



APXVBBLL20H_43-C-I20

X-Pol 8-ports Antenna, 2.0m, 690-960/690-960/1695-2690/1695-2690MHz, 65deg, 16.1/16.2/17.9/17.9dBi, 2-12deg, Integrated RET

FEATURES / BENEFITS

- 4 ports / 2 cross pol systems in low band (690-960MHz)
- 4 ports / 2 cross pol systems in high band (1695-2690MHz)
- Supports 4x4 MIMO in low band and high band
- Integrated and field replaceable SRET
- ACU HW Version -HRLS170901H1.00 / SW Version -SRLS190802V1.22
- 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	15.2	15.7	16.1
Gain Over all Tilts	dBi	14.7 +/- 0.5	15.2 +/- 0.5	15.6 +/- 0.5
Azimuth Beamwidth 3dB	Deg	65.9 +/- 6	59.7 +/- 4	56.5 +/- 6.4
Elevation Beamwidth 3dB	Deg	11.6 +/- 0.5	10.5 +/- 0.5	9.6 +/- 0.5
Cross Polar Discrimination at Boresight	dB	25	26	25
Cross Polar Discrimination over Sector	dB	13	11	10
F/B at +/-30deg Total Power	dB	21	24	24
First Upper Side Lobe Suppression	dB	16	16	19
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		



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ELECTRICAL SPECIFICATIONS

Electrical Specification Header		LOW BAND ARRAY (690-960 MHz) [R2]		
Frequency Band	MHz	690 - 806	790 - 894	880 - 960
Gain Typical	dBi	15.2	15.8	16.2
Gain Over all Tilts	dBi	14.7 +/- 0.5	15.3 +/- 0.5	15.7 +/- 0.5
Azimuth Beamwidth 3dB	Deg	65.8 +/- 6.4	60.1 +/- 3.5	57.4 +/- 5.5
Elevation Beamwidth 3dB	Deg	11.6 +/- 0.5	10.5 +/- 0.5	9.6 +/- 0.5
Cross Polar Discrimination at Boresight	dB	27	33	30
Cross Polar Discrimination over Sector	dB	12	11	9
F/B at +/-30deg Total Power	dB	18	23	23
First Upper Side Lobe Suppression	dB	16	16	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 Array (1695-2690 MHz) [Y1]				
Frequency Band	MHz	1695 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	16.5	16.9	17.9	17.8	17.4
Gain Over all Tilts	dBi	16.0 +/- 0.5	16.6 +/- 0.3	17.1 +/- 0.8	17.3 +/- 0.5	17 +/- 0.4
Azimuth Beamwidth 3dB	Deg	69.6 +/- 6.9	66 +/- 3.5	66.1 +/- 3.6	54.6 +/- 4.4	67 +/- 6
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	24.2	24	21	19	15
Cross Polar Discrimination over Sector	dB	5	5	6	2	1
F/B at +/-30deg Total Power	dB	23	22	24	25	24
First Upper Side Lobe Suppression	dB	18	16	17	20	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	250				



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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	16.5	17	17.9	17.8	17.4
Gain Over all Tilts	dBi	16.0 +/- 0.5	16.5 +/- 0.5	16.9 +/- 1	17.3 +/- 0.5	17 +/- 0.4
Azimuth Beamwidth 3dB	Deg	69.6 +/- 7.9	64.8 +/- 3	63.3 +/- 4.5	53.2 +/- 3.9	62.3 +/- 5
Elevation Beamwidth 3dB	Deg	7.6 +/- 0.5	6.7 +/- 0.5	6.2 +/- 1	5.1 +/- 0.5	5 +/- 0.1
Cross Polar Discrimination at Boresight	dB	20	23	22	19	16
Cross Polar Discrimination over Sector	dB	6	6	6	2	1
F/B at +/-30deg Total Power	dB	24	25	25	26.7	25
First Upper Side Lobe Suppression	dB	16	16	17	19.5	16
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

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)	30 (66.1)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	2198 x 563 x 288 (86.5 x 22.2 x 11.3)
Shipping Weight	kg (lb)	40.5 (89.3)
Connector type		8 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	962
Wind Load @Rated Wind Side	N	274
Wind Load @Rated Wind Rear	N	1223

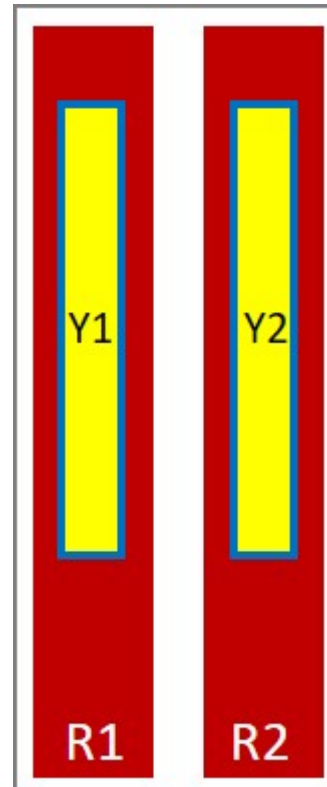
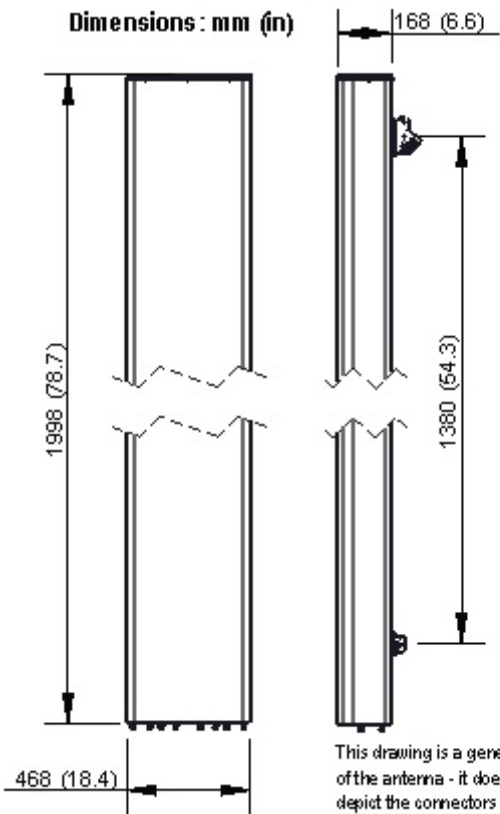
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVBLL20H_43-C-I20	Internal RET(ACU-I20-H12B)	APM50-H2	50-125mm	40.5 Kg



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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](#)



PRODUCT DATASHEET

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