

FEATURES / BENEFITS

- 4 ports / 2 cross pol systems in low band (690-960 MHz)
- 2 ports / 1 cross pol system in very wide high band (1695-2690 MHz)
- Integrated and field replaceable SRET
- ACU HW Version -HRLS200608H1.00
- Compliant with AISG V2.0 and 3GPP



Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		LOW BAND ARRAY (690-960 MHz) [R1]		
Frequency Band	MHz	690 - 806	790 - 894	880 - 960
Gain Typical	dBi	16	16.3	16.4
Gain Over all Tilts	dBi	15.3 +/- 0.7	15.9 +/- 0.4	16.1 +/- 0.3
Azimuth Beamwidth 3dB	Deg	66.3 +/- 7	62.2 +/- 4.2	60.5 +/- 7.5
Elevation Beamwidth 3dB	Deg	11.6 +/- 1.1	10.4 +/- 0.6	9.6 +/- 0.5
Cross Polar Discrimination at Boresight	dB	17.9	23	23.7
Cross Polar Discrimination over Sector	dB	9.9	10.4	9.7
F/B at +/-30deg Total Power	dB	20.6	23.7	23.9
First Upper Side Lobe Suppression	dB	18.4	19.2	20.8
Electrical Downtilt	Deg	2 to 12		
Cross Polar Isolation	dB	25		
Interband Isolation	dB	25		
VSWR	-	1.5		
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-153		
Maximum Effective Power per Port	Watt	250		

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		LOW BAND ARRAY (690-960 MHz) [R2]		
Frequency Band	MHz	690 - 806	790 - 894	880 - 960
Gain Typical	dBi	15.8	16.2	16.3
Gain Over all Tilts	dBi	15.3 +/- 0.5	15.8 +/- 0.4	16 +/- 0.3
Azimuth Beamwidth 3dB	Deg	68.1 +/- 7.4	63.7 +/- 3.9	63 +/- 7.6
Elevation Beamwidth 3dB	Deg	11.5 +/- 0.9	10.4 +/- 0.6	9.5 +/- 0.5
Cross Polar Discrimination at Boresight	dB	18.1	22	25.5
Cross Polar Discrimination over Sector	dB	9.5	11.4	10.3
F/B at +/-30deg Total Power	dB	20.1	23.5	23.4
First Upper Side Lobe Suppression	dB	18.8	18.2	20.4
Electrical Downtilt	Deg	2 to 12		
Cross Polar Isolation	dB	25		
Interband Isolation	dB	25		
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 (1695-2690 MHz) [Y1]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	16.6	17.2	18.1	18.2	18.5
Gain Over all Tilts	dBi	16.2 +/- 0.4	16.7 +/- 0.5	17.3 +/- 0.8	17.7 +/- 0.5	17.7 +/- 0.8
Azimuth Beamwidth 3dB	Deg	72.5 +/- 4.1	66.8 +/- 7.2	59.4 +/- 11.8	59.5 +/- 5.5	65.5 +/- 3.2
Elevation Beamwidth 3dB	Deg	6.7 +/- 0.5	6.1 +/- 0.4	5.8 +/- 0.4	5 +/- 0.2	4.7 +/- 0.4
Cross Polar Discrimination at Boresight	dB	20.7	19	19.6	18.3	14.7
Cross Polar Discrimination over Sector	dB	14	13.2	11.2	5.6	0.7
F/B at +/-30deg Total Power	dB	25.9	28.7	28.7	28.4	26.5
First Upper Side Lobe Suppression	dB	13	14	13.9	12	13.7
Electrical Downtilt	Deg	2 to 12				
Cross Polar Isolation	dB	26				
Interband Isolation	dB	28				
VSWR	-	1.5				
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-153				
Maximum Effective Power per Port	Watt	200				

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

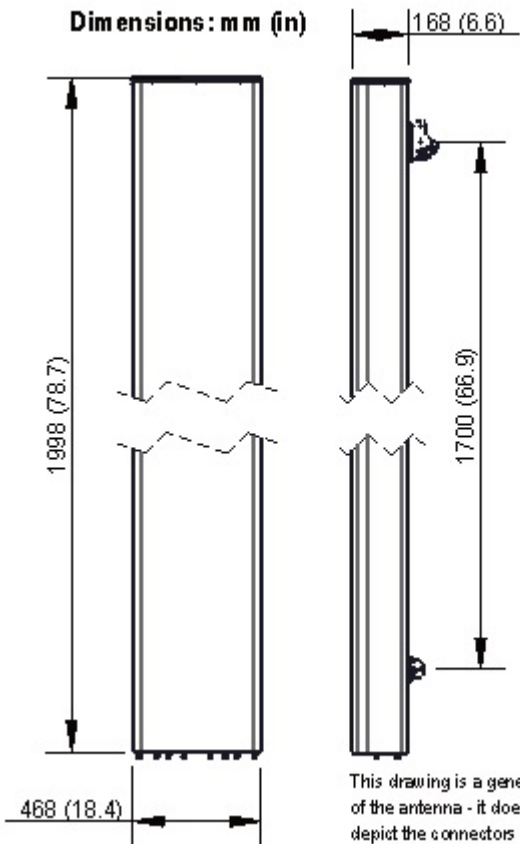
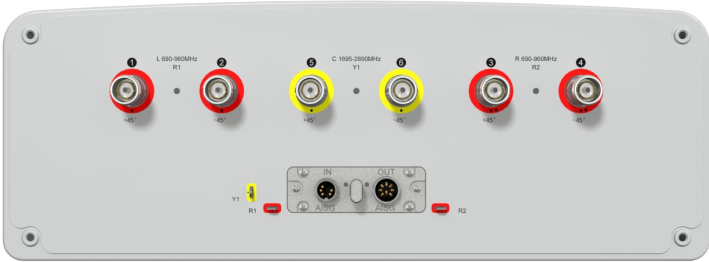
Dimensions - H x W x D	mm (in)	1998 x 468 x 168 (78.7 x 18.4 x 6.6)
Weight (Antenna Only)	kg (lb)	27 (59.5)
Weight (Mounting Hardware only)	kg (lb)	5.5 (12.1)
Packing size- HxWxD	mm (in)	2198 x 544 x 278 (86.5 x 21.4 x 10.9)
Shipping Weight	kg (lb)	37.5 (82.7)
Connector type		6 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiber Glass / Light Grey RAL7035

TESTING AND ENVIRONMENTAL

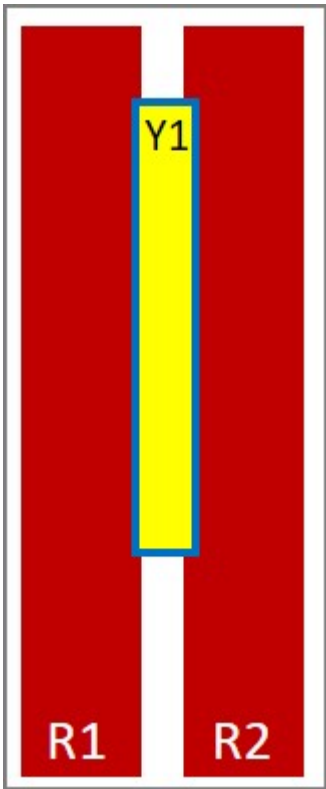
Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		Direct Ground
Survival/Rated Wind Velocity	km/h	200 (150)
Wind Load @Rated Wind Front	N	860
Wind Load @Rated Wind Side	N	320
Wind Load @Rated Wind Rear	N	960

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVBBL20H_43-C-I20	Internal RET (ACU-I20-H12I)	APM50-H2	50-125mm	37.5 Kg



This drawing is a general representation of the antenna - it does NOT accurately depict the connectors or radome shape.



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](#)