



APXVBLL20B_43-C-I20

8-port X-Pol Antenna, 2.0m, 698-960/698-960/1710-2690/1710-2690MHz, 65deg, 16.1/16.0/19.0/19.1dBi, 2-12°/2-12°/2-12°/2-12°, Integrated RET

FEATURES / BENEFITS

- 4 ports / 2 cross pol systems in low band (698-960MHz)
- 4 ports / 2 cross pol systems in high band (1710-2690MHz)
- Supporting 4x4 MIMO
- Integrated and field replaceable SRET
- ACU HW Version -2.02 / SW Version -2.72
- 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	15.9	16	16.1
Gain Over all Tilts	dBi	14.9+/-1	15.5+/-0.5	15.6+/-0.5
Azimuth Beamwidth 3dB	Deg	64+/-6.5	59.3+/-3	55.3+/-5.7
Elevation Beamwidth 3dB	Deg	11.1+/-1	10.1+/-0.5	9.2+/-0.5
Cross Polar Discrimination at Boresight	dB	18.8	20.5	22
Cross Polar Discrimination over Sector	dB	9	11	11
F/B at +/-30deg Total Power	dB	17	22	22
First Upper Side Lobe Suppression	dB	18	19	16
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	350		



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ELECTRICAL SPECIFICATIONS

Electrical Specification Header		LOW BAND ARRAY (698-960MHZ) [R2]		
Frequency Band	MHz	698-806	790-894	880-960
Gain Typical	dBi	15.4	15.9	16
Gain Over all Tilts	dBi	14.4+/-1	15.4+/-0.5	15.5+/-0.5
Azimuth Beamwidth 3dB	Deg	62.7+/-6.5	57.8+/-2.6	54+/-5.1
Elevation Beamwidth 3dB	Deg	10.9+/-1	10+/-1	9.2+/-0.5
Cross Polar Discrimination at Boresight	dB	20	21.8	21
Cross Polar Discrimination over Sector	dB	6.6	11	11
F/B at +/-30deg Total Power	dB	16	23	22.5
First Upper Side Lobe Suppression	dB	16	17	15.2
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	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	17.5	18	19	19	18.3
Gain Over all Tilts	dBi	16.9+/-0.6	17.1+/-0.9	18+/-1	18.2+/-0.8	17.8+/-0.5
Azimuth Beamwidth 3dB	Deg	60.8+/-8	63.7+/-7.8	58.4+/-10.1	56.2+/-7.9	54.4+/-4.5
Elevation Beamwidth 3dB	Deg	5.3+/-0.5	5.1+/-0.3	4.6+/-0.5	4.2+/-0.5	3.8+/-0.5
Cross Polar Discrimination at Boresight	dB	13	14.5	11.2	11.3	17.6
Cross Polar Discrimination over Sector	dB	8.7	8.9	5	2	1
F/B at +/-30deg Total Power	dB	22	23.1	22.8	22	22.8
First Upper Side Lobe Suppression	dB	20.3	21.5	18	17	16
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		HIGH BAND ARRAY (1710-2690 MHZ) [Y2]				
Frequency Band	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	17.3	17.9	18.9	19.1	18.2
Gain Over all Tilts	dBi	16.8+/-0.5	17+/-0.9	17.9+/-1	18.1+/-1	17.7+/-0.5
Azimuth Beamwidth 3dB	Deg	62.5+/-6.4	63.1+/-5.1	58.5+/-9.1	56+/-8.5	54.3+/-4.7
Elevation Beamwidth 3dB	Deg	5.3+/-0.5	5.1+/-0.5	4.5+/-0.5	4.1+/-0.5	4+/-1
Cross Polar Discrimination at Boresight	dB	11.7	13	12	12	18
Cross Polar Discrimination over Sector	dB	8	7.8	4.2	2	1
F/B at +/-30deg Total Power	dB	22.1	23.9	22.5	21	22.2
First Upper Side Lobe Suppression	dB	19.9	20.1	17.2	18.2	14.7
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

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	2090 x 499 x 199 (82.3 x 19.6 x 7.8)
Weight (Antenna Only)	kg (lb)	36 (79.4)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	2360 x 575 x 275 (92.9 x 22.6 x 10.8)
Shipping Weight	kg (lb)	47 (103.6)
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	220 (160)
Wind Load @Rated Wind Front	N	1281
Wind Load @Rated Wind Side	N	438
Wind Load @Rated Wind Rear	N	1352

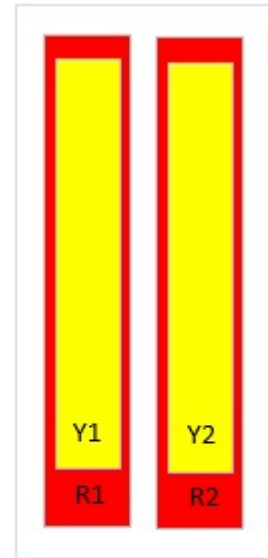
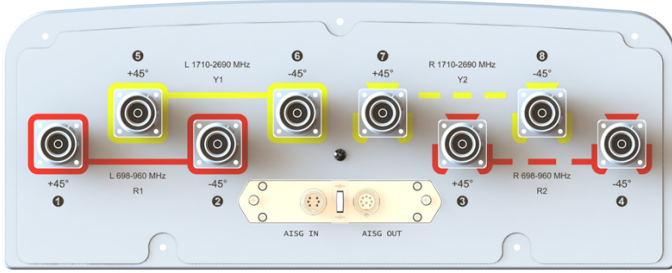
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting Pipe Diameter	Shipping Weight
APXVBLL20B_43-C-I20	Internal RET (ACU-I20-B4)	APM50-B1	50-110mm	47.0 kg

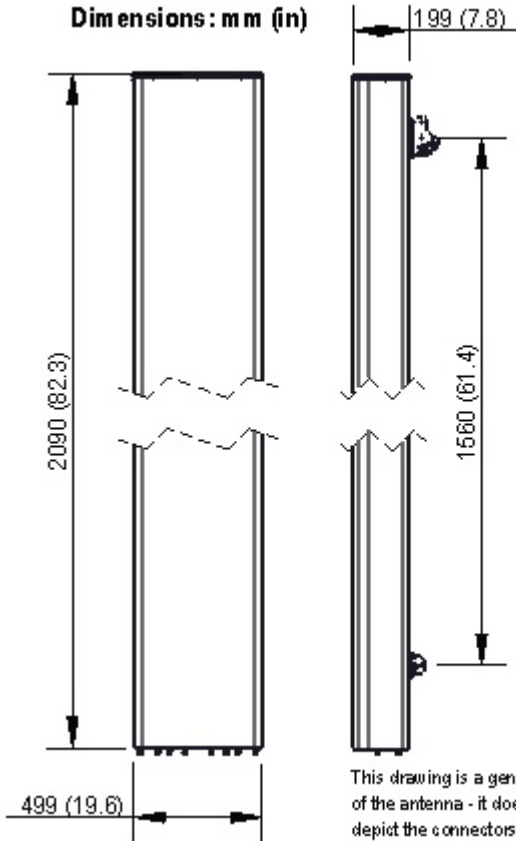


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Dimensions: mm (in)



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



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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](#)