

## Section 2

### BROADCAST ANTENNAS

Updated 25 August 2009

#### FMVD FM Radio Vertical Dipole

Frequency <b>88 – 108 MHz</b>	Bandwidth <b>Specify 1 MHz</b>	Availability <b>BUILD</b>
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**FMVD is a ground independent vertical dipole designed for low power FM radio transmit and receive.**

The antenna is factory tuned to **any 1 MHz** bandwidth you specify within the FM frequency range 88 to 108 MHz with return loss optimised to better than -20 dB.

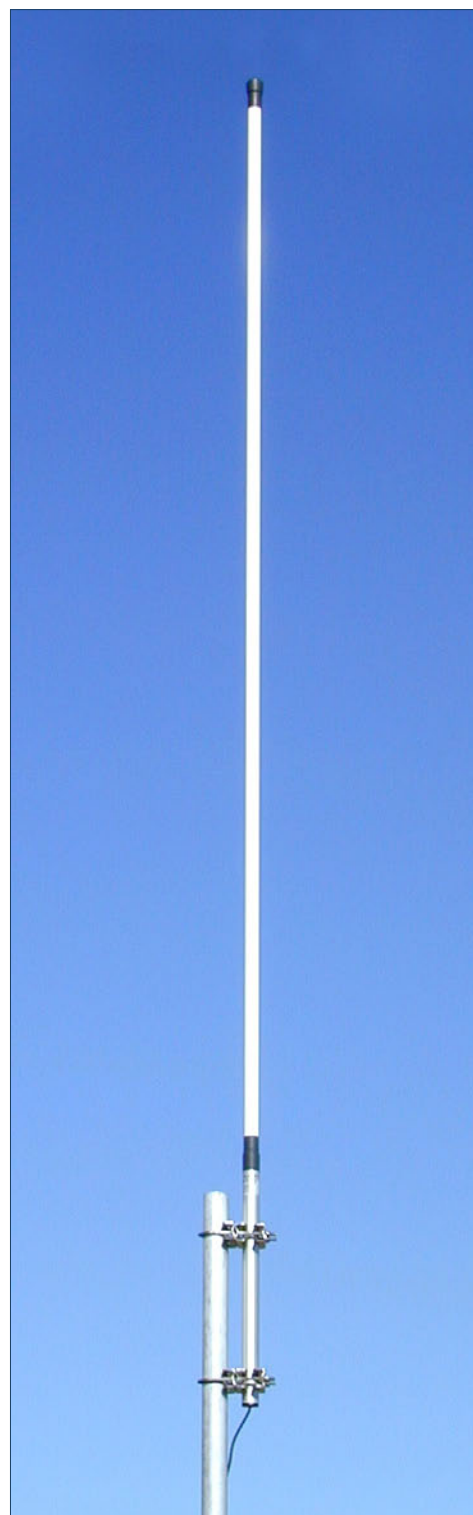
#### Key features are :

- Low cost.
- Low angle efficient radiator.
- Low wind loading.
- Easy mounting.
- Occupies minimal tower space.

The 50 cm RG58 low loss cable tail is fitted with an N-Type Female connector suitable for up to 25 watts input power.

Mast mounting clamps, feeder cable, connectors and other accessories are available separately to complete the installation.

SPECIFICATIONS	FMVD
Construction	Brass internals, aluminium mount tube and parallel white fibreglass radome
Frequency Range	Specify any 1 MHz bandwidth within the FM frequency range 88 to 108 MHz
Tuning	Factory
Return Loss, VSWR	Better than -20 dB, less than 1.2:1 across your specified 1 MHz bandwidth
Gain	0 dBd
Maximum Input Power	25 Watts
Impedance	50 Ohms
DC Grounding	Yes
Polarisation	Vertical
H Plane	Omnidirectional $\pm 0.5$ dBd
Cable Tail	0.5 metres RG58 low loss cable bottom exits from mount tube
Connector	N-Female fitted to the cable
Max Height at 88 MHz	2.8 metres (reduces at higher frequencies)
Weight	1 kg
Projected Area	0.048 m <sup>2</sup>
Wind Load at 160 kph	5.8 kg, 0.06 kN
Aluminium Mount Tube Dimensions	600 mm long x 32 mm diameter
Mounting Clamps (Not Supplied)	2 x <b>EB1SS</b> stainless steel parallel clamps are recommended and available separate
WARRANTY	<b>2 YEARS</b>



**EB1SS** parallel mast mounting clamps have all stainless steel components and are the ideal choice for mounting the **FMVD** dipole to a round mast between 20 mm and 50 mm in diameter.