

470-806MHz TV Panel Arrays
PCP series

Product Description

The PCP broadband panel is designed as a building block for integration into complex antenna arrays . It is a dual feed circularly or elliptically polarised UHF panel antenna. The panel can also be used individually for simple distributed or infill applications.

Features/Benefits

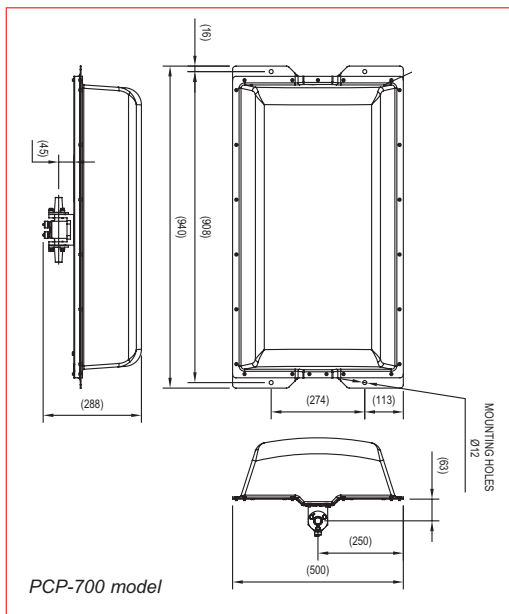
- Fully engineered for Digital TV, Mobile TV, Analogue TV and MIMO applications
- Corrosion resistant aluminium construction with fibreglass radome
- Independent inputs allowing utmost polarisation and pattern flexibility.
- Horizontal / Vertical, Circular or mixed polarization
- Low wind loading
- Cyclone rated
- High power rating
- Array design allows for custom design of horizontal and vertical radiation patterns
- Temperature range -40 to +60° C available



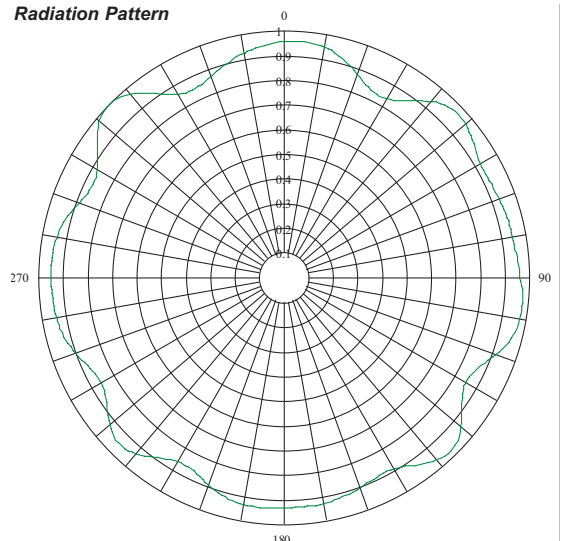
PCP-500 model shown

Technical Features

MODEL	PCP-500	PCP-600	PCP-700
Product Type	Band IV/V (UHF) TV Panel Arrays		
Frequency Range, MHz	470 - 560	500-700	680-790
Polarization	Horizontal / Vertical / Circular / Elliptical		
Number of Channels	Multichannel		
Nominal Gain (Mid-band, per plane), dBd	11 - 12	11-12	10 - 11
Nominal Half Power Beamwidth Azimuth, degrees	60		
Antenna System Omni ripple	± 1.5 dB typical, ± 2.0 dB max		
Return Loss, dB	26 min		
Input Connector	2x 7/8" EIA Flange		
Power Rating, kW	2.5 / input x 2		
Impedance, Ohms	50 unbalanced		
Weight, kg (lb)	14.5 (32)	15.0 (33)	< 11.5 (25)
Mounting (Standard), mm (in)	4 x 10mm (3/8) bolts		
Effective Area Front, sq m (sq ft)	0.55 (5.9)	0.55 (5.9)	0.45 (4.84)
Effective Area Side, sq m (sq ft)	0.35 (3.76)	0.35 (3.76)	0.3 (3.2)
Effective Area Back, sq m (sq ft)	0.7 (7.5)	0.7 (7.5)	0.65 (7.0)
Design Wind Speed (max), km/h (mph)	240 (150)		
Colour	White radome standard, other upon request		
Pressurization - Operational, kPa (psi)	7 - 21 (1 - 3)		
Pressurization - Test, kPa (psi)	100 (15)		
Material - Insulators	PTFE		
Material - Radiators	Corrosion resistant aluminium		
Material - Reflecting Screen	Corrosion resistant aluminium		



Radiation Pattern



Measured azimuth pattern model PCP-600
 4 panels in omni-directional configuration, 680 MHz

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