PRODUCT DATASHEET

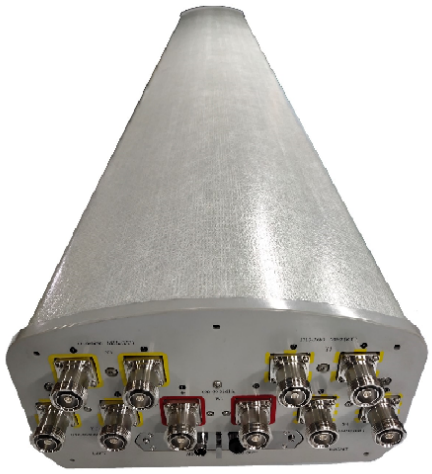
APXVB4L20B_43-C-I20

10-Ports, X-Pol, Panel Antenna, 2.0m, 1x698-960/4x1710-2690, 65deg, Integrated RET

This antenna is an ideal choice for Penta band site upgrades for high traffic areas.
It can be used for multiple bands such as LTE 700, Digital Dividend, CDMA, GSM, DCS, PCS, AWS, UMTS and LTE 2600.

FEATURES / BENEFITS

- Penta band cross-polarized (10 ports), 1x698-960 / 4x 1710-2690 into a compact size
- Ultra-broadband design from LTE 700 to LTE 2600
- High reliability - designed to last in a tower top environment
- SRET -Field replaceable / 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	790-896	870-960
Gain Typical	dBi	15.2	15.9	16.3
Gain Over all Tilts	dBi	14.9 +/- 0.3	15.4 +/- 0.5	15.9 +/- 0.4
Azimuth Beamwidth 3dB	Deg	65.2 +/- 1.7	62.9 +/- 3	59.6 +/- 1.7
Elevation Beamwidth 3dB	Deg	11.8 +/- 1.1	10.5 +/- 0.9	9.4 +/- 0.8
Cross Polar Discrimination at Boresight	dB	23.9	23.2	22.5
Cross Polar Discrimination over Sector	dB	10.7	8.8	9.3
F/B at +/-30deg Total Power	dB	23.3	24.4	24.1
First Upper Side Lobe Suppression	dB	17.6	16.1	12.8
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	-150		
Maximum Effective Power per Port	Watt	350		

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y1]			
Frequency Band	MHz	1710-1880	1920-2200	2300-2400	2500-2690
Gain Typical	dBi	14.8	16	15.5	15.5
Gain Over all Tilts	dBi	14.2 +/- 0.6	15.3 +/- 0.7	14.7 +/- 0.8	14.7 +/- 0.8
Azimuth Beamwidth 3dB	Deg	65.6 +/- 4.1	64.3 +/- 7.9	67 +/- 3.9	64 +/- 3.4
Elevation Beamwidth 3dB	Deg	10 +/- 0.9	8.6 +/- 0.7	8 +/- 0.5	7.3 +/- 0.5
Cross Polar Discrimination at Boresight	dB	19.4	17.3	12.5	14.4
Cross Polar Discrimination over Sector	dB	8.9	7.4	4.5	4.7
F/B at +/-30deg Total Power	dB	19.6	19.4	17.7	18.7
First Upper Side Lobe Suppression	dB	13.5	12.9	13.9	14.7
Electrical Downtilt	Deg	2 to 10			
Cross Polar Isolation	dB	26			
Interband Isolation	dB	26			
VSWR	-	1.5			
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150			
Maximum Effective Power per Port	Watt	250			

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y2]			
Frequency Band	MHz	1710-1880	1920-2200	2300-2400	2500-2690
Gain Typical	dBi	15.5	17.1	16.2	16.2
Gain Over all Tilts	dBi	14.8 +/- 0.7	16.3 +/- 0.8	15.5 +/- 0.7	15.3 +/- 0.9
Azimuth Beamwidth 3dB	Deg	68 +/- 4.1	66.3 +/- 5.6	70.6 +/- 3.5	63.1 +/- 4.2
Elevation Beamwidth 3dB	Deg	9.8 +/- 0.8	8.6 +/- 0.7	7.8 +/- 0.5	7.3 +/- 0.4
Cross Polar Discrimination at Boresight	dB	18.5	14.4	10.3	12.8
Cross Polar Discrimination over Sector	dB	9.6	6.6	6	5.2
F/B at +/-30deg Total Power	dB	19.4	20.8	19	19.7
First Upper Side Lobe Suppression	dB	12.8	13.1	12.8	14.6
Electrical Downtilt	Deg	2 to 10			
Cross Polar Isolation	dB	26			
Interband Isolation	dB	26			
VSWR	-	1.5			
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150			
Maximum Effective Power per Port	Watt	250			

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y3]			
Frequency Band	MHz	1710-1880	1920-2200	2300-2400	2500-2690
Gain Typical	dBi	14.9	16.1	15.5	15.9
Gain Over all Tilts	dBi	14.3 +/- 0.6	15.4 +/- 0.7	14.7 +/- 0.8	14.9 +/- 1
Azimuth Beamwidth 3dB	Deg	65.7 +/- 5.2	64.7 +/- 6.5	67.9 +/- 3.3	62.7 +/- 4.8
Elevation Beamwidth 3dB	Deg	10 +/- 0.7	8.6 +/- 0.6	8 +/- 0.6	7.3 +/- 0.5
Cross Polar Discrimination at Boresight	dB	18.3	17	14.4	14.8
Cross Polar Discrimination over Sector	dB	10.4	7.1	5.7	5.3
F/B at +/-30deg Total Power	dB	19.7	19.9	18.1	18.4
First Upper Side Lobe Suppression	dB	12.5	11.2	12.7	12.3
Electrical Downtilt	Deg	2 to 10			
Cross Polar Isolation	dB	26			
Interband Isolation	dB	26			
VSWR	-	1.5			
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150			
Maximum Effective Power per Port	Watt	250			

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y4]			
Frequency Band	MHz	1710-1880	1920-2200	2300-2400	2500-2690
Gain Typical	dBi	15.2	17	16	16.2
Gain Over all Tilts	dBi	14.6 +/- 0.6	16.2 +/- 0.8	15.3 +/- 0.7	15.2 +/- 1
Azimuth Beamwidth 3dB	Deg	68 +/- 4.1	65.9 +/- 5.7	70.2 +/- 3.5	62.7 +/- 5.2
Elevation Beamwidth 3dB	Deg	9.8 +/- 0.8	8.6 +/- 0.7	7.8 +/- 0.6	7.2 +/- 0.3
Cross Polar Discrimination at Boresight	dB	17.6	14.2	10.2	12.9
Cross Polar Discrimination over Sector	dB	9.7	7	5.9	5.8
F/B at +/-30deg Total Power	dB	19.1	21.3	19.1	19.2
First Upper Side Lobe Suppression	dB	11.7	10.6	10.3	11.6
Electrical Downtilt	Deg	2 to 10			
Cross Polar Isolation	dB	26			
Interband Isolation	dB	26			
VSWR	-	1.5			
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150			
Maximum Effective Power per Port	Watt	250			

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

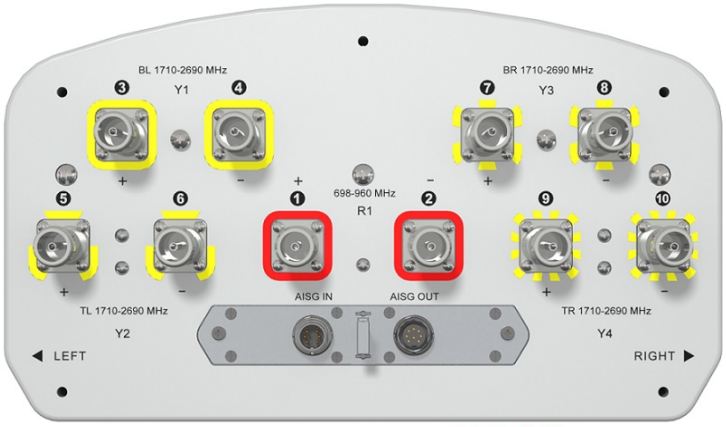
Dimensions - H x W x D	mm (in)	1950 x 350 x 200 (76.8 x 13.8 x 7.9)
Weight (Antenna Only)	kg (lb)	25 (55.1)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	2200 x 445 x 295 (86.6 x 17.5 x 11.6)
Shipping Weight	kg (lb)	30.5 (67.2)
Connector type		10 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiberglass / Light Grey RAL7035

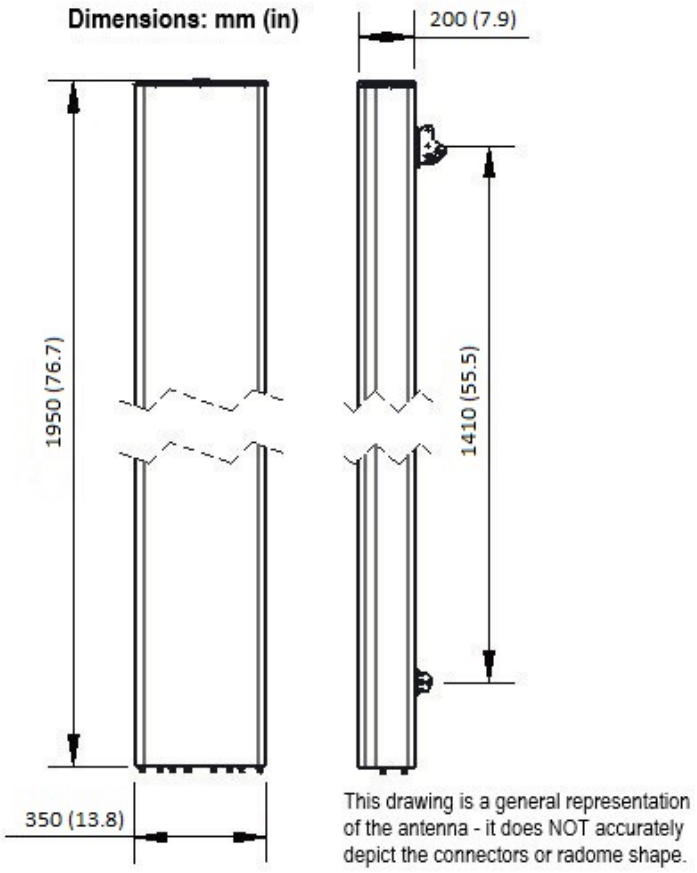
TESTING AND ENVIRONMENTAL

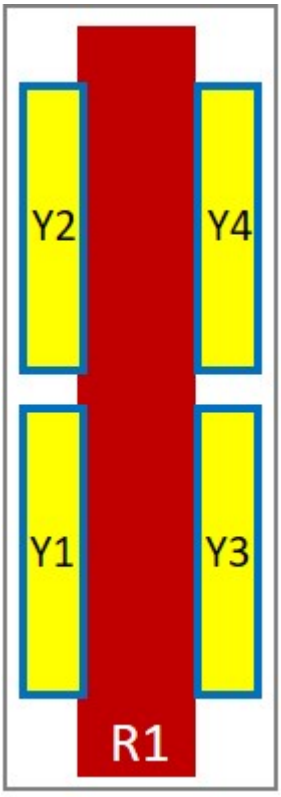
Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		Direct Ground
Survival/Rated Wind Velocity	km/h	220 (160)
Wind Load @Rated Wind Front	N	842
Wind Load @Rated Wind Side	N	413
Wind Load @Rated Wind Rear	N	1025

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting Pipe Diameter	Shipping Weight
APXVB4L20B_43-C-I20	Internal RET(ACU-I20-B5)	APM50-B1	50-110mm	30.5 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