FMCPY2-716-RS1

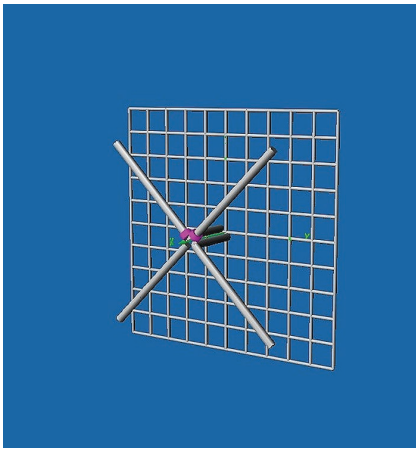
Circular Polarised FM Panel with Rear Screen
FM Radio 87.5-108MHz

Build To Order

The FMCPY2-716-RS1 is a circular polarised FM panel antenna featuring two crossed stainless steel dipoles mounted in front of a galvanised steel rear screen. This design delivers reliable circular polarisation, reduced back lobes, and long service life.

Optimised for triangular, three-sided towers or masts, the FMCPY2-716-RS1 can be configured as part of an omnidirectional or directional array to suit your service area. Arrays are fed via a corporate feed system with power dividers and branch feeders, and each panel is rated to 4 kW input power, with higher power options available.

ZCG's Technical Services team can assist with array design to meet your specific coverage and power requirements.



Construction	Two crossed stainless steel dipoles mounted on a galvanised steel rear screen with external terminations
Frequency range	FM Radio 87.5-108MHz
Bandwidth	Full frequency range stated - 20.5 MHz
VSWR	<1.2:1
Tuning	Factory
Polarisation	Circular Elliptical
Gain - per plane	4.0 dBd (Nominal)
Impendance - nominal	50 Ohms
DC grounding	Yes
Front-to-back ratio	> 20dB
Maximum power	4 Kilowatt per bay - 2 Kilowatts per input
Connectors - fitted to base	2 x 7/16" DIN females
Dimensions	Height: 2.2m, Width: 2.2m, Depth: 0.75m
Weight	55kg
Projected area	Front: 1.256m^2 Side: 1.256m^2
Wind load at 240kph per antenna	Front: 4.218kN, 433.550kg Side: 1.528kN, 157.091kg
Mounting hardware	U-bolts or bolts - order separate to suit requirements
Installation hardware requirements	Power divider and 90° out of phase branch feeders - order separate to suit your requirements
Warranty	2 Years

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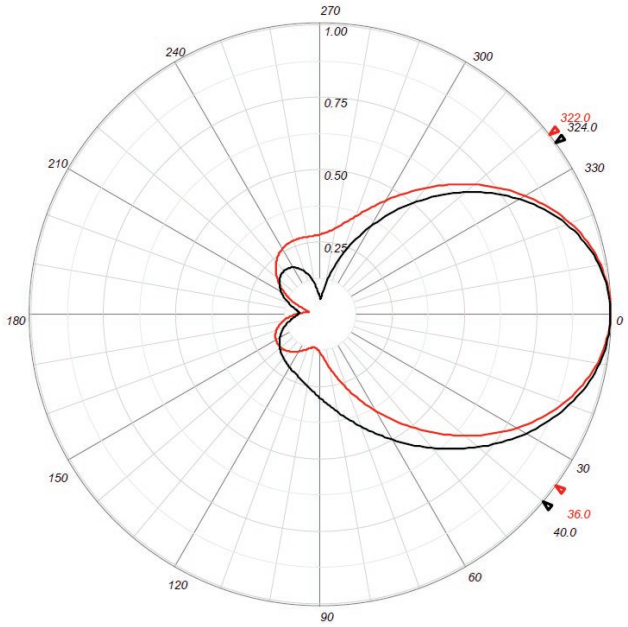
Mechanical Data

Height of array	Subject to configuration/frequency
Total net weight	Refer to table
Wind Load	Refer to table
Mounting hardware	U-bolts or bolts per bay - Order separate as required 2 x 90 phased branch feeders - order separate 1 x 2-way power divider/splitter - order separate Feeder cable and extra power dividers - order as required

Technical Data

Configuration	Gain - dBd	Weight - kg	Antenna height L - m	Wind load - kN
1 antenna	3.0	77	2.2 x 2.2	1.65
2 bay	6.0	145	2.2 x 5.0	3.3
4 bay	9.0	280	2.2 x 11.5	6.7
6 bay	10.8	420	2.2 x 17.5	10.0

- Configuration: Refers to the vertical arrangement of one or more antennas. A single antenna provides directional coverage in one sector. To achieve an omni-directional pattern, antennas must be mounted on each face of a tower or mast.
- Gain: refers to total antenna gain, not per plane, losses of power through cable or power dividers not included
- Weight: does include mounting hardware supplied, does not include extra mounting hardware, power dividers or mount poles
- Wind load: V = 160km/h



Example radiation pattern - single bay

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Suitable coaxial feeder cable and connectors

1/2" super flexible helical shielded, foam dielectric coaxial cable

P/N ZCG1250SF

Available in per metre, or 500m rolls or alternatively request a custom cable assembly

Low PIM 7/16" DIN male clamp-style connector for 1/2" helical shielded foam dielectric coaxial cable

P/N 716DINM1250SF

Tri-metal plated

1/2" corrugated shielded, foam dielectric coaxial cable

P/N ZCG1250

Available in per metre, or 500m rolls or alternatively request a custom cable assembly

Low PIM 7/16" DIN male clamp-style connector for 1/2" corrugated foam dielectric coaxial cable

P/N 716DINM1250

Tri-metal plated

7/8" corrugated shielding, foam dielectric coaxial cable

P/N ZCG7850

Available in per metre, or 500m rolls or alternatively request a custom cable assembly

Low PIM 7/16" DIN male clamp-style connector for 7/8" corrugated foam dielectric coaxial cable

P/N 716DINM7850

Tri-metal plated