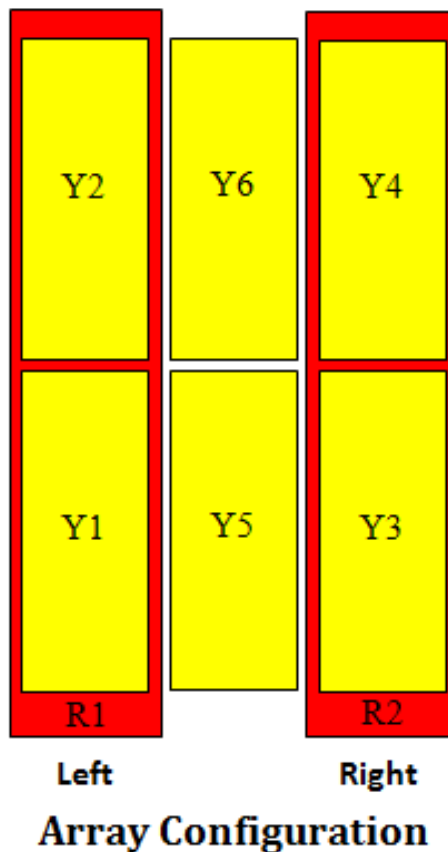




Preliminary Issue

Model Number: **PAA-8B2L6HA-RC**

Octa-Band Antenna 2×690-960-4×1695-2690-2×1427-2690MHz





ELECTRICAL SPECIFICATIONS	
Left and Right Side, Low Band	R1 and R2
Frequency Range, MHz	690 - 960
Polarization	Dual $\pm 45^\circ$
Port Number	1, 2, 3, 4
Gain, dBi	15.8 - 16.9
VSWR	< 1.5:1
Impedance, ohms	50
Port-to-Port Isolation, dB	> 28
Cross-Polar Isolation, dB	> 28
Radiation Pattern	Directional
Horizontal 3-dB Beamwidth	$75^\circ - 60^\circ$
Vertical 3-dB Beamwidth	$9.5^\circ - 6.8^\circ$
Electrical Downtilt, Continuously Adjustable, Flex RET	$0^\circ - 12^\circ$
1st Upper Side lobe Suppression, dB 20° above horizon	> 16 -
Front-to-Back Ratio ($180^\circ \pm 30^\circ$), dB	> 22
Cross-Polar ratio Main-direction 0° Sector $\pm 60^\circ$	> 20 dB -
Tilt Accuracy	< 0.5°
Azimuth Beam Port-to-Port Tracking, dB	< 2
Maximum Power Rating per Port, W	500 at 50°C ambient temperature
Intermodulation IM3 (2×43 dBm carrier)	< -153 dBc
Lightning Protection	DC Grounded



ELECTRICAL SPECIFICATIONS	
Left Bottom, Left Top, Right Bottom, and Right Top Side, High Band	Y1, Y2, Y3 and Y4
Frequency Range, MHz	1695 - 2690
Polarization	Dual $\pm 45^\circ$
Port Number	5, 6, 7, 8, 9, 10, 11, 12
Gain, dBi	16.5 - 17.6
VSWR	< 1.5:1
Impedance, ohms	50
Port-to-Port Isolation, dB	> 28
Cross-Polar Isolation, dB	> 28
Radiation Pattern	Directional
Horizontal 3-dB Beamwidth	$68^\circ - 55^\circ$
Vertical 3-dB Beamwidth	$8^\circ - 4.5^\circ$
Electrical Downtilt, Continuously Adjustable, Flex RET	$0^\circ - 12^\circ$
1st Upper Side lobe Suppression, dB 20° above horizon	> 16 -
Front-to-Back Ratio ($180^\circ \pm 30^\circ$), dB	> 25
Cross-Polar ratio Main-direction 0° Sector $\pm 60^\circ$	> 17 dB -
Tilt Accuracy	< 0.5°
Azimuth Beam Port-to-Port Tracking, dB	< 2
Maximum Power Rating per Port, W	250 at 50°C ambient temperature
Intermodulation IM3 (2×43 dBm carrier)	< -153 dBc
Lightning Protection	DC Grounded



ELECTRICAL SPECIFICATIONS	
Center Bottom, Center Top Side, High Band	Y5 and Y6
Frequency Range, MHz	1427 - 2690
Polarization	Dual $\pm 45^\circ$
Port Number	13, 14, 15, 16
Gain, dBi	15.5 - 17.5
VSWR	< 1.5:1
Impedance, ohms	50
Port-to-Port Isolation, dB	> 28
Cross-Polar Isolation, dB	> 28
Radiation Pattern	Directional
Horizontal 3-dB Beamwidth	$70^\circ - 53^\circ$
Vertical 3-dB Beamwidth	$9.2^\circ - 4.5^\circ$
Electrical Downtilt, Continuously Adjustable, Flex RET	$0^\circ - 12^\circ$
1st Upper Side lobe Suppression, dB 20° above horizon	> 15 -
Front-to-Back Ratio ($180^\circ \pm 30^\circ$), dB	> 25
Cross-Polar ratio Main-direction 0° Sector $\pm 60^\circ$	>15 dB -
Tilt Accuracy	< 0.5°
Azimuth Beam Port-to-Port Tracking, dB	< 2
Maximum Power Rating per Port, W	250 at 50°C ambient temperature
Intermodulation IM3 (2×43 dBm carrier)	< -153 dBc
Lightning Protection	DC Grounded



MECHANICAL & ENVIRONMENTAL SPECIFICATIONS	
Input Connector	16 × 4.3-10 Female
Connector position	Bottom side
Antenna Dimensions - H×W×D, mm	Approx. 2800 × 480 × 210
Packing Dimensions - H×W×D, mm	-
Weight without Mounting Hardware, kg	Approx. 55
Mounting Hardware Weight, kg	Approx. 6
Antenna Packing Weight, kg	-
Mounting Hardware Materials	Hot-dip galvanized steel
Reflector Material	Aluminum
Radiating Element Material	Die-cast Aluminum, Tin Plated / Brass
Radome Material	UV-PVC / Fiberglass
Radome Color	Light Grey / White
Mechanical Down tilt, degree	0 - 15
Bracket Diameter, mm	50 - 115
Operating Temperature Range, °C	-40 to +65
Relative Humidity	Up to 100%
Max. Operational Wind Speed, km/h	200
Survival Wind Speed, km/h	250
Wind Load (N) at 150 km/h	Frontal: Lateral: Rear side:

Antenna Information Management Module (AIMM) Specifications								
RET Properties								
RET Type	Flex RET							
RET Protocol	AISG v2.0 / AISG v3.0 / 3GPP							
Input voltage range (V)	DC 10 - 30							
RET Interface (485 connector)	2 × 8-Pin AISG Connector Daisy chain in: Male / Daisy chain out: Female							
Pin assignment according AISG	1	2	3	4	5	6	7	8
	DC	n/c	RS-485B	n/c	RS-485A	DC	DC Return	n/c