

Section 2

BROADCAST ANTENNAS

Updated 16 February 2011

FM Radio Mixed Polarised Dipoles

Frequency
88 – 108 MHz

Bandwidth
Single FM Station



Mixed polarised dipoles are an excellent choice for FM radio single station local area coverage. Community broadcast groups with a limited budget will find these an affordable and effective option.

Key features of a mixed polarised dipole are :

- ⇒ Mixed polarisation provides better signal penetration into built up areas,
- ⇒ Wide fill radiation pattern well suited for omnidirectional applications,
- ⇒ Stainless steel construction for a long service life,
- ⇒ Low cost,
- ⇒ Light weight,
- ⇒ Low wind loading,
- ⇒ Easy mount,
- ⇒ Occupies minimal space, and
- ⇒ Adjustable tuning stubs for frequency change.

FMD-CPLP with N-Type Female connector is rated for up to 500 Watts power per bay.

FMD-CPHP is fitted with a 7/16" Female DIN connector for higher input power up to 1 Kilowatt per bay.

Specify your FM radio station broadcasting frequency when ordering and the antenna will be tuned accordingly at better than -20 dB return loss.

For increased gain and power, these antennas can be mounted in stack array formations using a power divider and branch feeder cables.

To restrict the radiation pattern emitted behind the dipole and increase forward gain, the **RS1 rear reflector screen** is available.



The **RS1** Rear Reflector Screen is available to restrict the radiation pattern emitted behind the dipole.

SPECIFICATIONS	FMD-CPLP	FMD-CPHP
Construction	All stainless steel	All stainless steel
Frequency Range	88 to 108 MHz	88 to 108 MHz
Bandwidth	Specify your single FM Radio Station broadcasting frequency when ordering	
Tuning	Adjustable tuning stubs set in the factory	
Return Loss, VSWR	Better than -20 dB, less than 1.2:1	
Gain	Single Bay = -3 dBd, 2 Bay Array = 0 dBd, 3 Bay Array = 1.4 dBd, 4 Bay Array = 3 dBd	
Polarisation	Mixed	Mixed
Impedance	50 Ohms	50 Ohms
Maximum Input Power	500 Watts per Bay	1 Kilowatt per Bay
Connector	N-Female	7/16" Female DIN
DC Grounding	Yes	Yes
Overall Length	1.4 metres	1.4 metres
Weight	1.5 kg	1.5 kg
Projected Area	0.048 m ²	0.048 m ²
Wind Load at 160 kph	5.7 kg, 0.057 kN	5.7 kg, 0.057 kN
Mounting Clamp (Supplied)	1 x S48 stainless steel right-angle clamp	
WARRANTY	2 YEARS	