

# Directional Panel Antennas

746-960 MHz

BPA7496-15



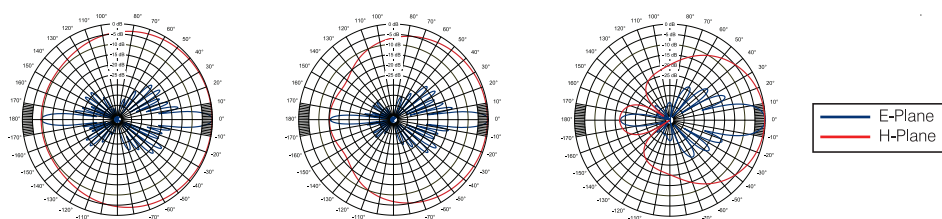
The BPA series panel antennas provide excellent gain with a range of directional radiation patterns, ideal for coverage requirements in “corridor” and sectorised applications. These panel antennas are fully enclosed to aid installation, provide waterproofing, and to resist bird attack. The main lobe of these antennas is strong, offering excellent beam control, upper side lobe suppression and front to back ratio, ensuring the integrity of the pattern.

Proven design and construction techniques provide not only excellent radiation characteristics but also high levels of intermodulation and noise suppression. IM performance is -150dBc based on a two-carrier test. The antenna rests at ground potential and offers excellent lightning protection and reduced precipitation noise.

## Features:

- Ideal for highly populated sites requiring “corridor” or sectorised coverage
- Choice of 60° 120° or 180° beamwidth models
- Industry leading PIM ratings (-150dBc) providing low IM and low noise characteristics
- 25kW Peak instantaneous (PIP) rating
- Convenient mounting style suits various pole, mount and wall installation locations
- Manually adjustable electrical tilt (MET)
- DC grounded for superior lightning protection

## Radiation Patterns



BPA-7496-180-14

BPA7496-120-15

BPA7496-60-15



## Electrical Specifications

Model Number	BPA7496-180-14-P	BPA7496-120-15-P	BPA7496-60-15-P
Nominal Gain <i>dBi</i> ( <i>dBd</i> )	14 (12)	15 (13)	
Frequency <i>MHz</i>	740-960		
Tuned Bandwidth <i>MHz</i>	Entire Band		
Polarity	Vertical		
VSWR (Return Loss)	< 1.5:1 (14dB)		
Nominal Impedance $\Omega$	50		
Downtilt	0° to 8° adjustable		2° to 16° adjustable
Vertical Beamwidth°	7		14
Horizontal Beamwidth°	170±10	120±10	60±5
Upper Side Lobe Suppression <i>dB</i>	< -16		
Front to back Ratio <i>dB</i>	≥7	≥12	≥24
Input Power <i>W</i>	500		
Passive IM 3rd order <i>dBc</i>	< -150		
Peak Instantaneous Power <i>kW</i>	25		

## Mechanical Specifications

Model Number	BPA7496-180-14-P	BPA7496-120-15-P	BPA7496-60-15-P
Construction	Fully enclosed in radome		
Length x Width x Depth <i>mm</i> ( <i>inches</i> )	2825 x 265 x 145 (111 x 10.4 x 6)		900 x 265 x 145 (35.4 x 10.4 x 6)
Weight <i>kg</i> ( <i>lbs</i> )	17 (38)		8 (17)
Weight (Packed) <i>kg</i> ( <i>lbs</i> )	20 (44)		16 (35)
Termination	1 x 4.3-10 female		
Clamps (Provided)	Mechanical downtilt stle (0-8°)		
Clamps Diameter <i>mm</i> ( <i>in</i> )	Ø70 to Ø120 (Ø2.8 to Ø4.7)		
Wind Load @ 150km/h N Frontal/Lateral/Rearside	810/443/810		438/239/438
Max. Wind Velocity <i>km/h</i>	210		210