



FEATURES / BENEFITS

- 4 ports / 2 cross pol systems in low band (690-960MHz)
- 8 ports / 4 cross pol systems in high band (1695-2690MHz)
- Supporting 4x4 MIMO in low band and high band
- 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 Array (690-960 MHz) [R1]		
Frequency Band	MHz	690 - 806	790 - 894	880 - 960
Gain Typical	dBi	16.1	16.8	17.4
Gain Over all Tilts	dBi	16 +/- 0.1	16.3 +/- 0.5	16.9 +/- 0.5
Azimuth Beamwidth 3dB	Deg	67.5 +/- 6	62.6 +/- 2.1	61.2 +/- 4
Elevation Beamwidth 3dB	Deg	8.5 +/- 0.5	7.9 +/- 0	7.2 +/- 0.5
Cross Polar Discrimination at Boresight	dB	25	27	26
Cross Polar Discrimination over Sector	dB	14	11.6	11
F/B at +/-30deg Total Power	dB	23	23.3	24
First Upper Side Lobe Suppression	dB	17	17	17
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	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	16.3	16.7	17.3
Gain Over all Tilts	dBi	15.8 +/- 0.5	16.2 +/- 0.5	16.8 +/- 0.5
Azimuth Beamwidth 3dB	Deg	67.1 +/- 6.5	62.1 +/- 3	61.1 +/- 5
Elevation Beamwidth 3dB	Deg	8.6 +/- 0.5	7.9 +/- 0.1	7.2 +/- 0.5
Cross Polar Discrimination at Boresight	dB	24	27	25.6
Cross Polar Discrimination over Sector	dB	13	11	10
F/B at +/-30deg Total Power	dB	22	24	25
First Upper Side Lobe Suppression	dB	17	18	18
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	250		

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Arrays at Bottom (1695-2690 MHz) [Y1]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	16.8	17.6	17.9	18	17.1
Gain Over all Tilts	dBi	15.8 +/- 1	17.1 +/- 0.5	17.4 +/- 0.5	17.5 +/- 0.5	17 +/- 0.1
Azimuth Beamwidth 3dB	Deg	72.7 +/- 7.6	63 +/- 6	59.3 +/- 4.9	55.6 +/- 6	54.8 +/- 3.5
Elevation Beamwidth 3dB	Deg	7.5 +/- 0.5	6.7 +/- 0.5	6.3 +/- 0.5	5.5 +/- 0.5	5 +/- 0.1
Cross Polar Discrimination at Boresight	dB	17	20	17	14	19
Cross Polar Discrimination over Sector	dB	5	7	4	1	1
F/B at +/-30deg Total Power	dB	25	25	25	26	25
First Upper Side Lobe Suppression	dB	13	14	14	17	20
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

Electrical Specification Header		High Band Arrays at Bottom (1695-2690 MHz) [Y2]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	16.1	17.2	18.2	18	17.3
Gain Over all Tilts	dBi	15.6 +/- 0.5	16.7 +/- 0.5	17.2 +/- 1	17 +/- 1	16.8 +/- 0.5
Azimuth Beamwidth 3dB	Deg	71.9 +/- 4.5	65.6 +/- 6	60.6 +/- 6.7	54.1 +/- 4.9	53.8 +/- 2.5
Elevation Beamwidth 3dB	Deg	7.3 +/- 0.5	6.7 +/- 0.5	6.3 +/- 0.5	5.6 +/- 0.5	5 +/- 0.1
Cross Polar Discrimination at Boresight	dB	23.9	24.9	19	15	20
Cross Polar Discrimination over Sector	dB	7	8.9	4	2	1
F/B at +/-30deg Total Power	dB	25	26	27	27.7	26
First Upper Side Lobe Suppression	dB	13	13	14	15.9	20
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

Electrical Specification Header		High Band Arrays at Top (1695-2690 MHz) [Y3]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	16.6	17.7	18.7	18.1	17.2
Gain Over all Tilts	dBi	15.6 +/- 1	17.2 +/- 0.5	17.7 +/- 1	17.2 +/- 0.9	16.9 +/- 0.3
Azimuth Beamwidth 3dB	Deg	72.8 +/- 9.1	62 +/- 4.4	59.3 +/- 4	57.1 +/- 5.6	55.6 +/- 4.5
Elevation Beamwidth 3dB	Deg	7.6 +/- 0.5	6.8 +/- 0.5	6.4 +/- 0.5	5.8 +/- 0.5	5 +/- 0.1
Cross Polar Discrimination at Boresight	dB	21	21	17	15	21
Cross Polar Discrimination over Sector	dB	6.9	6	4	2	1
F/B at +/-30deg Total Power	dB	24	25	26	27	25
First Upper Side Lobe Suppression	dB	14	14	14	15.9	19
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

Electrical Specification Header		High Band Arrays at Bottom (1695-2690 MHz) [Y4]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	16.1	17.2	18.2	17.8	17.1
Gain Over all Tilts	dBi	15.6 +/- 0.5	16.7 +/- 0.5	17.2 +/- 1	16.9 +/- 0.9	16.6 +/- 0.5
Azimuth Beamwidth 3dB	Deg	71.6 +/- 5	65.2 +/- 5.5	60 +/- 7.1	53.6 +/- 3.5	54.8 +/- 3.5
Elevation Beamwidth 3dB	Deg	7.3 +/- 0.5	6.7 +/- 0.5	6.3 +/- 0.5	5.7 +/- 0.5	5 +/- 0.1
Cross Polar Discrimination at Boresight	dB	22	25	21	17.5	20
Cross Polar Discrimination over Sector	dB	7	9.2	4	2	0.1
F/B at +/-30deg Total Power	dB	25	26	24	26	26
First Upper Side Lobe Suppression	dB	14	14	14	15.5	21
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)	2750 x 469 x 205 (108.3 x 18.5 x 8.1)
Weight (Antenna Only)	kg (lb)	45.6 (100.5)
Weight (Mounting Hardware only)	kg (lb)	9 (19.8)
Packing size- HxWxD	mm (in)	2950 x 564 x 325 (116.1 x 22.2 x 12.8)
Shipping Weight	kg (lb)	62.4 (137.6)
Connector type		12 x 4.3-10 female/bottom + 4 AISG connectors (2 male, 2 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	817
Wind Load @Rated Wind Side	N	340
Wind Load @Rated Wind Rear	N	769

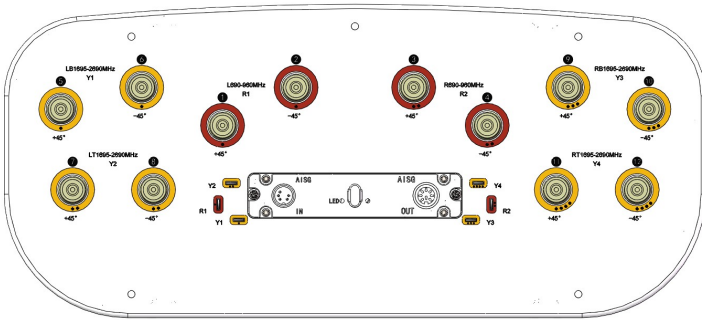
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting Pipe Diameter	Shipping Weight
APXVBB4L26H_43-C-I20	Internal RET(ACU-I20-H12C)	APM50-HS	50-125mm	55.0 kg

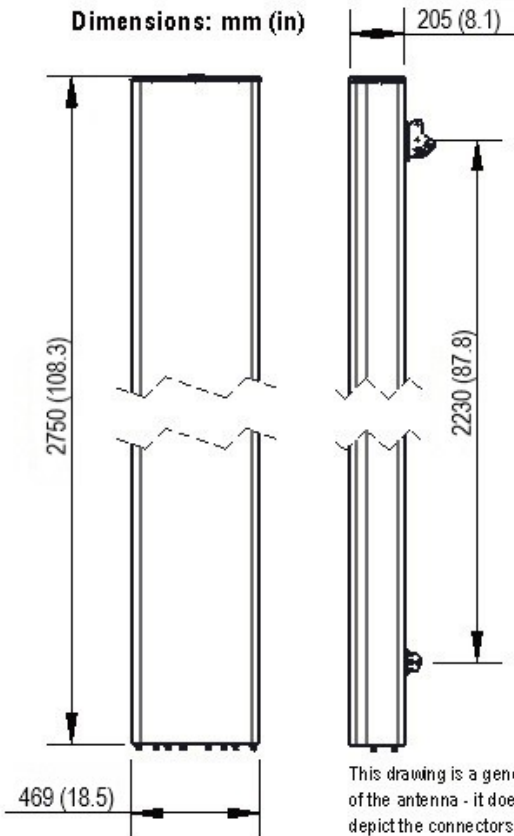


APXVBB4L26H_43-C-I20

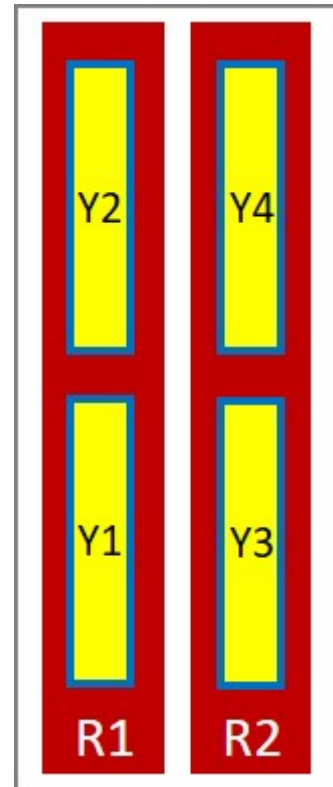
12-Ports, X-Pol, Panel Antenna, 2.6m, 2x 690-960/4x 1695-2690MHz, 65deg, Integrated RET



Dimensions: mm (in)



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](#)