

Directional Panel Antennas

380-430 MHz

BPA3843



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.

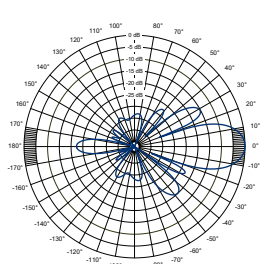
Proven design and construction techniques provide not only excellent radiation characteristics but also high levels of intermodulation and noise suppression. IM performance is -150dBc based on a two-carrier test. The antenna rests at ground potential and offers excellent lightning protection and reduced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

Features:

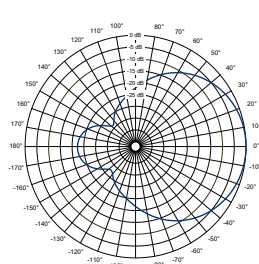
- Analogue and digital technology compatible
- Ideal for highly populated sites requiring “corridor” or sectorised coverage
- Industry leading PIM ratings (-150dBc) providing low IM and low noise characteristics for optimum performance
- Convenient mounting style suits various pole, mount and wall installation locations
- Mechanical tilt mounting brackets supplied
- DC grounded for superior lightning protection.



E Plane Radiation



H Plane Radiation



Electrical Specifications

Model Number	BPA3843-65-14	BPA3843-65-8
Nominal Gain <i>dBd</i> (<i>dBi</i>)	14 (12)	8 (6)
Frequency <i>MHz</i>	380-430	
Tuned Bandwidth <i>MHz</i>	Entire Band	
Polarity	Vertical	
VSWR (Return Loss)	<1.5:1 (14dB)	
Nominal Impedance Ω	50	
Vertical Beamwidth ^o	18	65
Horizontal Beamwidth ^o	65	
Upper Side Lobe Suppression <i>dB</i>	<-15	-
Front to back Ratio <i>dB</i>	\geq 23	\geq 16
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	BPA3843-65-14	BPA3843-65-8
Construction	Fully enclosed in radome	
Length x Width x Depth <i>mm</i> (<i>in</i>)	1525 x 265 x 145 (60 x 10.4 x 6)	700 x 560 x 200 (27.5 x 22 x 8)
Weight <i>kg</i> (<i>lbs</i>)	22 (48.4)	13 (29)
Weight (Packed) <i>kg</i> (<i>lbs</i>)	26 (57.4)	16 (35)
Termination	1 x DIN female	
Clamps (Provided)	Adjustable mechanical downtilt style (0-8°)	
Clamp Diameter <i>mm</i> (<i>in</i>)	\varnothing 70 to \varnothing 120 (\varnothing 2.76 to \varnothing 4.72)	