA-2450 Omnidirectional 2400-2483 MHz



The TA-2450 is a 10 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 10 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 8 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 48 in. (1219 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 15 lb. (6.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 31 lb. (14.1 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Copper Radome: Gray UV stabilized fiberglass Clamps: HDG steel




LANtenna Series TA-2450H Omnidirectional 2400-2483 MHz



The TA-2450H is a 9.5 dBi horizontally polarized omnidirectional antenna designed specifically for the 2.4 GHz ISM band. Pattern shaping and null fill provide optimum coverage while superior cross polarization discrimination allows operators to provide service in areas congested with vertically polarized systems. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 9.5 dBi VSWR: 1.6:1 max. Polarization: Horizontal Power Rating: 1 Watt H-Plane Beamwidth: 7 degrees E-Plane Beamwidth: 360 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Length: 51 in. (1295 mm) Diameter: 3 in. (76 mm) Weight (Incl. Clamps): 12 lb. (5.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb (19.9 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated Copper on PCB Radome: Gray UV stabilized fiberglass Clamps: EDZ steel

Typical mid band values. (For details , contact factory)

E-Plane



H-Plane



Form 2006-2450H



LANtenna Series TA-2460 Omnidirectional 2400-2483 MHz



The TA-2460 is an 8.5 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2400-2483 MHz Gain: 8.5 +/- 0.5 dBi VSWR: 2:1 max. Polarization: Vertical Power Rating: 125 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 14.5 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 24 in approx. (610 mm) Diameter: 1.0 in (25 mm) Weight (Incl. Clamps): 1 lb. (0.45 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 6.8 lb. (3.1 kg) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Radome: White UV stabilized fiberglass Clamps: Stainless steel

E-Plane





TA-2503 Panel 2485-2690 MHz



The TA-2503 is a lower gain, vertically or horizontally polarized panel antenna incorporating a broadband full wave dipole in an aluminum base and UV stabilized radome. It is designed for severe weather conditions. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2485-2690 MHz Gain: 12 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB typical Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 50 degrees E-Plane Beamwidth: 45 degrees Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 13.5 in. (343 mm) Width: 6.75 in. (172 mm) Depth: 2.75 in. (69.85 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 41 lb. (18.6 kg) Mechanical Tilt: 0 +/- 11 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Irridited aluminum Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel











TA-2504-8 Adjustable Sector 2500-2700 MHz



The TA-2504-8 is a medium-gain vertically polarized sectoral antenna which has adjustable side panels to provide a 60 or a 90 degree azimuth pattern. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2500-2700 MHz Gain: 16.5 dBi @ 60°, 15.5 dBi @ 90° VSWR: 1.5:1 max. Front to Back Ratio: 20 dB Polarization: Vertical Power Rating: 25 Watts H-Plane Beamwidth: 60, 90 degrees E-Plane Beamwidth: 8 degrees Electrical Downtilt: 0, 2 degrees Cross Pol. Discrimination: 18 dB (azimuth) Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 39.4 in. (1000mm) Width: 5.1 in. (129.5 mm) Depth: 3.75 in. (95.25 mm) Weight (incl. Clamps): 9 lb. (4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 87 lb. (39.5 kg) Mechanical Tilt: 0 - 10 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum, EDZ Steel (HDG Steel Opt)







TA-2504-8-50 Sector 2500-2700 MHz

The TA-2504-8-50 is a medium-gain vertically polarized 50 degree sectoral antenna. It consists of a linear dipole array with fixed side panels to achieve the correct beamwidth. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2500-2700 MHz Gain: 17.5 +/- 1 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 50° +/- 5° E-Plane Beamwidth: 8° +/- 1° Electrical Downtilt: 0, 2 degrees Cross Pol. Discrimination: 15 dB (azimuth) Impedance: 50 ohms nominal Termination: N female (7/16 optional)

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 39.4 in. (1000 mm) Width: 5.5 in. (140 mm) Depth: 3.75 in. (95 mm) Weight (incl. Clamps): 9 lb. (4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 93 lb. (42 kg) Mechanical Tilt: 0 - 10°, 1° increments Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin-Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum, EDZ Steel (HDG Steel Opt)







TA-2504-16-50 Sector 2500-2700 MHz

The TA-2504-16-50 is a high-gain vertically polarized 50 degree sectoral antenna. It consists of a linear dipole array with fixed side panels to achieve the correct beamwidth. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 2500-2700 MHz Gain: 19.5 +/- 1 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 50° +/- 5° E-Plane Beamwidth: 5° +/- 0.5° Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 70.5 in. (1792 mm) Width: 5.5 in. (140 mm) Depth: 3.75 in. (95 mm) Weight (incl. Clamps): 15 lb. (6.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 166 lb. (75 kg) Mechanical Tilt: 0 - 10°, in 1° increments Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin-Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel









TA-2505H-8 Adjustable Sector 2500-2700 MHz



The TA-2505H-8 is a medium-gain horizontally polarized sectoral antenna that is field adjustable to either 50 or 60 degrees. It consists of a linear dipole array with fixed side panels to achieve the correct beamwidth. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2500-2700 MHz Gain: 17.5 +/- 1 dBi @ 50° 16.0 +/- 1 dBi @ 60° VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. @ 50° 24 dB min. @ 60° Polarization: Horizontal Power Rating: 50 Watts

H-Plane Beamwidth: 8° +/- 1° E-Plane Beamwidth: 50° +/- 5°, 60° +/- 5° Cross Pol. Discrimination: 20 dB (azimuth) Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 39.4 in. (1000 mm) Width: 8 in. (203 mm) Depth: 3.75 in. (95 mm) Weight (incl. Clamps): 9 lb. (4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 84 lb. (38 kg) Mechanical Tilt: 0 - 10°, 1° increments Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin-Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel



H-Plane





TA-2505H-8-90 Sector 2500-2700 MHz

The TA-2505H-8-90 is a medium-gain horizontally polarized 90 degree sectoral antenna. It consists of a linear dipole array with fixed side panels to achieve the correct beamwidth. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2500-2700 MHz Gain: 14.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 19 dB min. Polarization: Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 8 degrees E-Plane Beamwidth: 90 degrees Cross Pol. Discrimination: 20 dB @ 90° +/- 5 Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications Length: 39.4 in. (1000 mm)

Width: 8 in. (203 mm) Depth: 3.75 in. (95 mm) Weight (incl. Clamps): 9 lb. (4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 84 lb. (38 kg) Mechanical Tilt: 0 - 10°, 1° increments Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin-Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel



H-Plane



TIL-TEK Antennae Inc.





TA-2505H-16-50 Sector 2500-2700 MHz

The TA-2505H-16-50 is a high-gain horizontally polarized 50 degree sectoral antenna. It consists of a linear dipole array with fixed side panels to achieve the correct beamwidth. Radiating elements are protected by a weatherproof radome for operation under severe weather conditions and are at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 2500-2700 MHz Gain: 19.5 +/- 0.5 dB VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Horizontal Power Rating: 50 Watts H-Plane Beamwidth: 5° +/- 0.5° E-Plane Beamwidth: 50° +/- 5° Cross Pol. Discrimination: 20 dB (azimuth) Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 70.5 in. (1792 mm) Width: 8 in. (203 mm) Depth: 3.75 in. (95 mm) Weight (incl. Clamps): 16 lb. (7.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 243 lb. (110 kg) Mechanical Tilt: 0 - 10°, 1° increments Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Tin-Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel



H-Plane





TA-2506 Panel 2485-2690 MHz

The TA-2506 is a medium gain, vertically or horizontally polarized panel antenna. The antenna has relatively broad E & H plane patterns and is designed for severe weather conditions. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2485-2690 MHz Gain: 16 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB typical Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 26 degrees E-Plane Beamwidth: 21 degrees Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 14 in. (356 mm) Width: 12 in. (305 mm) **Depth:** 4 in. (102 mm) Weight (incl. Clamps): 5 lb. (2.3 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 73 lb. (33.2 kg) Mounting (O.D.): 1.9 in. (48.3 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Grav UV stabilized ASA Clamps: HDG steel





dB

180

TIL-TEK Antennae Inc.

90

Form 2006-2506



TA-2518 Solid Parabolic

2485-2690 MHz



TA-2518



TA-2518R

The TA-2518 is an 18 inch diameter solid parabolic antenna. The antenna feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-2518R) is also available for extreme weather conditions.

Electrical Specifications

Frequency Range: 2485-2690 MHz Gain: 19 dBi VSWR: 1.35:1 (1.5:1 for TA-2518R) Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 18 degrees E-Plane Beamwidth: 20 degrees Cross Pol. Discrimination: 25 dB Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Diameter: 19.25 in. (489 mm) Depth: 8 in. (204 mm) Weight (Incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 136 lb. (61.8 kg) with radome: 69 lb. (31.4 kg) Mechanical Tilt: 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel

E-Plane





TA-2524



TA-2524R

TA-2524 Solid Parabolic

2485-2690 MHz

The TA-2524 is a 24 inch diameter solid parabolic antenna. The antenna feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-2524R) is also available for extreme weather conditions.

Electrical Specifications

Frequency Range: 2485-2690 MHz Gain: 21 dBi VSWR: 1.35:1 max. Front to Back Ratio: 28 dB min. Polarization: Vertical or Horizontal Power Rating: 100 Watts H-Plane Beamwidth: 13.5 degrees E-Plane Beamwidth: 15 degrees Cross Pol. Discrimination: 25 dB Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Diameter: 25.25 in. (641 mm) Depth: 8 in. (204 mm) Weight (Incl. Clamps): 20 lb. (9.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 234 lb. (106.4 kg) with radome: 120 lb. (54.5 kg) Mechanical Tilt: 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





TA-2536 Grid Parabolic

2485-2690 MHz



The TA-2536 is a grid parabolic antenna with a broadband dipole horn feed which is sealed for superior weatherability. The antenna is at DC ground to aid in lightning protection. These antennas are extremely rugged and are designed to provide superior performance in any conditions.

Electrical Specifications

Frequency Range: 2485-2690 MHz Gain: 25.5 dBi VSWR: 1.35:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 8.3 degrees E-Plane Beamwidth: 9.3 degrees Cross Pol. Discrimination: 30 dB Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Diameter: 38.5 in. (978 mm) Weight (Incl. clamps): 40 lb. (18.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 177 lb. (80.5 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Aluminum Reflector: Irridited aluminum Clamps: HDG steel

Typical mid band values. (For details , contact factory)

H-Plane







TA-2548 Grid Parabolic

2485-2690 MHz



The TA-2548 is a grid parabolic antenna with a broadband dipole horn feed which is sealed for superior weatherability. The antenna is at DC ground to aid in lightning protection. These antennas are extremely rugged and are designed to provide superior performance in any conditions.

Electrical Specifications

Frequency Range: 2485-2690 MHz Gain: 28 dBi VSWR: 1.35:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 200 Watts H-Plane Beamwidth: 6.3 degrees E-Plane Beamwidth: 7 degrees Cross Pol. Discrimination: 30 dB Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

Diameter: 50.5 in. (1283 mm) Weight (Incl. clamps): 50 lb. (22.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 304 lb. (138.2 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

Materials

Radiating Elements: Aluminum Reflector: Irridited aluminum Clamps: HDG steel

Typical mid band values. (For details , contact factory)

H-Plane

E-Plane







TA-2550 Omnidirectional

2485-2690 MHz



The TA-2550 is a 10 dBi omnidirectional antenna consisting of center fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 2485-2690 MHz Gain: 10 dBi VSWR: 1.5:1 max. Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 8 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 48 in. (1219 mm) Diameter: 2.25 in. (57 mm) Weight (Incl. Clamps): 15 lb. (6.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 31 lb. (14.1 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Copper Radome: Gray UV stabilized fiberglass Clamps: HDG steel

E-Plane





TA-3402H-8-60 Sector 3400-3700 MHz



The TA-3402H-8-60 is a horizontally polarized 60 degree sectoral antenna designed to comply with the ETSI EN 302 085 V1.1.2 Section 6.2 CS3 standard. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 17 +/- 1 dBi VSWR: 1.5:1 Front to Back Ratio: ETSI CS3 Polarization: Horizontal Power Rating: 20 Watts H-Plane Beamwidth: 10 degrees E-Plane Beamwidth: 60 degrees Cross Pol. Discrimination: ETSI CS3 Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 23.9 in. (607.1 mm) Width: 10.6 in. (269.2 mm) Depth: 2.74 in. (69.85 mm) Weight (incl. Clamps): 5 lb. (2.27 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 110 lb. (49.9 kg) Mechanical Tilt: 0+/-16 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel







TIL-TEK Antennae Inc.

Form 2006-3402H-8-60



TA-3402H-8-90 Sector 3400-3700 MHz



The TA-3402H-8-90 is a horizontally polarized 90 degree sectoral antenna designed to comply with the ETSI EN 302 085 V1.1.2 Section 6.2 CS3 standard. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 14 dBi VSWR: 1.5:1 Front to Back Ratio: ETSI CS3 Polarization: Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 9 degrees E-Plane Beamwidth: 90 degrees Cross Pol. Discrimination: ETSI CS3 Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Length: 23.8 in. (604.5 mm)

Mechanical Specifications

Width: 9.4 in. (238.8 mm) Depth: 2.75 in. (69.8 mm) Weight (incl. Clamps): 4.5 lb. (2.0 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 96 lb. (43.5 kg) Mechanical Tilt: 0+/-16 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminium and stainless steel



H-Plane



TIL-TEK Antennae Inc.



TA-3404-8-60 Sector 3400-3700 MHz



The TA-3404-8-60 is a vertically polarized 60 degree sectoral antenna. The antenna complies with ETSI EN 302 085 V1.1.2 Section 6.1 CS1 standard. The TA-3404-8-60 consists of a printed broadband dipole array enclosed in an aluminum cavity and UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 17 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. 30 typical Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 60 degrees E-Plane Beamwidth: 6.7 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 27.4 in. (696.7 mm) Width: 3.25 in. (83 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 4 lb. (1.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 26 lb. (11.8 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel









TA-3404-8-90 Sector 3400-3700 MHz



The TA-3404-8-90 is a vertically polarized 90 degree sectoral antenna. The antenna complies with ETSI EN 302 085 V1.1.2 Section 6.1 CS1 standard. The TA-3404-8-90 consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 15.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. 30 typical Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 90 degrees E-Plane Beamwidth: 6.7 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 27.4 in. (696.7 mm) Width: 3.25 in. (83 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 4 lb. (1.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 26 lb. (11.8 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel









TA-3404-8-120 Sector

3400-3700 MHz



The TA-3404-8-120 is a vertically polarized 120 degree sectoral antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 14 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. 25 typical Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 120 degrees E-Plane Beamwidth: 6.7 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 27.4 in. (696.7 mm) Width: 3.25 in. (83 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 4 lb. (1.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 26 lb. (11.8 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel











TA-3404-16-60 Sector 3400-3700 MHz

The TA-3404-16-60 is a vertically polarized 60 degree sectoral antenna. The antenna consists of a broadband dipole array on printed circuit boards enclosed in an aluminum cavity with a weatherproof plastic cover. The antenna elements are at DC ground to aid in lightning protection. Due to the very narrow elevation beamwidth, TIL-TEK recommends that this antenna be used on stable platforms and where other options are not practical.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 19.75 dBi VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. 25 typical Polarization: Vertical Power Rating: 50 Watts H-Plane Beamwidth: 60 degrees E-Plane Beamwidth: 3.5 degrees Cross Pol. Discrimination: 15 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 53 in. (1346 mm) Width: 3.25 in. (83 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 7 lb. (3.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 50 lb. (22.7 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel







TA-3407 Panel 3400-4200 MHz



The TA-3407 is a vertically or horizontally polarized panel antenna. The TA-3407 consists of a printed broadband dipole array enclosed in an aluminum flat base and a molded plastic radome. The antenna was designed for operation under severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 3400-4200 MHz Gain: 18.0 dBi VSWR: 2:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 18 degrees E-Plane Beamwidth: 18 degrees Cross Pol. Discrimination: 25 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Length: 10.1 in. (256.5 mm) Width: 10.1 in. (256.5 mm) **Depth:** 2.2 in. (55.9 mm) Weight (incl. Clamps): 4 lb. (1.8 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb. (20 kg) Mechanical Tilt: 0+/-10 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: HDG steel







TA-3408 Panel 3400-3700 MHz



The TA-3408 is a vertically or horizontally polarized panel antenna. The antenna complies with ETSI EN 302 085 V1.1.2 Section 6.1 TS3 standard. The TA-3408 consists of a printed broadband dipole array enclosed in an aluminum flat base and a molded plastic radome. The antenna was designed for operation under severe weather conditions and is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 18 +/- 0.5 dBi VSWR: 1.5 :1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 20° +/- 2° E-Plane Beamwidth: 20° +/- 2° Cross Pol. Discrimination: 22 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications Length: 9.25 in. (235 mm)

Width: 9.25 in. (235 mm) **Depth:** 1.63 in. (41 mm) Weight (incl. Clamps): 1.5 lbs. (0.68 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 38 lbs. (17.2 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Tin-Plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel



E-Plane



TIL-TEK Antennae Inc.



TA-3418 Solid Parabolic 3400-3700 MHz



TA-3418



TA-3418R

The TA-3418 is an 18 inch diameter solid parabolic antenna. The antenna complies with ETSI EN 302 085 V1.1.2 Section 6.1 TS3 standard. The TA-3418 feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-3418R) is also available for extreme weather conditions.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 21 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical / Horizontal Power Rating: 50 Watts H-Plane Beamwidth: 12 degrees E-Plane Beamwidth: 12 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Diameter: 19.25 in. (489 mm) Depth: 8 in. (204 mm) Weight (Incl. Clamps): 12 lb. (505 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 136 lb. (61.8 kg) with radome: 69 lb. (31.4 kg) Mechanical Tilt: 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





TA-3424 Solid Parabolic 3400-3700 MHz



TA-3424



TA-3424R

The TA-3424 is a 24 inch diameter solid parabolic antenna. The antenna complies with ETSI EN 302 085 V1.1.2 Section 6.1 TS3 standard. The TA-3424 feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-3424R) is also available for extreme weather conditions.

Electrical Specifications

Frequency Range: 3400-3700 MHz Gain: 23 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical or Horizontal Power Rating: 50 Watts H-Plane Beamwidth: 9.6 degrees E-Plane Beamwidth: 9.6 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Diameter: 25.25 in. (641 mm) Depth: 8 in. (204 mm) Weight (Incl. Clamps): 20 lb. (9.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 234 lb. (106.4 kg) with radome: 120 lb. (54.5 kg) Mechanical Tilt: 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Tin plated copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel

E-Plane





TA-4904-14-90 Sector

4940 - 4990 MHz

The TA-4904-14-90 is a vertically polarized 90 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 4940 - 4990 MHz Gain: 15.5 dBi typ. VSWR: 2:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 5 Watts H-Plane Beamwidth: 90 degrees E-Plane Beamwidth: 5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Length: 26.5 in. (673 mm) Width: 6.25 in. (159 mm)

Mechanical Specifications

 Width:
 0.25 in. (159 min)

 Depth:
 2.0 in. (51 mm)

 Weight (incl. Clamps):
 6 lb. (2.72 kg)

 Rated Wind Velocity:
 125 mph (200 km/h)

 Hor.
 Thrust at rated wind:
 72 lb. (32.6 kg)

 Mechanical Tilt:
 0+/-16 degrees

 Mounting (O.D.):
 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements:Plated copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and stainless steel









TA-4952 Omnidirectional 4940-4990 MHz



The TA-4952 is a 10 dBi omnidirectional antenna consisting of end fed collinear dipoles in a UV stabilized fiberglass radome. The antenna is designed for severe weather conditions and is at DC ground to aid in lightning protection. The TA-4952 has been developed in response to customer requests specifically with and for the Public Safety Band in mind which demands optimal performance and reliability at an affordable price.

Electrical Specifications

Frequency Range: 4940-4990 MHz Gain: 10 dBi typ. VSWR: 1.7:1 max. Polarization: Vertical Power Rating: 75 Watts H-Plane Beamwidth: 360 degrees E-Plane Beamwidth: 5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 34 in. (864 mm) Diameter: 1.0 in. (25 mm) Weight (Incl. Clamps): 1.2 lb. (0.544 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 9.3 lb. (4.2 kg) Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated Copper on PCB Radome: White UV stabilized fiberglass Clamps: Stainless steel





TA-5204-14-90 Sector 5250-5350 & 5725-5875 MHz

The TA-5204-14-90 is a vertically polarized 90 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5250-5350 & 5725-5875 MHz Gain: 16 dBi min. VSWR: 1.5:1 Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 5 Watts H-Plane Beamwidth: 90 degrees E-Plane Beamwidth: 5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications

Length: 26.5 in. (673 mm) Width: 6.25 in. (159 mm) Depth: 2.0 in. (51 mm) Weight (incl. Clamps): 6 lb. (2.72 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 72 lb. (32.6 kg) Mechanical Tilt: 0+/-16 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements:Plated Copper on PCBReflector:Irridited aluminumRadome:Gray UV stabilized ASAClamps:Aluminum and stainless steel









TA-5206 Panel 5250-5350 & 5725-5875 MHz



The TA-5206 is a vertically or horizontally polarized directional panel antenna. The antenna complies with ETSI EN 302 085 V1.1.2 Section 6.1 TS3 standard. The antenna consists of a printed broadband dipole array enclosed in an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5250-5350 & 5725-5875 MHz Gain: 23.5 +/- 0.5 dBi @ 5725-5875 MHz

22.5 +/- 0.5 dBi @ 5250-5350 MHz

VSWR: 1.5:1 Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 10 Watts H-Plane Beamwidth: 9.5 degrees E-Plane Beamwidth: 9 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane



Mechanical Specifications

Length: 12 in. (304.8 mm) Width: 12 in. (304.8 mm) Depth: 1.5 in. (38.1 mm) Weight (incl. Clamps): 5 lb. (2.27 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 63 lb. (28.6 kg) Mechanical Tilt: 0+/-15 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





TA-5404-8-60 Sector

5470-5875 MHz



The TA-5404-8-60 is a vertically polarized 60 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5470-5875 MHz Gain: 16 dBi min. VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 40 Watts H-Plane Beamwidth: 60 degrees E-Plane Beamwidth: 7 degrees Electrical Downtilt: 0° **Cross Pol. Discrimination:** 15 dB min.

Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

180

Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 4.9 in. (124 mm) Depth: 3.2 in. (81 mm) Weight (incl. Clamps): 4 lb. (1.81 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 37 lb. (16.8 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum, EDZ and HDG Steel





H-Plane



TA-5404-8-90 Sector 5470-5875 MHz

The TA-5404-8-90 is a vertically polarized 90 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5470-5875 MHz Gain: 15.5 dBi typ. VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 40 Watts H-Plane Beamwidth: 90 degrees E-Plane Beamwidth: 7 degrees Electrical Downtilt: 0° **Cross Pol. Discrimination:** 15 dB min.

Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

180

H-Plane

Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 4.9 in. (124 mm) **Depth:** 3.2 in. (81 mm) Weight (incl. Clamps): 4 lb. (1.81 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 37 lb. (16.8 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum, EDZ and HDG Steel





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TA-5404-8-120 Sector 5470-5875 MHz



The TA-5404-8-120 is a vertically polarized 120 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5470-5875 MHz Gain: 14.5 +/- 0.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 40 Watts H-Plane Beamwidth: 120 degrees E-Plane Beamwidth: 7 degrees Electrical Downtilt: 0° **Cross Pol. Discrimination:** 15 dB min.

Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

70

Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 4.9 in. (124 mm) Depth: 3.2 in. (81 mm) Weight (incl. Clamps): 4 lb. (1.81 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 37 lb. (16.8 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum, EDZ and HDG Steel







TIL-TEK Antennae Inc.

Form 2006-5404-8-120



TA-5404-8-180 Sector

5470-5875 MHz



The TA-5404-8-180 is a vertically polarized 180 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5470-5875 MHz Gain: 13 dBi typ. VSWR: 1.5:1 max. Front to Back Ratio: 20 dB min. Polarization: Vertical Power Rating: 40 Watts H-Plane Beamwidth: 180 degrees E-Plane Beamwidth: 7 degrees Electrical Downtilt: 0° **Cross Pol. Discrimination:** 15 dB min.

Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

70

Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 4.9 in. (124 mm) **Depth:** 3.2 in. (81 mm) Weight (incl. Clamps): 4 lb. (1.81 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 37 lb. (16.8 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum, EDZ and HDG Steel









TA-5404-14-90 Sector

5470-5725 MHz



The TA-5404-14-90 is a vertically polarized 90 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5470-5725 MHz Gain: 16 dBi min. VSWR: 1.65:1 max. Front to Back Ratio: 25 dB min. Polarization: Vertical Power Rating: 5 Watts H-Plane Beamwidth: 90 degrees E-Plane Beamwidth: 5 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications Length: 26.5 in. (673 mm)

Width: 6.25 in. (159 mm) **Depth:** 2.0 in. (51 mm) Weight (incl. Clamps): 6 lb. (2.72 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 72 lb. (32.6 kg) Mechanical Tilt: 0+/-16 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel







TA-5405H-8-60 Sector 5470-5875 MHz



The TA-5405H-8-60 is a horizontally polarized 60 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5470-5875 MHz Gain: 16.0 +/- 0.5 dBi VSWR: 1.5:1 max. Front to Back Ratio: 25 dB min. Polarization: Horizontal Power Rating: 40 Watts H-Plane Beamwidth: 7 degrees E-Plane Beamwidth: 60 degrees Electrical Downtilt: 0° Cross Pol. Discrimination: 20 dB max.

Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

E-Plane

Mechanical Specifications

Length: 20.5 in. (521 mm) Width: 4.9 in. (124 mm) Depth: 3.3 in. (84 mm) Weight (incl. Clamps): 4 lb. (1.81 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 37 lb. (16.8 kg) Mechanical Tilt: 0 - 30 degrees Mounting (O.D.): 0.75 - 3.0 in. (19 - 76 mm)

Materials

 Radiating Elements:
 Plated Copper on PCB

 Reflector:
 Aluminum

 Radome:
 Gray UV stabilized ASA

 Clamps:
 Aluminum, EDZ and HDG Steel

H-Plane







TA-5405H-14-90 Sector

5470-5725 MHz



The TA-5405H-14-90 is a horizontally polarized 90 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5470-5725 MHz Gain: 16.5 dBi min. VSWR: 1.65:1 max. Front to Back Ratio: 25 dB min. Polarization: Horizontal Power Rating: 5 Watts H-Plane Beamwidth: 5 degrees E-Plane Beamwidth: 90 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications Length: 24.5 in. (622 mm)

Width: 9.0 in. (229 mm) Depth: 2.25 in. (57mm) Weight (incl. Clamps): 6 lb. (2.72 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 96 lb. (43.5 kg) Mechanical Tilt: 0+/-16 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel



H-Plane





TA-5406 Panel 5470-5725 MHz



The TA-5406 is a vertically or horizontally polarized directional panel antenna. The antenna complies with ETSI EN 302 085 V1.1.2 Section 6.1 TS3 standard. The antenna consists of a printed broadband dipole array enclosed in an aluminum base with a UV stabilized ASA radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5470-5725 MHz Gain: 23.5 +/- 0.5 dBi VSWR: 1.65:1 max. Front to Back Ratio: 30 dB min. Polarization: Vertical or Horizontal Power Rating: 10 Watts H-Plane Beamwidth: 9.5 degrees E-Plane Beamwidth: 9 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications Length: 12 in. (304.8 mm)

Width: 12 in. (304.8 mm) **Depth:** 1.5 in. (38.1 mm) Weight (incl. Clamps): 5 lb. (2.27 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 63 lb. (28.6 kg) Mechanical Tilt: 0+/-15 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel







TA-5705H-14-90 Sector

5725-5875 MHz



The TA-5705H-14-90 is a horizontally polarized 90 degree sectoral antenna. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. The antenna is at DC ground to aid in lightning protection.

Electrical Specifications

Frequency Range: 5725-5875 MHz Gain: 16.5 dBi min. VSWR: 1.5:1 Front to Back Ratio: 25 dB min. Polarization: Horizontal Power Rating: 5 Watts H-Plane Beamwidth: 5 degrees E-Plane Beamwidth: 90 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

Mechanical Specifications Length: 24.5 in. (622 mm)

Width: 9.0 in. (229 mm) Depth: 2.25 in. (57mm) Weight (incl. Clamps): 6 lb. (2.72 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 96 lb. (43.5 kg) Mechanical Tilt: 0+/-16 degrees Mounting (O.D.): 0.75 - 2.0 in. (19 - 51 mm)

Materials

Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and stainless steel



H-Plane





TA-5724R Solid Parabolic

5725-5875 MHz



The TA-5724R is a 24 inch diameter solid parabolic antenna. The polarization can easily be changed in the field by rotating the antenna through 90 degrees. The antenna is at DC ground to aid in lightning protection and it requires a full radome to ensure the feed is protected from all weather conditions.

Electrical Specifications

Frequency Range: 5725-5875 MHz Gain: 28 dBi VSWR: 1.5:1 max. Front to Back Ratio: 30 dB Polarization: Vertical or Horizontal Power Rating: 25 Watts H-Plane Beamwidth: 6 degrees E-Plane Beamwidth: 6 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Typical mid band values. (For details , contact factory)

H-Plane

Mechanical Specifications

Diameter: 24 in. (610 mm) Depth: 9.56 in. (243 mm) Weight (Incl. Clamps): 20 lb. (9.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: N/A with radome: 127 lb. (57.6 kg) **Mechanical Tilt:** 0 ± 10 degrees Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements: Brass Rod Reflector: Aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel



