

# ANT850F8 SERIES

## FIBERGLASS COLLINEAR ANTENNA 8 dBd

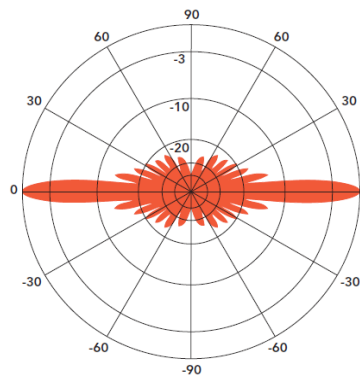
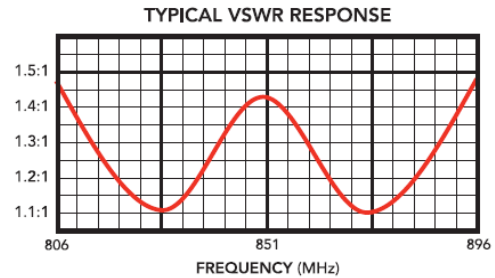
The Telewave Collinear line of antennas are rugged omnidirectional antennas suited for most environments, see the exact model specifications below.

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

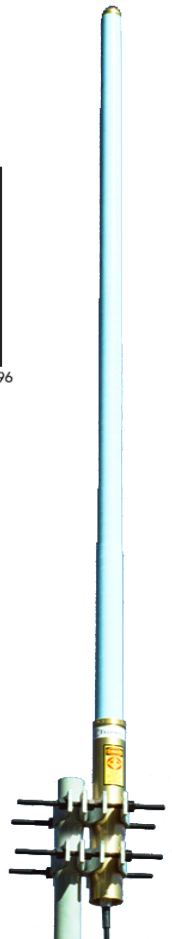
The "Cool Blue" fiberglass radome provides maximum protection from corrosive gases, ultraviolet radiation, icing, acid rain, and wind-blown abrasives. Intrusion and water protection is equivalent to an IP24 rating.

When ordering, specify all TX and RX frequencies that will be used on the antenna. Telewave's support can assist with any special mounting needs.

Part Number	Connector	Jumper	Clamp Kit (Included)	Mounting
ANT850F8	N-F	24" RG213 M-M	ANTC482	Clamps Bottom (Normal)
ANT850F8-I	N-F	24" RG213 M-M	ANTC482	Clamps Top (Inverted)
ANT850F8-DIN	DIN-F	None	ANTC482	Clamps Bottom (Normal)
ANT850F8-IDIN	DIN-F	None	ANTC482	Clamps Top (Inverted)



Vertical Plane  
Gain = 8 dBd  
Antenna Pattern available on website



(Mast not included)

SPECIFICATIONS			
Frequency (continuous)	806 - 896 MHz	Tower weight (antenna + clamps)	19 lbs.
Gain	8 dBd	Wind rating / with 0.5" ice	200 / 150 MPH
Power rating (Type.)	500 watts	Maximum exposed area	1.3 ft. <sup>2</sup>
Impedance	50 ohms	Lateral thrust at 100 MPH	53 lbs.
Input VSWR	1.5:1 or less	Shipping weight	23 lbs.
Pattern	Omnidirectional	Full antenna dimensions (L x D) in (cm)	82.78 x 2.75 (210.26 x 7)
Vertical beamwidth	10°	Shipping dimensions (L X W X H) in (cm)	84 x 7 x 5 (213.36 x 17.78 x 12.7)
Temperature range	-48 to +140 °F -40 to +60 °C	Base pipe dimensions (L x D) in (cm)	12 x 2.085 (30.48 x 5.3)
Coastal / Salt Air Suitable	No	Radome dimensions (L x D) in (cm)	70.78 x 2.75 (179.78 x 7)



# INSTALLATION GUIDE

## FOR COLLINEAR ANTENNAS MODELS: F6, F8

### **WARNING:**

For your safety, do not install any antenna near power lines and carefully follow all installation instructions. Always use safety devices for tower climbing. Ensure that the tower structure is well grounded for lightning protection.

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

### **IMPORTANT - BEFORE ASSEMBLING AND MOUNTING**

Both clamps must be properly installed and spaced to prevent antenna rotation from wind load. Make sure you have all parts ready prior to installation, see on the right.

### **MOUNTING INSTRUCTIONS**

1. Apply anti-seize compound to the threaded rod ends. Insert rods through dual clamps with hex nuts and lock washers in the middle of the clamps. Mount both clamps to the support structure with the two single clamp plates, hex nuts, and lock washers. Arrange clamps so that 1"-2" of the ferrule is exposed above and below the clamps. Be sure to allow sufficient thread length on the antenna side of the clamps.
2. Attach the antenna clamp plate to the upper clamp set only, allowing maximum plate movement on the rods. Feed the ferrule down through the clamp until aligned with the upper attachment point. Partially tighten the hex nuts and straighten the antenna until clamped into a vertical position.
3. Attach and secure the lower antenna clamp with the supplied hex nuts and lock washers and tighten both clamps until the lock washers are flat. Then perform an additional half turn on each nut.
4. Connect RF feed cable terminated with Type-N or 7-16 DIN as required to antenna input connector. Secure all cables with UV-Resistant cable ties.
5. Be sure to properly seal the input connector with waterproof tape or other sealing material. Refer to Telewave TWDS-0502 for a recommended method of connector sealing.

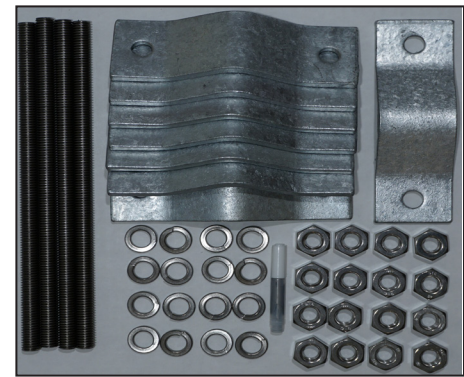


Figure 1: ANTC482 Clamp Kit  
**Clamp Kit Contents (Figure 1):**  
(8) Galvanized Clamp Plates  
(4) 1/2"-13 x 10" Stainless Steel Rods  
(16) 1/2" Stainless Steel Hex Nuts  
(16) 1/2" Stainless Steel Split Lock Washers  
(1) Tube of Anti-Seize Compound

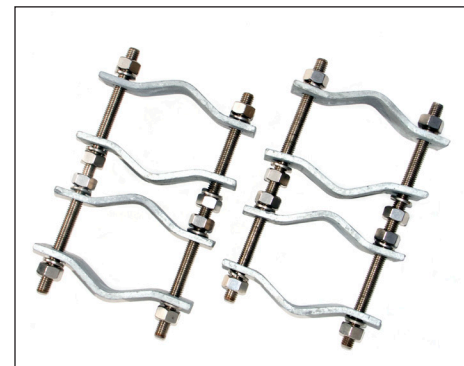


Figure 2: Clamp Preassembly