

## FM Sidemount Antennas CPF Series

### Product Description

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.



### Features/Benefits

- Single channel operation.
- Rugged stainless steel construction.
- Low cost.
- Low windload.
- 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.

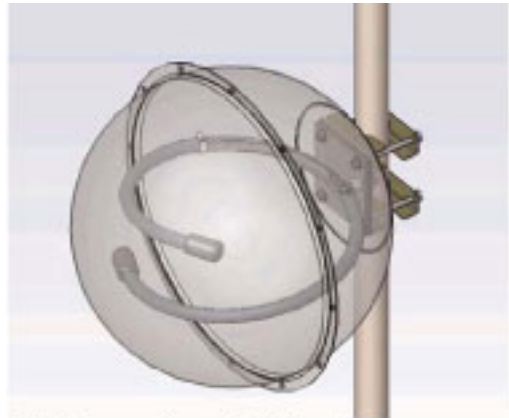
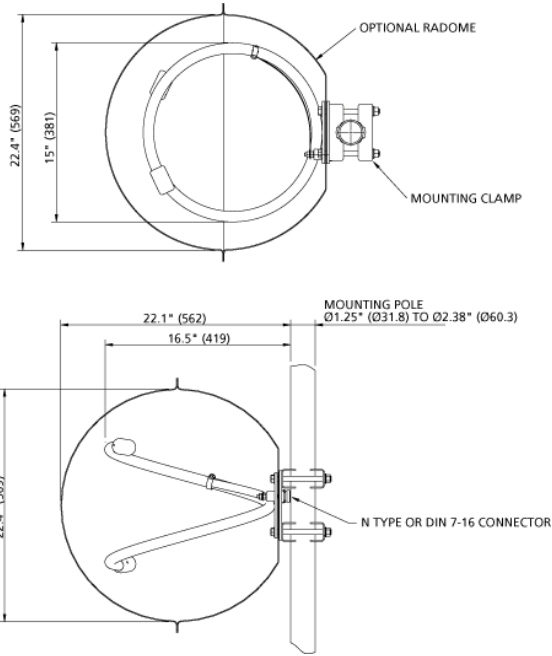
### Technical Specifications

|   |   |
|---|---|
| Product Line                                      | Antenna Radio                                     |
| Product Type                                      | Band II (VHF) FM Sidemount Antennas               |
| Frequency Range, MHz                              | 87.5 - 108  |
| Polarization                                      | Circular  |
| Number of Levels                                  | 6   |
| Gain per Plane of Polarization, dBd               | 4.8   |
| Circularity, dB                                   | +/- 2dB in free space                             |
| Return Loss, dB                                   | >20 (typically >26dB)                             |
| Input Connector                                   | Single element N type, Array N type; 7/8" EIA     |
| Power Rating, kW                                  | 3.0 (7/8" EIA i/p connector)                      |
| Impedance, ohms                                   | 50 unbalanced                                     |
| Weight, kg (lb)                                   | 35.3 (78)   |
| Mounting (Standard), mm (in)                      | 38 to 64 mm diameter mounting pipe (not supplied) |
| Effective Area Front (full antenna), sq m (sq ft) | 0.33 (3.6)  |
| Effective Area Side (full antenna), sq m (sq ft)  | 0.033 (0.35) - Single Bay                         |
| Material  | Stainless Steel                                   |

### Notes

### Other Documentation

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CPF Antenna Element with radome  
(Semi transparent radome for illustration purposes only)

All information contained in the present datasheet is subject to confirmation at time of ordering