



The CPF series of FM antennas are designed for low wind load, low cost, single channel requirements. These antenna elements are circularly polarized with an omnidirectional pattern. A choice of two input connector sizes provides power ratings of 500 W or 2.5 kW per bay. An optional radome fully enclosing the radiating element is also available for sites where icing is likely. The antennas are designed to be sidemounted to a vertical pole and a wide range of mounting brackets are available for this purpose. Multiple element arrays are supplied as a complete package including power dividers and distribution cables. An optional input tuner ensures optimum VSWR performance after installation as it enables the effects of tower steelwork to be eliminated. Beam tilt and null fill can be provided on request.



CPF Series showing CPF500-1 Antenna

**FEATURES / BENEFITS**

- Single channel operation
- Rugged stainless steel construction
- Low cost
- Low wind load
- Power rating of up to 20kW for an 8 bay antenna
- Optional radome available for icing conditions
- Optional input tuner ensures optimum VSWR
- Parallel (Corporate) feed network provides low downward radiation.

**Technical features**

**STRUCTURE**

Product Line		Antenna TV
Product Type		Band II (VHF) FM Sidemount Antennas

**ELECTRICAL SPECIFICATIONS**

Frequency Range	MHz	87.5 - 108
Polarization		Circular
Gain per Plane of Polarization	dBd	6
Circularity in free space	dB	+/- 2
Return Loss	dB	>20 (typically >26dB)
Power Rating	kW	4.0 (7/8" EIA i/p connector)
Impedance (unbalanced)	$\Omega$	50

**MECHANICAL SPECIFICATIONS**

Number of Levels		8
Input Connector		Single element N type Array N type 7/8" EIA
Mounting (Standard)	mm (in)	38 to 64 mm diameter mounting pipe (not supplied)
Effective Area Front (full antenna) No Ice	m <sup>2</sup> (ft <sup>2</sup> )	0.44 (4.8)
Effective Area Front (full antenna) with 12.5mm(0.5") Radial Ice	m <sup>2</sup> (ft <sup>2</sup> )	0.44 (4.8)
Effective Area Side (full antenna) No Ice	m <sup>2</sup> (ft <sup>2</sup> )	0.033 (0.35) - Single Bay
Effective Area Side (full antenna) 12.5mm (0.5") Radial Ice	m <sup>2</sup> (ft <sup>2</sup> )	0.033 (0.35) - Single Bay
Weight	kg (lb)	47.2 (104)

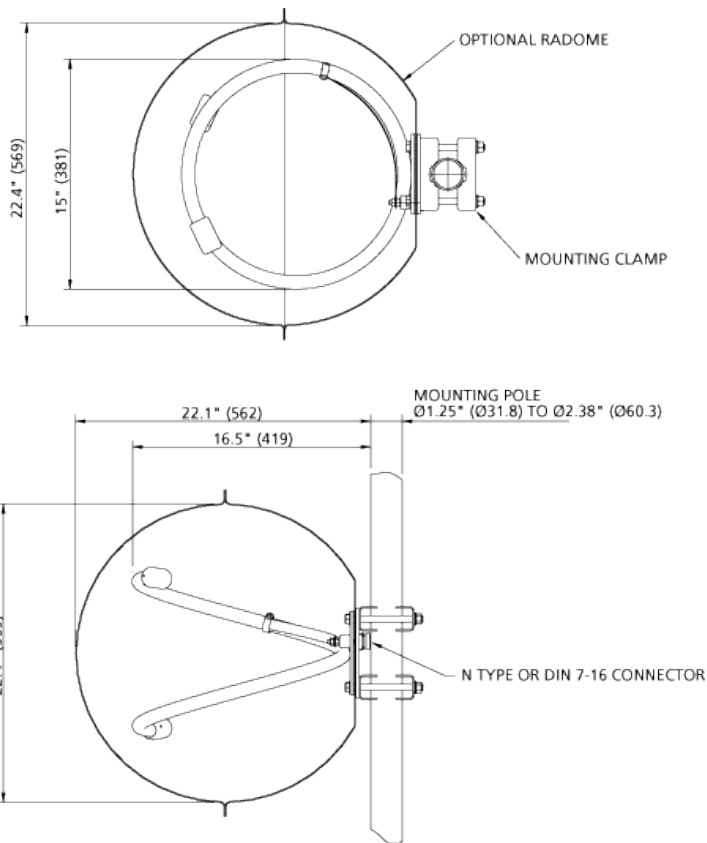


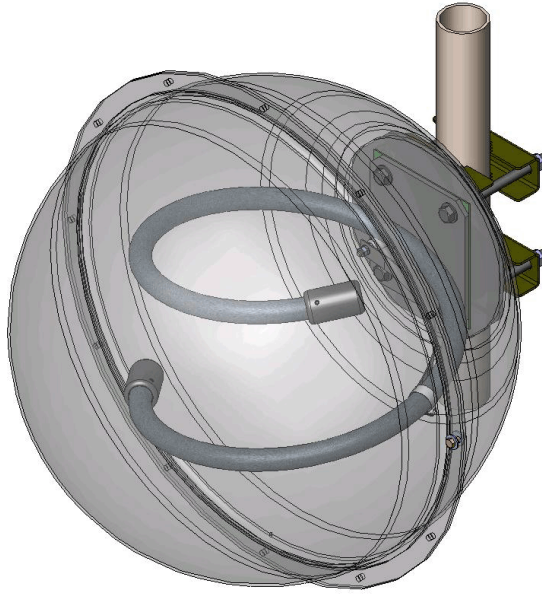
**PACKAGING INFORMATION**

Shipping Weight, Kg (lb)	kg (lb)	47.2 ( )
--------------------------	---------	----------

**MATERIAL**

Material		Stainless Steel
Material - Radome		Stainless Steel
Material - Insulators		Stainless Steel
Material - Support Pole / Mounting		Stainless Steel
Material - Reflecting Screen		Stainless Steel





CPF antenna element with radome (transparent for illustrative purposes only)

[External Document Links](#)

[Notes](#)