



FEATURES / BENEFITS

- 2 ports / 1 cross pol system in low band (698-960MHz)
- 6 ports / 3 cross pol systems in high band (1710-2690MHz)
- Integrated and field replaceable SRET
- ACU HW Version: 2.02
- 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	16	16.6	16.9
Gain Over all Tilts	dBi	15.4 +/- 0.6	16 +/- 0.6	16.6 +/- 0.3
Azimuth Beamwidth 3dB	Deg	67.9 +/- 1.6	66.5 +/- 1.7	65.6 +/- 0.6
Elevation Beamwidth 3dB	Deg	11.9 +/- 0.9	10.6 +/- 0.7	9.3 +/- 0.6
Cross Polar Discrimination at Boresight	dB	27.1	26.8	24.6
Cross Polar Discrimination over Sector	dB	11.3	10.2	10.4
F/B at +/-30deg Total Power	dB	24.4	25.1	25.7
First Upper Side Lobe Suppression	dB	15	17.1	16.1
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	15.8	16.1	16.2	15.8	16.4
Gain Over all Tilts	dBi	15.2 +/- 0.6	15.8 +/- 0.3	15.9 +/- 0.3	15 +/- 0.8	15.8 +/- 0.6
Azimuth Beamwidth 3dB	Deg	62.5 +/- 4.4	65.5 +/- 4.1	65.2 +/- 4.6	67.4 +/- 6.1	61.3 +/- 2.7
Elevation Beamwidth 3dB	Deg	9.9 +/- 0.6	9.1 +/- 0.4	8.6 +/- 0.6	7.8 +/- 0.7	7.3 +/- 0.4
Cross Polar Discrimination at Boresight	dB	19.8	22.1	22	14.2	15.5
Cross Polar Discrimination over Sector	dB	10.5	10.1	7.3	8.5	5.9
F/B at +/-30deg Total Power	dB	19.8	21.5	20.6	19.6	20.5
First Upper Side Lobe Suppression	dB	13.1	11.9	12	12	14.3
Electrical Downtilt	Deg	2 to 11				
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 (1710-2690 MHZ) [Y2]				
Frequency Band	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	15.4	16	16.3	15.5	16.2
Gain Over all Tilts	dBi	14.9 +/- 0.5	15.6 +/- 0.4	15.8 +/- 0.5	14.7 +/- 0.8	15.6 +/- 0.6
Azimuth Beamwidth 3dB	Deg	62 +/- 7.9	67.5 +/- 4.7	66.6 +/- 6.3	71.1 +/- 5	62.1 +/- 3
Elevation Beamwidth 3dB	Deg	10.2 +/- 0.7	9.3 +/- 0.5	8.8 +/- 0.6	7.9 +/- 0.5	7.5 +/- 0.6
Cross Polar Discrimination at Boresight	dB	21.8	23.9	17.5	13.5	12.7
Cross Polar Discrimination over Sector	dB	10.3	9.7	8.2	6.3	3.1
F/B at +/-30deg Total Power	dB	20.3	21.1	21	18.7	20.3
First Upper Side Lobe Suppression	dB	14.3	13.6	13.3	10.8	14.3
Electrical Downtilt	Deg	2 to 11				
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 (1710-2690 MHZ) [Y3]				
Frequency Band	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	15.8	16.2	16.2	15.5	16.4
Gain Over all Tilts	dBi	15.1 +/- 0.7	15.9 +/- 0.3	15.9 +/- 0.3	14.9 +/- 0.6	15.7 +/- 0.7
Azimuth Beamwidth 3dB	Deg	61 +/- 2.5	63.4 +/- 4.5	63.8 +/- 6.4	67.3 +/- 5.4	61.4 +/- 3.1
Elevation Beamwidth 3dB	Deg	10 +/- 0.6	9.2 +/- 0.5	8.7 +/- 0.7	7.8 +/- 0.6	7.3 +/- 0.4
Cross Polar Discrimination at Boresight	dB	20	19	18.3	15	15.3
Cross Polar Discrimination over Sector	dB	9.2	9.5	5.7	7	6.4
F/B at +/-30deg Total Power	dB	19.8	21.6	21.7	19.1	19.2
First Upper Side Lobe Suppression	dB	12.6	12	11.9	10.6	12.7
Electrical Downtilt	Deg	2 to 11				
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)	1950 x 350 x 200 (76.8 x 13.8 x 7.9)
Weight (Antenna Only)	kg (lb)	22.5 (49.6)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	2200 x 445 x 295 (86.6 x 17.5 x 11.6)
Shipping Weight	kg (lb)	31.5 (69.4)
Connector type		8 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiberglass / Light Gray

TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		DC Ground
Survival/Rated Wind Velocity	km/h	200 (150)
Wind Load @Rated Wind Front	N	842
Wind Load @Rated Wind Side	N	481
Wind Load @Rated Wind Rear	N	1025

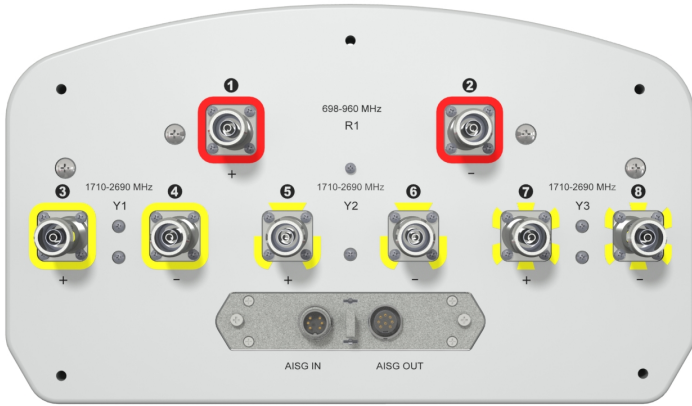
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVB3L20B_43-C-I20	Internal RET (ACU-I20-B4)	APM50-B1	50-110 mm	31.5 Kg

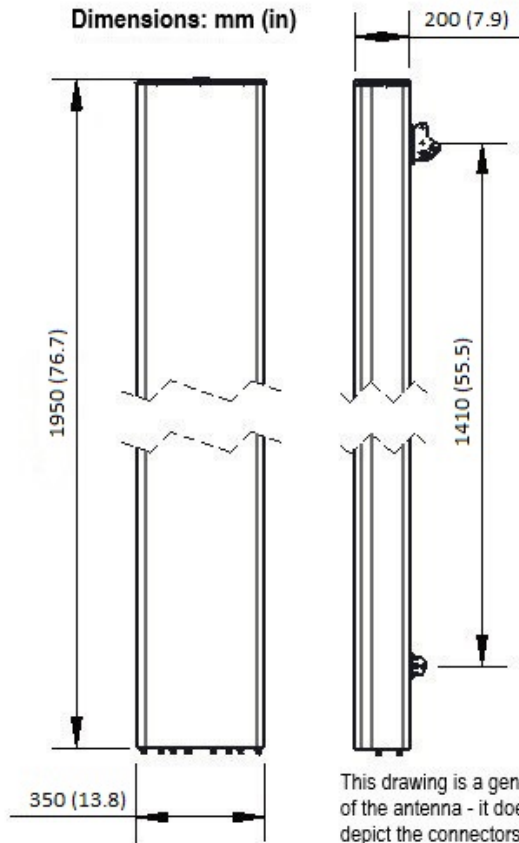


APXVB3L20B_43-C-I20

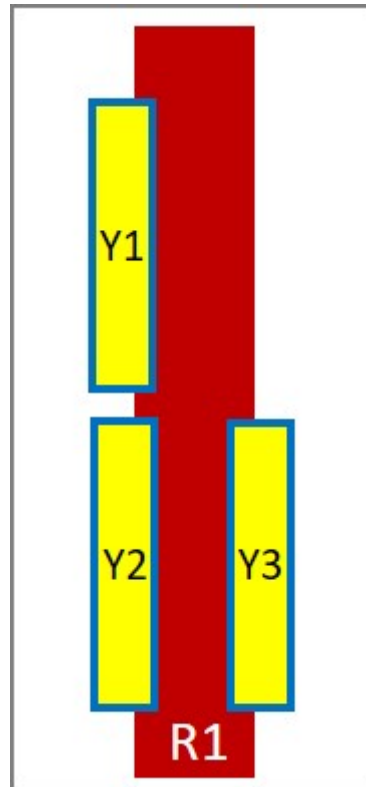
8-Ports, X-Pol, Panel Antenna, 2.0m, 1x 698-960/3x 1710-2690MHz, 65deg, Integrated RET



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](#)