

ANT280S

WIDEBAND DISCONE ANTENNA

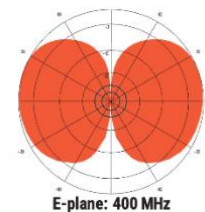
The Telewave.io ANT280S Discone is a rugged, lightweight, wideband Discone antenna for all frequencies between 118 MHz and 3 GHz. Default color is Black, contact Telewave.io for TAN or other optional color.

Each Discone is constructed from Mil. Spec. 6061-T6 solid aluminum, fully welded at all joints for maximum strength. All internal junctions are enclosed within a ruggedized radome to ensure survivability in the worst environments.

All exposed surfaces are coated with Txylan™ to ensure protection from corrosive gases, ultraviolet radiation, salt spray, acid rain and blowing sand. Applicable harsh environment uses include onshore/offshore petroleum fields, petrochemical production/transport facilities, underground/pit mines, ships, and command vehicles.

The wide vertical beamwidth and wide frequency bandwidth of the Discone antennas make them perfect for Air Traffic Control (ATC) applications. These antennas also excel in applications where two or more radios are connected to the antenna via cross-band couplers. The Discone antennas support TX only, RX only, and Transceiver applications.

The Discone antennas can be clamped to any 1.5" to 3.5" diameter support structure (schedule 40 or stronger is recommended when using pipe.) A dual clamp kit is included.



SPECIFICATIONS			
Tail Connector Standard	N-Male	Tail Connector Optional	DIN 7-16 Male
Frequency Range	118 – 3000 MHz	Input VSWR / Return Loss	<= 1.5:1 / 14 dB 136 - 3000 MHz <= 1.8:1 / 10.9 dB 118 - 136 MHz
Power RMS	500 W / 57 dBm	Gain (Typical)	0 dBd / 2.1 dBi
Impedance RF	50 Ohms	Impedance DC	Short
Polarization	Vertical	Pattern Horizontal	Omnidirectional
Beamwidth Vertical	110 degrees	Vertical Beam Tilt (from horizon)	0 degrees
Tail Cable Type	RG-214	Tail Cable Length In (CM)	36" (91.5)
Installed Active Antenna Dimensions Inch (CM)	43" H x 28.5" W (110 H x 73 W)	Wind rating / w/ 0.5" ice MPH (KPH)	150 / 100 MPH (241 / 161 KPH)
Installed Boom Length below the Antenna	16" (40.75)	Maximum exposed area	0.89 Ft Sq
Total Length Inch (CM)	59" (150.75)	Lateral thrust at 100 MPH	36 lb (16.3 KG)
Boom Diameter Inch (CM)	2.75" (7)	Bending moment xfer to top clamp at 100 MPH	180 ft lb (244 nm)
Installed Weight lb (KG)	36 lb (16.4)	Clamp Kit (ship w/ Ant)	ANTC480
Shipping Dimensions Inch (CM)	45" x 32" x 32" (115 x 82 x 82)	Coastal / Salt Air Suitable	Yes
Shipping Weight Lb (KG)	41 lb (18.6)	Passive Intermodulation (PIM) Rating	NA
Shipping Mode (Freight/UPS/FedEx/etc.)	Freight Only	Peak Instantaneous Power (PIP) Rating	NA
Temperature Range (Operating & Storage)	40 to +140 °F / -40 to +60 °C	Temperature Range (Installation)	23 to +140 °F / -5 to +60 °C

ANTC480

Clamp Kit for ANT280S Discone Antenna

Fits mast or support structure with an outside diameter 1.5" to 3.5"

WARNING

For your safety: do not install any antenna near power lines, carefully follow all installation instructions, and use safety devices when climbing. Ensure that the tower structure is properly and safely grounded.

If the antenna falls toward or contacts any overhead wires, LET GO IMMEDIATELY and stay away. Contact the utility company for assistance.

Consult a qualified structural engineer to verify that the tower and all mounting hardware are sufficient to support the antenna and RF cables.

The mounting clamps must be properly installed and spaced to prevent antenna rotation from wind loading. Each installation is unique.

MOUNTING INSTRUCTIONS

1. Apply anti-seize compound to the threaded rod ends.
2. Mount ½ of each clamp set to the mast using two of the plates and supplied hardware. Set the clamps so that the vertical spacing will line up with the antenna ferrule with a minimum of 1" of ferrule exposed above and below the two clamp sets. Keep about ½" of threaded rod exposed on the mast side.
3. Tighten both clamp sets until the lock washers are flat. Then perform an additional half turn on each nut.
4. Mount upper clamp plates and hardware onto the rods but leave loose so that the antenna can be placed into the clamp.
5. Feed the antenna ferrule through the clamp until aligned with the upper attachment point (lower if an inverted antenna). Partially tighten the hex nuts and straighten the antenna until it is vertical.
6. Attach and secure the lower (upper if inverted antenna) antenna clamp and hardware. Tighten both clamps until the lock washers are flat. Then perform an additional half turn on each nut.
7. Connect RF feed cable to antenna input connector.
8. Secure all cables with UV-Resistant cable ties.
9. Seal the input connector with waterproof tape or other sealing material. Sealing instructions can be found at www.telewave.com

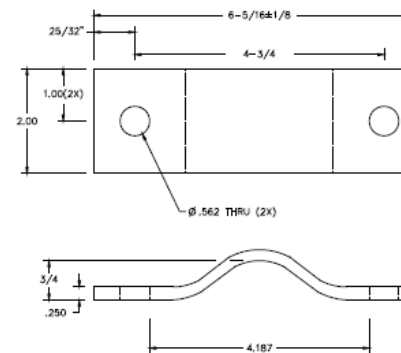


ANTC480 Clamp Kit

- (8) 2" x 6.3125" Galvanized Plates
- (4) 1/2"-13 x 8.5" Zinc Plated Rods
- (16) 1/2" Zinc Plated Hex Nuts
- (16) 1/2" Zinc Plated Split Lock Wash
- (1) Tube of Anti-Seize Compound



ANTC480 Clamp Kit



Clamp Plate Details