

TIL-TEK Antennas



Canada K0G 1J0



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 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 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

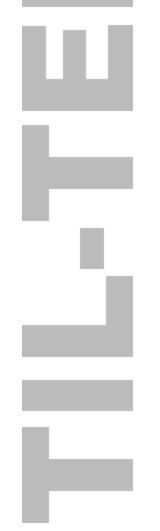
TIL-TEK products are warranted against defects in material and workmanship under normal use for a period of three years from the date of shipment from the factory. A RMA number must be obtained from TIL-TEK prior to returning a product for warranty service. The product must be returned to TIL-TEK with 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 is found to have no fault, the customer will be invoiced for the new replacement and will incur the freight to have the antenna returned to them.





Products

	TA-300 Series	340-400 MHz
	TA-400 Series	420-470 MHz
	TA-700 Series	698-806 MHz
	TA-800 Series	806-960 MHz
	TA-900 Series	902-928 MHz
	TA-1400 Series	1425-1535 MHz
	TA-1800 Series	1850-1990 MHz
	TA-1880 Series	1880-1930 MHz
	TA-2100 Series	2150-2700 MHz
	TA-2300 Series	2300-2500 MHz
	TA-2400 Series	2400-2483 MHz
	TA-2500 Series	2485-2690 MHz
	TA-3400 Series	3400-3700 MHz
	TA-5200 Series	5250-5875 MHz
-	TA-5400 Series	5470-5875 MHz
	TA-5700 Series	5725-5875 MHz

TIL-TEK Antennas

(613) 258-5928 F Specifications subject to change without notice

Form 2004-Products



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.

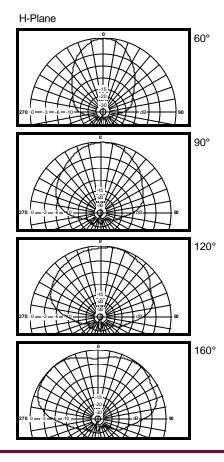
Electrical Specifications

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)



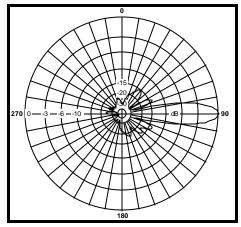
Mechanical Specifications

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 PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





Form 2004-2304-ISM



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

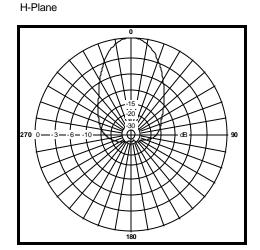
Typical mid band values. (For details , contact factory)

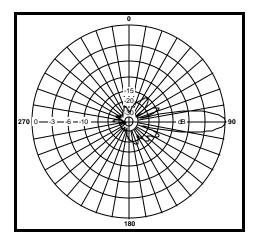
Mechanical Specifications Length: 20.5 in. (521 mm)

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







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)

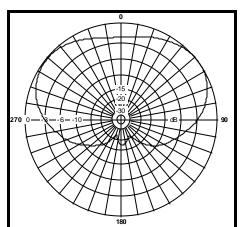
H-Plane

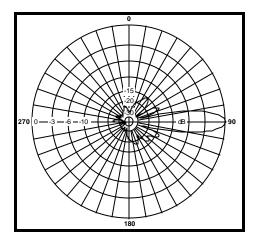
Mechanical Specifications

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







LANtenna Series TA-2304-2-ISM Adjustable Sector

2400-2483 MHz



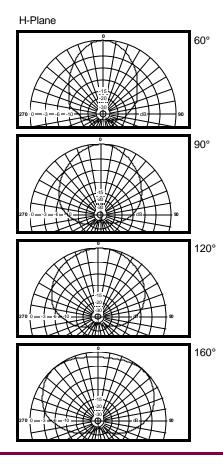
The TA-2304-2-ISM is a vertically polarized sectoral antenna which has adjustable side panels for 60-160 degree azimuth patterns. The antenna consists of a printed dipole array enclosed in an aluminum base with a UV stabilized radome for superior weatherability. It is designed for wireless data in the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

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)



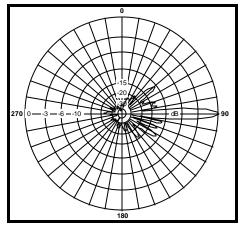
Mechanical Specifications

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 PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





TIL-TEK Antennas

www.tiltek.com

Form 2004-2304-2-ISM



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

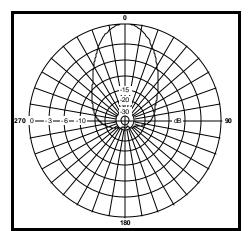
Typical mid band values. (For details , contact factory)

Mechanical Specifications Length: 40 in. (1016 mm)

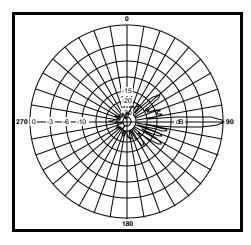
Width: 6.5 in (165 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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







H-Plane



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

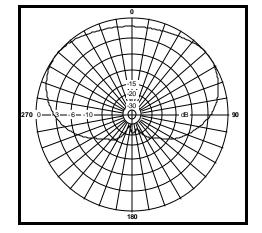
Mechanical Specifications

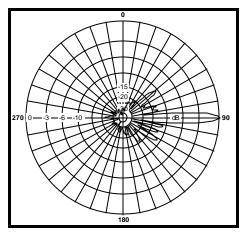
Length: 40 in. (1016 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 86 lb. (39 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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



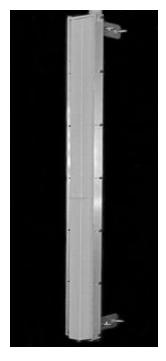






LANtenna Series TA-2304-4-ISM Adjustable Sector

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.

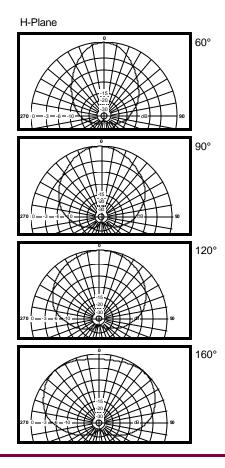
Electrical Specifications

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)

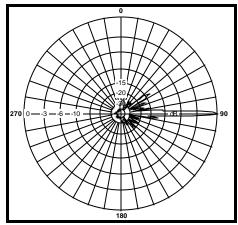


Length: 71 in. (1803 mm) Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 153 lb. (69 kg) Mechanical Tilt: 0 - 10 degrees (optional) Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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





TIL-TEK Antennas

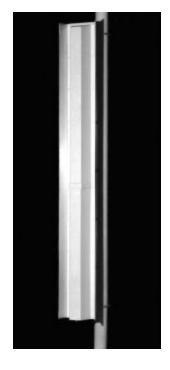
www.tiltek.com

Form 2004-2304-4-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 aluminumun 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

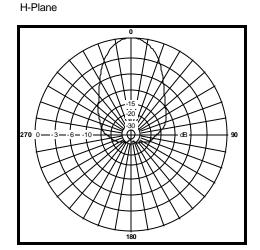
Typical mid band values. (For details , contact factory)

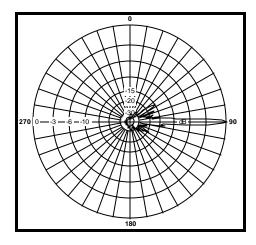
Mechanical Specifications Length: 71 in. (1803 mm)

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

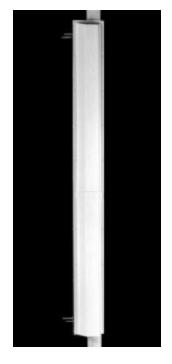






LANtenna Series TA-2304-4-180-ISM Sector

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

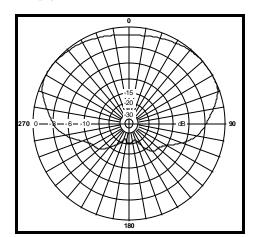
Typical mid band values. (For details , contact factory)

Mechanical Specifications Length: 71 in. (1803 mm)

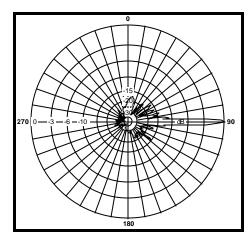
Width: 4.9 in. (124 mm) Depth: 4.6 in. (117 mm) Weight (incl. Clamps): 12 lb. (5.5 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 153 lb. (69 kg) Mechanical Tilt: 0 - 10 degrees (optional) Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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







H-Plane



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

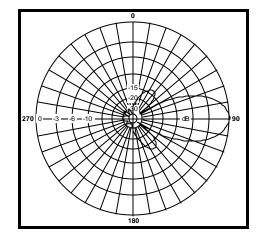
Typical mid band values. (For details , contact factory)

Mechanical Specifications

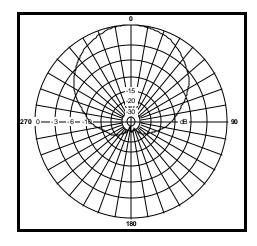
Length: 12.6 in. (320 mm) Width: 4.62 in. (117 mm) Depth: 3.9 in. (100 mm) Weight (incl. Clamps): 2.2 lb. (1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 25 lb. (11.4 kg) Mechanical Tilt: 0 +/- 45 degrees Mounting (O.D.):1.0 - 2.0 in. (25 - 50 mm)

Materials

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









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)

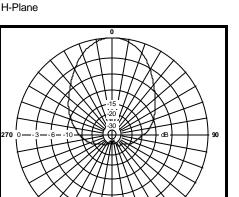
Length: 20.5 in. (520 mm)

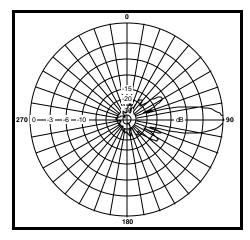
Mechanical Specifications

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-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)



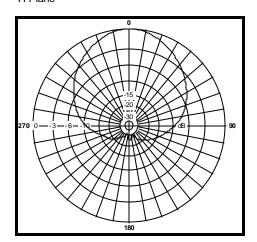


Mechanical Specifications

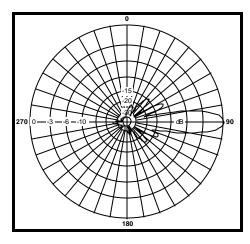
Length: 20.5 in. (520 mm) Width: 5.1 in. (129 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 2.5 lb. (1.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb. (20 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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



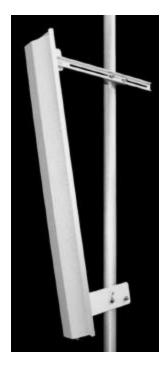






LANtenna Series TA-2404-8-120 Sector

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)

H-Plane

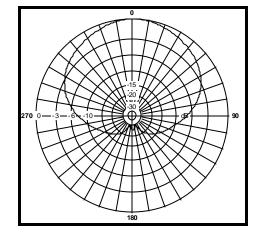
Mechanical Specifications Length: 40 in. (1016 mm)

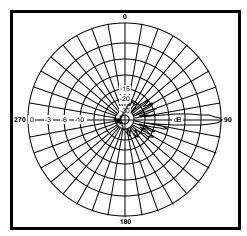
Width: 5.1 in. (129 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 7.5 lb. (3.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 87 lb. (39.5 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.):0.75 - 2.0 in. (19 - 50 mm)

Materials

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









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)

E-Plane

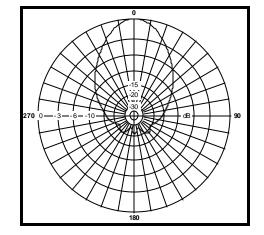
Mechanical Specifications

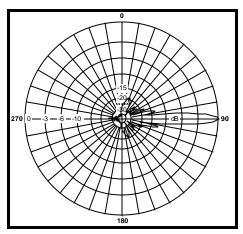
Length: 40 in. (1016 mm) Width: 4.9 in. (124 mm) Depth: 3.5 in. (89 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 84 lb. (38.1 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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







TIL-TEK Antennas

Form 2004-2405H-2-45



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

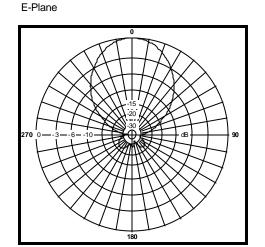
Typical mid band values. (For details , contact factory)

Mechanical Specifications

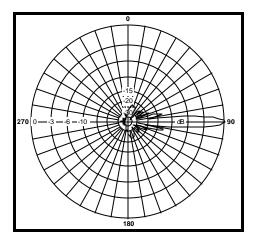
Length: 40 in. (1016 mm) Width: 4.7 in. (124 mm) Depth: 3.5 in. (89 mm) Weight (incl. Clamps): 8 lb. (3.6 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 84 lb. (38.1 kg) Mechanical Tilt: 0 - 30 degrees (optional) Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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



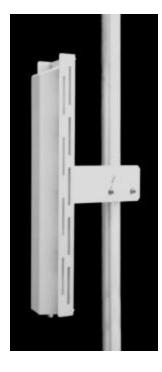






LANtenna Series TA-2405H-4-60 Sector

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)

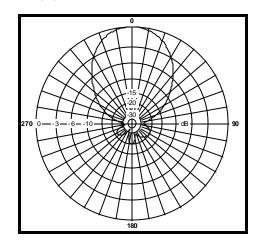
E-Plane

Mechanical Specifications

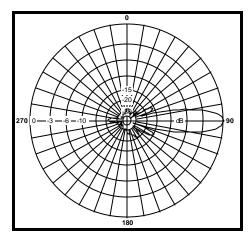
Length: 20.5 in. (520 mm) Width: 5.1 in. (129 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 2.5 lb. (1.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb. (20 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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







TIL-TEK Antennas

Form 2004-2405H-4-60



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)

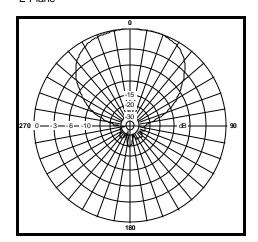
E-Plane

Mechanical Specifications

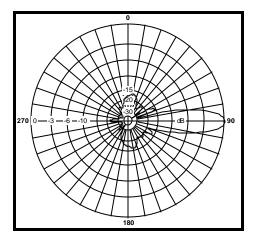
Length: 20.5 in. (520 mm) Width: 7.8 in. (198 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 2.5 lb. (1.1 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 69 lb. (31 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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







TIL-TEK Antennas



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

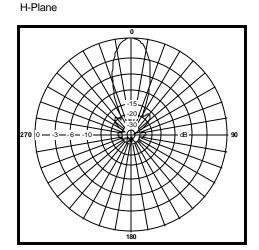
Typical mid band values. (For details , contact factory)

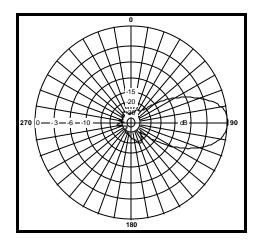
Mechanical Specifications

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 ClampsHook & 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)

H-Plane

Mechanical Specifications

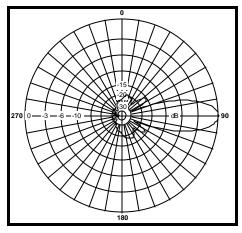
Length: 12.75 in. (324 mm) Width: 13.6 in. (345 mm) Depth: 3 in. (76 mm) Weight (incl. Clamps): 7 lb. (3.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 75 lb. (34.0 kg) Mechanical Tilt: 0 +/- 11 degrees Mounting (O.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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









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

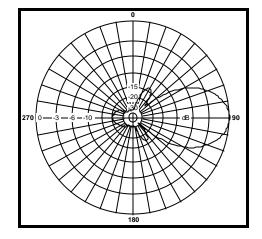
Typical mid band values. (For details , contact factory)

Mechanical Specifications

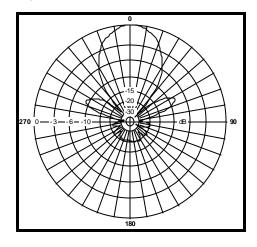
Length: 10.5 in. (267 mm) Diameter: 3 in. (76 mm) Weight (Incl. Clamps): 2 lb. (0.9 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 9 lb. (4 kg) Mechanical Tilt: 0 - 30 degrees Mounting (0.D.):0.75 - 3.0 in. (19 - 76 mm)

Materials

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









LANtenna Series TA-2418 Solid Parabolic

2400-2483 MHz



TA-2418



TA-2418R

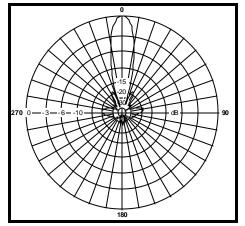
The TA-2418 is an 18 inch diameter solid parabolic antenna. The antenna feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-2418R) is also available for extreme weather conditions.

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

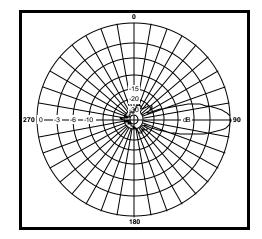


Mechanical Specifications

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 - 15 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

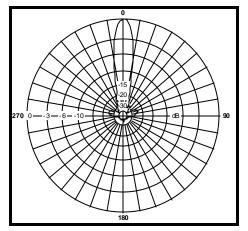
The TA-2424 is a 24 inch diameter solid parabolic antenna. The antenna feed is bolted to the aluminum reflector so the polarization can easily be changed in the field by rotating the antenna through 90 degrees. A full radome (TA-2424R) is also available for extreme weather conditions.

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

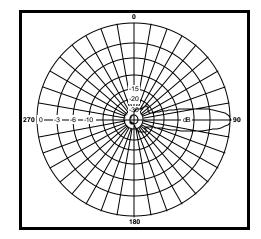


Mechanical Specifications

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 - 15 degrees Mounting (O.D.):1.75 - 4.0 in. (44.5 - 102 mm)

Materials

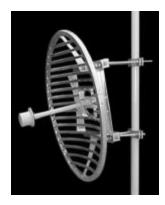
Radiating Elements: Plated Copper on PCB Reflector: Irridited aluminum Radome: Gray UV stabilized ASA Clamps: Aluminum and HDG steel





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

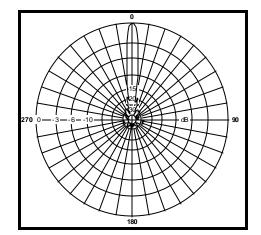
Diameter: 38.5 in. (978 mm) Weight (Incl. clamps): 40 lb. (18.2 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 177 lb. (80.5 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

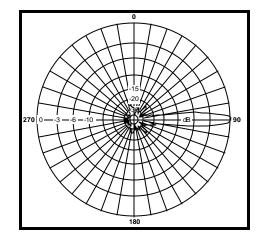
Materials

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: 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

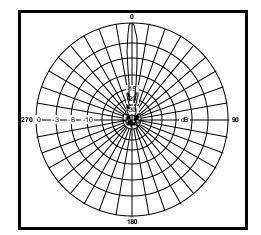
Diameter: 50.5 in. (1283 mm) Weight (Incl. clamps): 50 lb. (22.7 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 304 lb. (138.2 kg) Mechanical Tilt: 0 - 15 degrees Mounting (O.D.): 1.75 - 4.5 in. (44.5 - 114 mm)

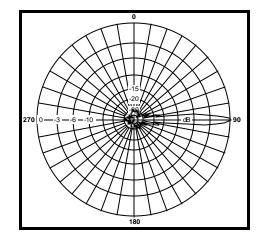
Materials

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

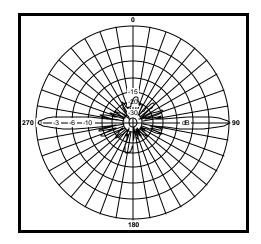
Typical mid band values. (For details , contact factory)

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: 360 degrees E-Plane Beamwidth: 7 degrees Cross Pol. Discrimination: 20 dB min. Impedance: 50 ohms nominal Termination: N female

Mechanical Specifications

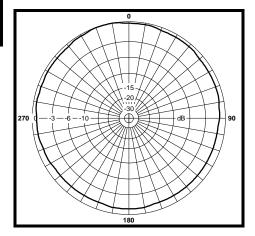
Length: 51 in. (1295 mm) Diameter: 3 in. (76 mm) Weight (Incl. Clamps): 12 lb. (5.4 kg) Rated Wind Velocity: 125 mph (200 km/h) Hor. Thrust at rated wind: 44 lb (19.9 kg) Mounting (O.D.): 1.75 - 4.0 in. (44.5 - 102 mm)

Materials

Radiating Elements:Plated Copper on PCBRadome:Gray UV stabilized fiberglassClamps:EDZ steel

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

E-Plane



H-Plane

