

## Section 2

### BROADCAST ANTENNAS

Updated 16 February 2011

#### FMD FM Radio High Power Dipole

**Frequency**  
88 – 108 MHz

**Bandwidth**  
Specify 6 MHz



FMD is a medium to high power dipole for FM radio broadcast. Constructed from stainless steel with a 7/8" EIA connector, the transmit power rating is up to 5 kilowatts per bay.

This antenna is also designed to suit a pressurised system.

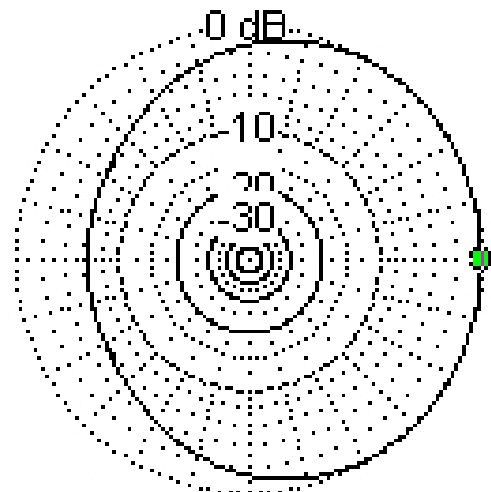
The adjustable tuning stubs allow the antenna to be set for any 6 MHz bandwidth. When ordering, specify your FM radio station transmit frequency and the dipole will be factory tuned for broadcast standard -20 dB return loss, less than 1.2:1 VSWR.

Higher gain and power is achieved in stack array formations using a suitable power divider and branch feeder cables. Stack array package pricing is available upon request.

The heavy duty stainless steel clamp assembly supplied is suitable for mounting to any mast between 38 mm and 75 mm in diameter



SPECIFICATIONS	FMD
Construction	Stainless steel
Frequency Range	88 to 108 MHz
Bandwidth	Specify any 6 MHz
Tuning	Factory (adjustable tuning stubs)
Return Loss, VSWR	Better than -20 dB, less than 1.2:1 across your specified 6 MHz bandwidth
Gain	0 dBd = Single Bay 3 dBd = 2 Bay Stack Array 6 dBd = 4 Bay Stack Array
Maximum Input Power	5 Kilowatts per bay
Impedance	50 Ohms
DC Grounding	Yes
Polarisation	Vertical
H Plane	Semi-omnidirectional, -4 dB at rear
Cable Tail	None
Connector	7/8" EIA
Max Height at 88 MHz	1.5 metres (reduces at higher frequencies)
Weight	11 kg
Projected Area	0.107 m <sup>2</sup>
Wind Load at 160 kph	12.9 kg, 0.127 kN
Aluminium Mount Tube Dimensions	600 mm long x 32 mm diameter
Mounting Clamps Supplied	Stainless steel V Blocks and U-Bolts to suit mast between 38 and 75 mm in diameter
WARRANTY	2 YEARS



The FMD horizontal radiation pattern is semi-omnidirectional, -4 dB at the rear

