



Hybrid Bi-Sector Array Antenna

HBSA33R-KE9C

SPECIFICATIONS

Electrical

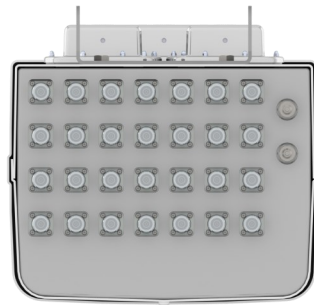
Ports	4X Low Band Ports for 698-960 MHz			8X High Band Ports for 1710-2170 MHz	8X High Band Ports for 2300-2400 MHz	8X High Band Ports for 2500-2690MHz	
Frequency Range	698-806 MHz	824-896 MHz	880-960 MHz	1710-1880 MHz	1920-2170 MHz	2300-2400 MHz	2500-2690 MHz
Gain	12.9 dBi	13.1 dBi	13.2 dBi	17.7 dBi	18.5 dBi	18.6 dBi	19.0 dBi
Gain (Average)*	12.6 dBi	12.8 dBi	12.9 dBi	16.8 dBi	17.9 dBi	18.0 dBi	18.4 dBi
Azimuth Beamwidth (-3dB)	68°	71°	66°	36°	31°	29°	27
Elevation Beamwidth (-3dB)	19.7°	17.0°	16.0°	8.0°	6.7°	6.0°	5.7°
Electrical Downtilt	0° to 14°	0 to 14°	0° to 14°	0° to 10°	0° to 10°	0° to 10°	0° to 10°
Elevation Sidelobes (1st Upper)	<-17 dB	<-17 dB	<-17 dB	<-17 dB	<-17 dB	<-17 dB	<-17dB
Front-to-Back Ratio @180°	> 30 dB	>30 dB	>30 dB	> 35 dB	> 35 dB	> 35 dB	> 35 dB
Cross-Polar Discrimination (at Peak)	> 22 dB	>22 dB	>22 dB	> 25 dB	> 25 dB	> 24 dB	> 24 dB
Cross-Polar Port-to-Port Isolation	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Voltage Standing Wave Ratio (VSWR)	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Passive Intermodulation (2x20W)	≤ -153 dBc	≤ -153dBc	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc
Input Power Continuous Wave (CW)	500 watts	500 watts	500 watts	300 watts	300 watts	300 watts	300 watts
Polarization	+/- 45°	+/- 45°	+/- 45°	+/- 45°	+/- 45°	+/- 45°	+/- 45°
Input Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground

Mechanical

Rear Isometric View

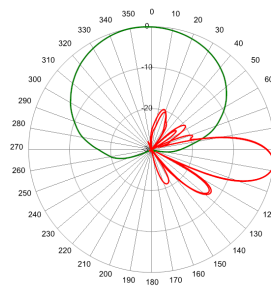


Bottom View

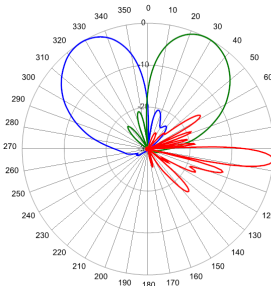


Dimensions (LxWxD)	106.3 x 13.7 x 10.6 inches (2700×348×270mm)
Survival Wind Speed	> 150 mph (> 241 km/hr)
Front Wind Load	369 lbs (1642 N) @ 100 mph (161 kph)
Side Wind Load	301 lbs (1340 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	14.4 ft ² (1.3 m ²)
Weight *	128.5 lbs (58.3 kg)
Connector	28× 4.3-10 Female
Mounting Pole	2-5 in (5-12 cm)

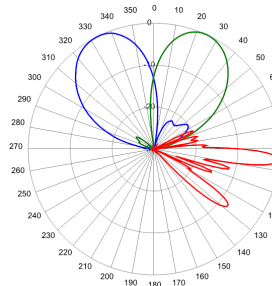
*Weight excludes mounting



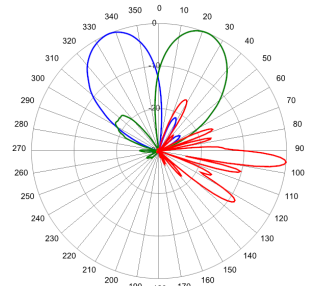
832 MHz
Elevation 7°



1950 MHz
Elevation 5°



2355 MHz
Elevation 5°



2650 MHz
Elevation 5°