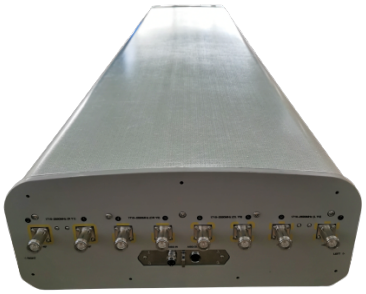
PRODUCT DATASHEET

APXVLLLL21B_43-C-I20

8-Ports, X-Pol, Panel Antenna, 2.1m, 4x 1710-2690MHz, 65deg, Integrated RET

FEATURES / BENEFITS

- 8 ports / 4 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		High Band Array (1710-2690 MHz) [Y1]				
Frequency Band	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	18.4	19.1	20.1	19.7	19.9
Gain Over all Tilts	dBi	17.9 +/- 0.5	18.6 +/- 0.5	19.6 +/- 0.5	19.2 +/- 0.5	18.9 +/- 1
Azimuth Beamwidth 3dB	Deg	65.6 +/- 4.3	62 +/- 4	62.6 +/- 3	62.5 +/- 4.3	60.2 +/- 5.4
Elevation Beamwidth 3dB	Deg	5 +/- 0.1	4.9 +/- 0.5	4.2 +/- 0.5	4 +/- 0.1	3.7 +/- 0.5
Cross Polar Discrimination at Boresight	dB	25.6	27.5	21.8	23	23.5
Cross Polar Discrimination over Sector	dB	15	14.2	16	15.4	11
F/B at +/-30deg Total Power	dB	24.2	24.5	25	22	19
First Upper Side Lobe Suppression	dB	24.9	22.6	14.7	15	9.7
Electrical Downtilt	Deg	0 to 6				
Cross Polar Isolation	dB	28				
Interband Isolation	dB	28				
VSWR	-	1.5				
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150				
Maximum Effective Power per Port	Watt	250				

APXVLLLL21B_43-C-I20

8-Ports, X-Pol, Panel Antenna, 2.1m, 4x 1710-2690MHz, 65deg, Integrated RET

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	19	19.2	20.2	20	19.7
Gain Over all Tilts	dBi	18 +/- 1	18.7 +/- 0.5	19.7 +/- 0.5	19.5 +/- 0.5	19.2 +/- 0.5
Azimuth Beamwidth 3dB	Deg	65.7 +/- 7.3	56.9 +/- 4.8	52.3 +/- 4.9	63 +/- 3.2	60 +/- 5.3
Elevation Beamwidth 3dB	Deg	5 +/- 0.1	4.5 +/- 0.5	4 +/- 0.1	3.9 +/- 0.2	3.4 +/- 0.5
Cross Polar Discrimination at Boresight	dB	24.9	26	22.2	20.8	18.4
Cross Polar Discrimination over Sector	dB	18	18	16.8	15.7	9.9
F/B at +/-30deg Total Power	dB	25	25.6	26	22.6	21
First Upper Side Lobe Suppression	dB	22	22	18	16.8	14
Electrical Downtilt	Deg	0 to 6				
Cross Polar Isolation	dB	28				
Interband Isolation	dB	28				
VSWR	-	1.5				
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150				
Maximum Effective Power per Port	Watt	250				

APXVLLLL21B_43-C-I20

8-Ports, X-Pol, Panel Antenna, 2.1m, 4x 1710-2690MHz, 65deg, Integrated RET

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	19.1	19.4	20.2	19.8	19.4
Gain Over all Tilts	dBi	18.1 +/- 1	18.9 +/- 0.5	19.7 +/- 0.5	19.3 +/- 0.5	18.9 +/- 0.5
Azimuth Beamwidth 3dB	Deg	65.1 +/- 7.5	56.6 +/- 5	52.9 +/- 5.3	62.3 +/- 3.2	60.4 +/- 4.5
Elevation Beamwidth 3dB	Deg	5 +/- 0.1	4.7 +/- 0.5	4.1 +/- 0.5	3.9 +/- 0.2	3.4 +/- 0.5
Cross Polar Discrimination at Boresight	dB	24	26.8	23	21	18
Cross Polar Discrimination over Sector	dB	18.8	17.3	17	15	9
F/B at +/-30deg Total Power	dB	25.9	26	26	22.8	23
First Upper Side Lobe Suppression	dB	21.1	19.1	16.3	14.9	12
Electrical Downtilt	Deg	0 to 6				
Cross Polar Isolation	dB	28				
Interband Isolation	dB	28				
VSWR	-	1.5				
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-150				
Maximum Effective Power per Port	Watt	250				

APXVLLLL21B_43-C-I20

8-Ports, X-Pol, Panel Antenna, 2.1m, 4x 1710-2690MHz, 65deg, Integrated RET

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Array (1710-2690 MHz) [Y4]				
Frequency Band	MHz	1710 - 1880	1850 - 1990	1920 - 2170	2300 - 2400	2490 - 2690
Gain Typical	dBi	18.8	19.2	20.1	19.8	19.4
Gain Over all Tilts	dBi	18 +/- 0.8	18.7 +/- 0.5	19.6 +/- 0.5	19.3 +/- 0.5	18.9 +/- 0.5
Azimuth Beamwidth 3dB	Deg	65.4 +/- 4.1	62.9 +/- 4	62.7 +/- 3.4	63.5 +/- 3.4	60.7 +/- 6
Elevation Beamwidth 3dB	Deg	5.1 +/- 0.1	4.9 +/- 0.5	4.2 +/- 0.5	4 +/- 0.1	3.8 +/- 0.5
Cross Polar Discrimination at Boresight	dB	25	25.7	23	25.7	21
Cross Polar Discrimination over Sector	dB	16	15.7	15	15.1	12.2
F/B at +/-30deg Total Power	dB	24	25	25	24	22
First Upper Side Lobe Suppression	dB	22.5	22	14.5	13.9	10
Electrical Downtilt	Deg	0 to 6				
Cross Polar Isolation	dB	28				
Interband Isolation	dB	28				
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)	2085 x 499 x 199 (82.1 x 19.6 x 7.8)
Weight (Antenna Only)	kg (lb)	35 (77.2)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	2330 x 595 x 275 (91.7 x 23.4 x 10.8)
Shipping Weight	kg (lb)	43.2 (95.2)
Connector type		8 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiberglass / Light Grey RAL7035

TESTING AND ENVIRONMENTAL

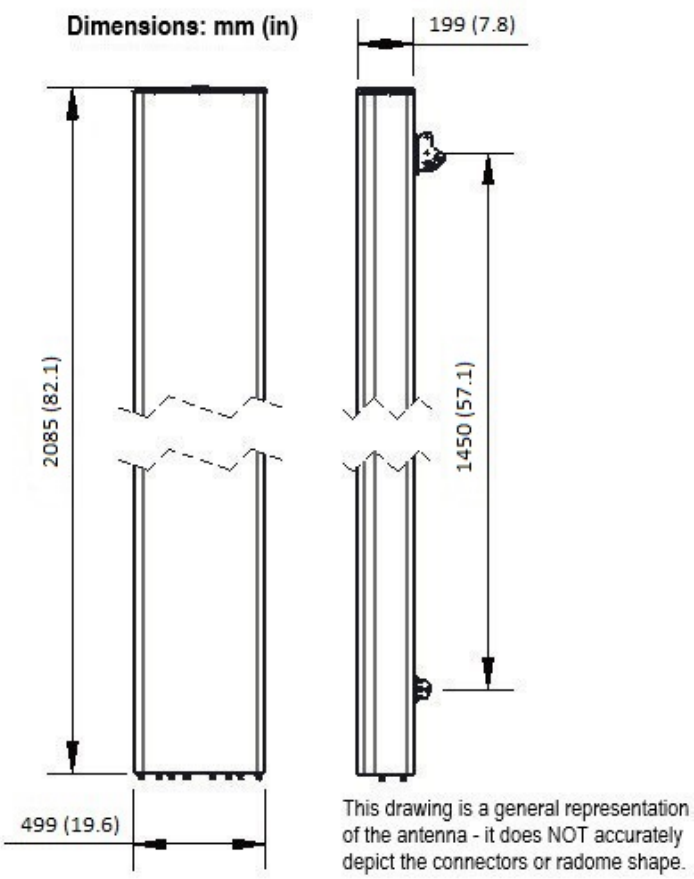
Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		Direct Ground
Survival/Rated Wind Velocity	km/h	200 (150)
Wind Load @Rated Wind Front	N	1281
Wind Load @Rated Wind Side	N	438
Wind Load @Rated Wind Rear	N	1352

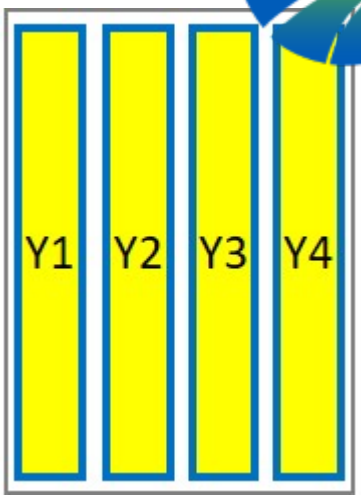
APXVLLLL21B_43-C-I20

8-Ports, X-Pol, Panel Antenna, 2.1m, 4x 1710-2690MHz, 65deg, Integrated RET

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVLLLL21B_43-C-I20	Internal RET(ACU-I20-B4)	APM50-B1	50-110 mm	43.2 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