



FEATURES / BENEFITS

- 2 ports / 1 cross pol system in low band (698-960MHz)
- 4 ports / 2 cross pol systems in high band (1710-2690MHz)
- Supporting 4x4 MIMO in high band
- Integrated and field replaceable SRET
- ACU HW Version: 2.02
- Compliant with AISG V2.0 and 3GPP



Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Low Band Array (698-960 MHz) [R1]		
Frequency Band	MHz	698-806	790-894	880-960
Gain Typical	dBi	15.6	16.3	16.1
Gain Over all Tilts	dBi	15.1 +/- 0.5	15.5 +/- 0.8	15.8 +/- 0.3
Azimuth Beamwidth 3dB	Deg	66.1 +/- 1.8	64.6 +/- 2.5	63 +/- 1
Elevation Beamwidth 3dB	Deg	12.2 +/- 1.1	10.9 +/- 0.7	9.6 +/- 1
Cross Polar Discrimination at Boresight	dB	26	24.3	20.9
Cross Polar Discrimination over Sector	dB	10.1	10.2	11.1
F/B at +/-30deg Total Power	dB	24.6	24.1	22.7
First Upper Side Lobe Suppression	dB	15.3	13.7	9
Electrical Downtilt	Deg	2 to 12		
Cross Polar Isolation	dB	26		
Interband Isolation	dB	26		
VSWR	-	1.5		
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-153		
Maximum Effective Power per Port	Watt	350		



ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y1]				
Frequency Band	MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	16.8	16.9	17.2	17	17.1
Gain Over all Tilts	dBi	16.1 +/- 0.7	16.6 +/- 0.3	16.8 +/- 0.4	16.2 +/- 0.8	16.6 +/- 0.5
Azimuth Beamwidth 3dB	Deg	66.2 +/- 7	67 +/- 3.5	66 +/- 4	69 +/- 3.2	64.8 +/- 5.3
Elevation Beamwidth 3dB	Deg	6.6 +/- 0.4	6.2 +/- 0.3	5.8 +/- 0.6	5.1 +/- 0.4	4.7 +/- 0.3
Cross Polar Discrimination at Boresight	dB	26.3	23	22.9	18.6	17
Cross Polar Discrimination over Sector	dB	7.5	6.1	6.2	8.8	5.8
F/B at +/-30deg Total Power	dB	19.5	20.4	22.4	23	22.3
First Upper Side Lobe Suppression	dB	17.3	17.1	17.8	15.7	15.1
Electrical Downtilt	Deg	2 to 11				
Cross Polar Isolation	dB	26				
Interband Isolation	dB	26				
VSWR	-	1.5				
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-153				
Maximum Effective Power per Port	Watt	250				

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y2]				
Frequency Band	MHz	1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	16.7	16.9	17.1	17.1	17.3
Gain Over all Tilts	dBi	16 +/- 0.7	16.6 +/- 0.3	16.7 +/- 0.4	16 +/- 1.1	16.7 +/- 0.6
Azimuth Beamwidth 3dB	Deg	66 +/- 6.8	66.7 +/- 3.6	66 +/- 4.4	69.5 +/- 3.3	64.3 +/- 4.5
Elevation Beamwidth 3dB	Deg	6.7 +/- 0.4	6.3 +/- 0.4	5.9 +/- 0.7	5.2 +/- 0.4	4.7 +/- 0.3
Cross Polar Discrimination at Boresight	dB	20	18.9	19.4	17.2	17.5
Cross Polar Discrimination over Sector	dB	6.4	6.1	6.7	6.9	5.2
F/B at +/-30deg Total Power	dB	19	21.1	22.1	22.9	21.7
First Upper Side Lobe Suppression	dB	17.8	16.8	19.2	15.1	17.9
Electrical Downtilt	Deg	2 to 11				
Cross Polar Isolation	dB	26				
Interband Isolation	dB	26				
VSWR	-	1.5				
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-153				
Maximum Effective Power per Port	Watt	250				



ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

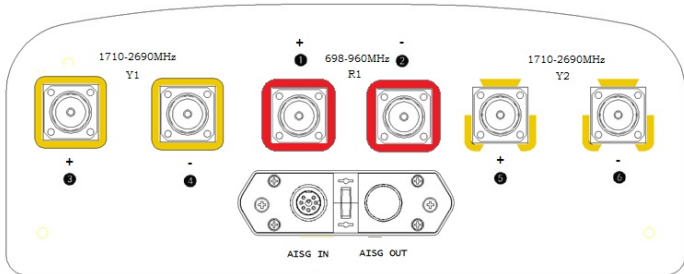
Dimensions - H x W x D	mm (in)	1960 x 350 x 200 (77.2 x 13.8 x 7.9)
Weight (Antenna Only)	kg (lb)	24.5 (54)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	2240 x 425 x 275 (88.2 x 16.7 x 10.8)
Shipping Weight	kg (lb)	37.5 (82.7)
Connector type		6x 7/16 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiberglass / Light Grey RAL7035

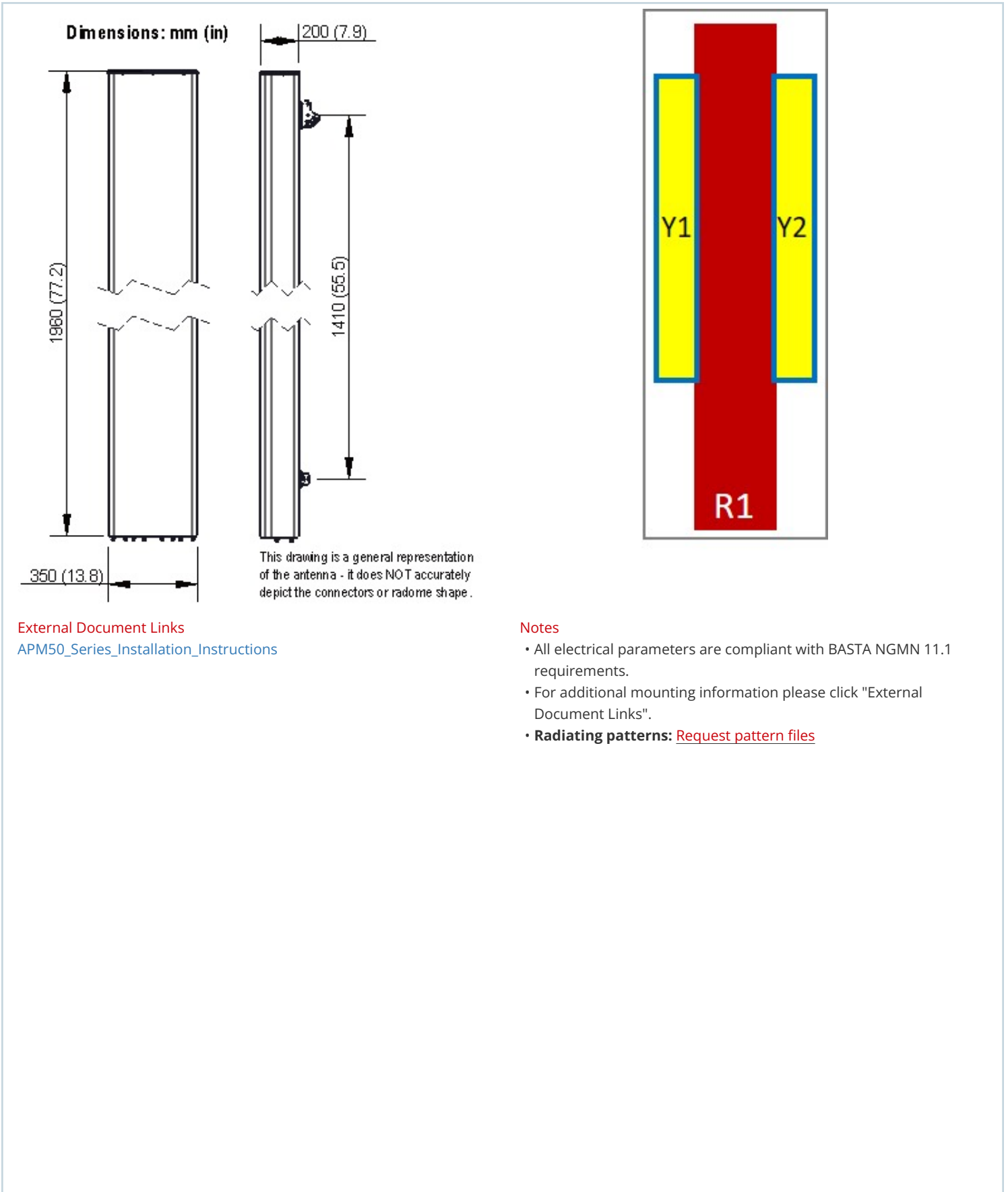
TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		DC Ground
Survival/Rated Wind Velocity	km/h	200 (150)
Wind Load @Rated Wind Front	N	880
Wind Load @Rated Wind Side	N	456
Wind Load @Rated Wind Rear	N	498

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVBLL20B-C-I20	Internal RET(ACU-I20-B3)	APM50-B1	50-110mm	37.5 kg





External Document Links

[APM50_Series_Installation_Instructions](#)

Notes

- All electrical parameters are compliant with BASTA NGMN 11.1 requirements.
- For additional mounting information please click "External Document Links".
- **Radiating patterns:** [Request pattern files](#)