

# ANT425F10

## FIBERGLASS RADOME ANTENNA

The Telewave.io fiberglass radome antennas are rugged omnidirectional antennas suited for most environments. The radome provides protection from corrosive gases, ultraviolet radiation, icing, acid rain, and wind-blown abrasives. Intrusion and moisture protection is equivalent to an IP24 rating. The default radome color is Cool Blue™.

These antennas are constructed with brass and copper elements that are soldered together, producing a DC path to ground, and preventing internally produced intermodulation products.

The antenna kit includes a dual clamp set for mounting the antenna to a 1.5" to 3.5" O.D. support mast (Not Included.) Please contact your tower vendor or local structural engineering firm for assistance with mounting hardware requirements and configuration.

### Variations

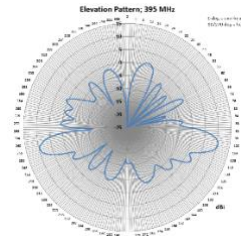
Part Number	Connector	Jumper	Default Clamp	Mounting
ANT425F10	N-F	None	ANTC482	Clamps Bottom (Normal)
ANT425F10-I	N-F	None	ANTC482	Clamps Top (Inverted)
ANT425F10-DIN	7/16 DIN-F	None	ANTC482	Clamps Bottom (Normal)
ANT425F10-IDIN	7/16 DIN-F	None	ANTC482	Clamps Top (Inverted)

### Gain and Tilt by Frequency

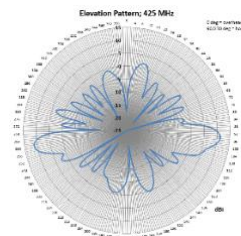
Frequency	Peak Gain	Peak Gain	Tilt
395 MHz	8.4 dBd	10.5 dBi	-8°
405 MHz	8.7 dBd	10.8 dBi	-7°
415 MHz	8.3 dBd	10.4 dBi	-5°
425 MHz	9.1 dBd	11.2 dBi	-4°
450 MHz	7.7 dBd	9.8 dBi	-2°



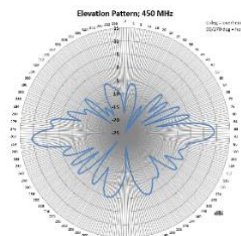
Rtn Loss > 14 dB Mhz



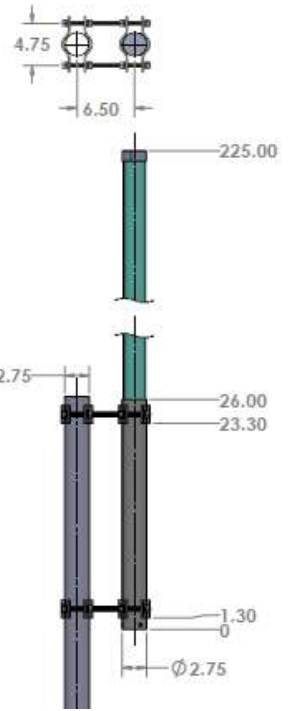
Vertical Beam Pattern 395 MHz



Vertical Beam Pattern 425 MHz



Vertical Beam Pattern 450 MHz



## SPECIFICATIONS

Frequency Range (Continuous)	395 to 450 MHz	Wind rating / with 0.5" ice (MPH)	150 / 125
Gain	See Freq Chart	Maximum exposed area (sq.ft)	3.90
Power Rating (RMS Continuous)	500 watts / 57 dBm	Lateral Thrust experienced by the antenna 100 MPH (lb)	97.8
Passive Intermodulation (PIM) Rating	NA	Bending Moment transfer to top clamp 100 MPH (lb-ft)	917
Peak Instantaneous Power (PIP) Rating	NA	Ferrule Dimension Inches (H" x D")	26 x 2.75 (66 x 7)
Beam width Vertical / Horizontal	12° / 360°	Radome Dimensions Inches (H" x D")	199 x 2.5 (506 x 6.3)
Supported Polarization	Vertical	Total Length Inches (H")	225 (571.5)
Vertical Beam Tilt (from horizon)	See Freq Chart	Installed Weight Lbs (Antenna + Default Clamp)	34 + 11 (15.4 + 5 Kg)
RF Impedance	50 Ohms	Antenna Shipping Mode (Freight/UPS/FedEx/etc.)	Freight Only
DC Impedance	Short	Shipping Tube Weight - Antenna + ANTC482 clamp (lbs)	54 (24.5 Kg)
Input VSWR / Return Loss (Minimum)	1.5:1 / 14 dB	Shipping Box Dimensions (L" x W") (Round Tube)	231 x 4 (612 x 10)
Coastal / Salt Air Suitable	Yes	Default Clamp Shipping Weight - Separate Box (lbs)	NA
Temperature Range (Operating or Storage)	-58 to +140 °F -50 to +60 °C	Default Clamp Shipping Box Dimensions (L" x W" x H")	NA

## ANTC482

### Clamp Kit for Radome Antennas: HP F6 F8 & F10

Fits mast or support structure with an outside diameter 1.5" to 4.0"

**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.

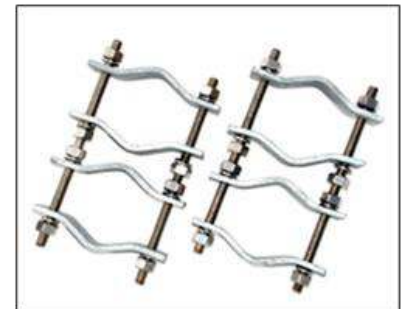


ANTC482 Clamp Kit

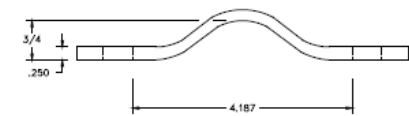
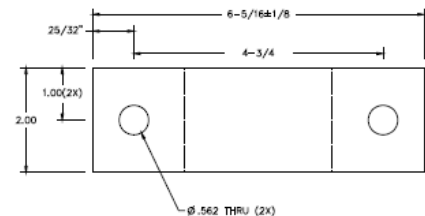
- (8) Galvanized Clamp Plates
- (4) 1/2"-13 x 10" Stainless Steel Rods
- (16) 1/2" Stainless Steel Hex Nuts
- (16) 1/2" Stainless Steel Split Lock Washers
- (1) Tube of Anti-Seize Compound

#### MOUNTING INSTRUCTIONS

1. Apply anti-seize compound to the threaded rod ends.
2. Mount 1/2 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 1/2" 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](http://www.telewave.com)



ANTC482 Clamp Kit



Clamp Plate Details