



FEATURES / BENEFITS

- 4 ports / 2 cross pol system in low band (690-960MHz)
- 4 ports / 2 cross pol systems in high band (1695-2690MHz)
- Integrated and field replaceable SRET
- ACU HW Version -HRLS170901H1.00
- Compliant with AISG V2.0 and 3GPP



Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Low Band Arrays (690-960 MHz) [R1]		
Frequency Band	MHz	690 - 806	790 - 894	880 - 960
Gain Typical	dBi	16.9	17.1	17
Gain Over all Tilts	dBi	15.9 +/- 1	16.7 +/- 0.4	16.7 +/- 0.3
Azimuth Beamwidth 3dB	Deg	70.5 +/- 9.1	64.5 +/- 2.5	63.8 +/- 3.6
Elevation Beamwidth 3dB	Deg	9.2 +/- 1.1	8.1 +/- 0.5	7.4 +/- 0.5
Cross Polar Discrimination at Boresight	dB	22.9	25.7	26.3
Cross Polar Discrimination over Sector	dB	11.7	11.6	11
F/B at +/-30deg Total Power	dB	19.6	22.8	22.9
First Upper Side Lobe Suppression	dB	18.8	19.8	18.2
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	250		



ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Low Band Arrays (690-960 MHz) [R2]		
Frequency Band	MHz	690 - 806	790 - 894	880 - 960
Gain Typical	dBi	16.6	16.9	17
Gain Over all Tilts	dBi	15.7 +/- 0.9	16.6 +/- 0.3	16.7 +/- 0.3
Azimuth Beamwidth 3dB	Deg	70.1 +/- 8.1	64.3 +/- 2.7	65.3 +/- 2.6
Elevation Beamwidth 3dB	Deg	9.1 +/- 0.9	8 +/- 0.4	7.4 +/- 0.5
Cross Polar Discrimination at Boresight	dB	23.9	26.8	28
Cross Polar Discrimination over Sector	dB	12.4	11.2	9.9
F/B at +/-30deg Total Power	dB	20	22.3	23.2
First Upper Side Lobe Suppression	dB	17.7	19.6	18.4
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	250		

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Arrays (1695-2690 MHz) [Y1]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	18.1	18.3	19.6	18.9	19.1
Gain Over all Tilts	dBi	17.6 +/- 0.5	17.9 +/- 0.4	18.6 +/- 1	18.4 +/- 0.5	18.4 +/- 0.7
Azimuth Beamwidth 3dB	Deg	62.7 +/- 6.5	61.1 +/- 7.5	57.2 +/- 4.6	52.3 +/- 3.3	54.6 +/- 5.6
Elevation Beamwidth 3dB	Deg	5.4 +/- 0.3	5 +/- 0.2	4.6 +/- 0.4	4.1 +/- 0.2	3.9 +/- 0.2
Cross Polar Discrimination at Boresight	dB	17.9	19.9	20.3	16.8	20.7
Cross Polar Discrimination over Sector	dB	5.6	8.7	3.5	0.6	0.4
F/B at +/-30deg Total Power	dB	26.9	27.2	27.4	26.7	24.8
First Upper Side Lobe Suppression	dB	21.2	22.8	21.8	15	14.2
Electrical Downtilt	Deg	2 to 10				
Cross Polar Isolation	dB	28				
Interband Isolation	dB	28				
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) [Y2]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	18.2	18.2	19.5	19.4	19.5
Gain Over all Tilts	dBi	17.8 +/- 0.4	18 +/- 0.2	18.8 +/- 0.7	19 +/- 0.4	19 +/- 0.5
Azimuth Beamwidth 3dB	Deg	62.7 +/- 6.4	65.1 +/- 3.3	61.6 +/- 8.9	56.8 +/- 4	64.2 +/- 6.7
Elevation Beamwidth 3dB	Deg	5.3 +/- 0.5	4.9 +/- 0.2	4.6 +/- 0.3	4 +/- 0.1	3.8 +/- 0.2
Cross Polar Discrimination at Boresight	dB	24.3	24.6	17.3	18.8	19.9
Cross Polar Discrimination over Sector	dB	11.4	10.9	7.5	5.2	2.7
F/B at +/-30deg Total Power	dB	26.8	26	27.7	29.8	28.1
First Upper Side Lobe Suppression	dB	15.4	17.3	15.9	13.6	12.6
Electrical Downtilt	Deg	2 to 10				
Cross Polar Isolation	dB	28				
Interband Isolation	dB	28				
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 Arrays (1695-2690 MHz) [Y3]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	18.1	18.3	19.6	18.8	19.1
Gain Over all Tilts	dBi	17.6 +/- 0.5	18 +/- 0.3	18.7 +/- 0.9	18.4 +/- 0.4	18.3 +/- 0.8
Azimuth Beamwidth 3dB	Deg	62.4 +/- 5.9	60.1 +/- 7.7	56.8 +/- 4.6	52.5 +/- 3.9	55 +/- 4.9
Elevation Beamwidth 3dB	Deg	5.4 +/- 0.3	5 +/- 0.2	4.6 +/- 0.4	4.1 +/- 0.2	4 +/- 0.2
Cross Polar Discrimination at Boresight	dB	17.7	20.1	20.6	18	21.4
Cross Polar Discrimination over Sector	dB	5.2	7.8	3.4	0.7	0.3
F/B at +/-30deg Total Power	dB	27	28.3	27.9	27.2	25.7
First Upper Side Lobe Suppression	dB	20.7	24	22.1	17.4	14
Electrical Downtilt	Deg	2 to 10				
Cross Polar Isolation	dB	28				
Interband Isolation	dB	28				
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)	2498 x 468 x 168 (98.3 x 18.4 x 6.6)
Weight (Antenna Only)	kg (lb)	40 (88.2)
Weight (Mounting Hardware only)	kg (lb)	9 (19.8)
Packing size- HxWxD	mm (in)	2820 x 583 x 298 (111 x 22.9 x 11.7)
Shipping Weight	kg (lb)	52 (114.6)
Connector type		10 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiberglass / RAL7035

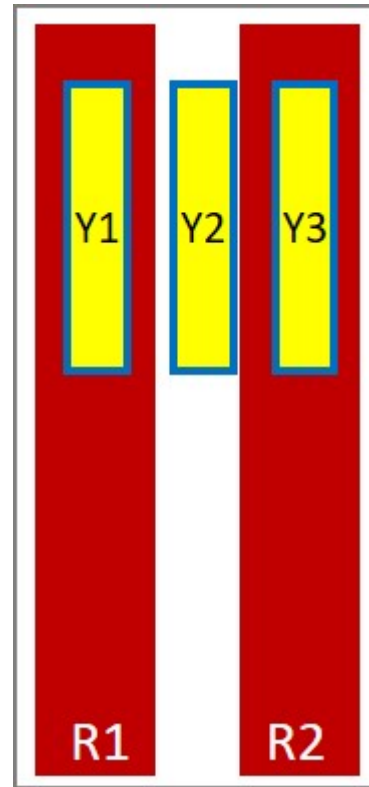
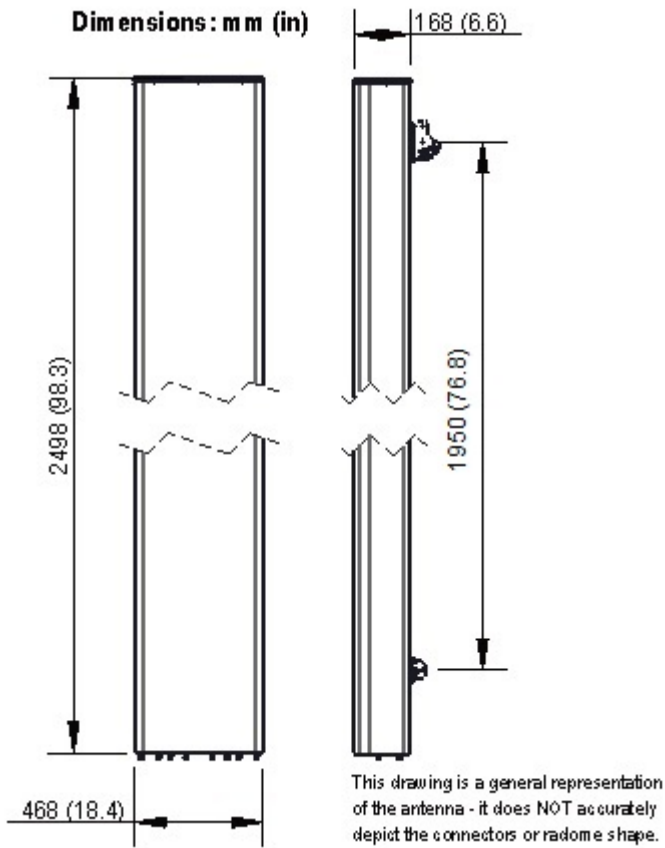
TESTING AND ENVIRONMENTAL

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	1080
Wind Load @Rated Wind Side	N	475
Wind Load @Rated Wind Rear	N	1205

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting Pipe Diameter	Shipping Weight
APXVBB3L26H_43-C-I20	Internal RET(ACU-I20-H12B)	APM50-HS	50-125mm	52 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](#)