



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	14.6	15.2	15
Gain Over all Tilts	dBi	14.1 +/- 0.5	14.4 +/- 0.8	14.8 +/- 0.2
Azimuth Beamwidth 3dB	Deg	66.7 +/- 2.1	65.8 +/- 2.5	64.6 +/- 1.2
Elevation Beamwidth 3dB	Deg	17.7 +/- 1.6	16 +/- 0.9	14.8 +/- 0.7
Cross Polar Discrimination at Boresight	dB	24.7	24	21.7
Cross Polar Discrimination over Sector	dB	10.2	9.2	10
F/B at +/-30deg Total Power	dB	24	24.1	23.1
First Upper Side Lobe Suppression	dB	16.3	16.4	13.8
Electrical Downtilt	Deg	2 to 15		
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	16.7	17.2	17.4	17.5	17.5
Gain Over all Tilts	dBi	16 +/- 0.7	16.8 +/- 0.4	17 +/- 0.4	16.5 +/- 1	16.9 +/- 0.6
Azimuth Beamwidth 3dB	Deg	65.9 +/- 5.5	65.1 +/- 4.3	63.2 +/- 6.7	66.6 +/- 4.9	61.1 +/- 3.2
Elevation Beamwidth 3dB	Deg	6.8 +/- 0.5	6.3 +/- 0.4	5.9 +/- 0.6	5.2 +/- 0.4	4.7 +/- 0.4
Cross Polar Discrimination at Boresight	dB	26.9	26.1	24.6	16.1	17.5
Cross Polar Discrimination over Sector	dB	9.2	9.5	8.8	8.9	5.4
F/B at +/-30deg Total Power	dB	19.3	21.1	22.7	22.3	21.5
First Upper Side Lobe Suppression	dB	16.2	15.5	16.4	15.9	14.9
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

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	16.6	17.1	17.4	17.2	17.7
Gain Over all Tilts	dBi	16 +/- 0.6	16.8 +/- 0.3	17 +/- 0.4	16.4 +/- 0.8	17 +/- 0.7
Azimuth Beamwidth 3dB	Deg	66 +/- 5.1	66.5 +/- 4.7	64.5 +/- 6.9	67.4 +/- 5.2	60.8 +/- 2.5
Elevation Beamwidth 3dB	Deg	6.7 +/- 0.5	6.2 +/- 0.4	5.9 +/- 0.6	5.1 +/- 0.4	4.7 +/- 0.4
Cross Polar Discrimination at Boresight	dB	20.6	19.2	20.7	14.7	15.5
Cross Polar Discrimination over Sector	dB	7.7	8.2	7.5	8.9	5.7
F/B at +/-30deg Total Power	dB	20.9	20	20.3	22.4	22.9
First Upper Side Lobe Suppression	dB	16.2	16.1	17.3	16.5	14.9
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	dBc	-153				
Maximum Effective Power per Port	Watt	250				



ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

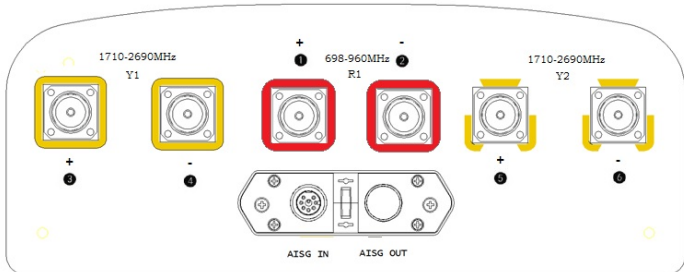
Dimensions - H x W x D	mm (in)	1495 x 350 x 200 (58.9 x 13.8 x 7.9)
Weight (Antenna Only)	kg (lb)	18.5 (40.8)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	1770 x 425 x 275 (69.7 x 16.7 x 10.8)
Shipping Weight	kg (lb)	29 (63.9)
Connector type		6x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiberglass / Light Grey RAL7035

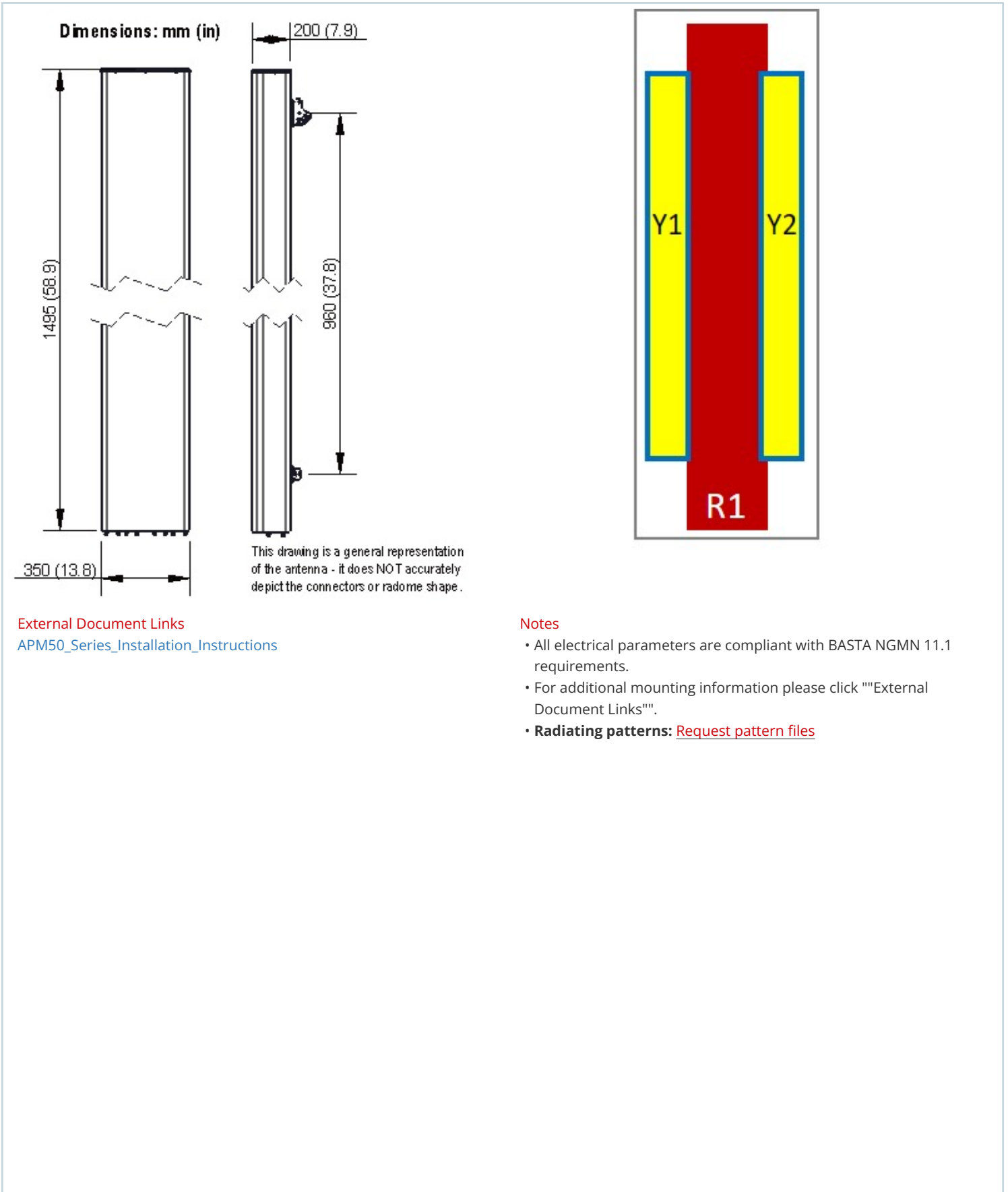
TESTING AND ENVIRONMENTAL

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	643
Wind Load @Rated Wind Side	N	315
Wind Load @Rated Wind Rear	N	734

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVBLL15B_43-C-I20	Internal RET (ACU-I20-B3)	APM50-B1	50-110mm	29 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](#)