PRODUCT DATASHEET

APXVBB3L15H_43-C-I20

10-Ports, X-Pol, Panel Antenna, 1.5m, 2x 690-960/3x 1695-2690MHz, 65deg, Integrated RET

FEATURES / BENEFITS

- 4 ports / 2 cross pol systems in low band (690-960MHz)
- 6 ports / 3 cross pol systems in high band (1695-2690MHz)
- Integrated and field replaceable SRET
- ACU HW Version -HRLS200608H1.00
- 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	14.5	15.2	15.3
Gain Over all Tilts	dBi	13.7 +/- 0.8	14.4 +/- 0.8	14.7 +/- 0.6
Azimuth Beamwidth 3dB	Deg	62.4 +/- 5.3	56.9 +/- 3.4	54.9 +/- 7.2
Elevation Beamwidth 3dB	Deg	15.6 +/- 1.3	14 +/- 0.9	12.6 +/- 1
Cross Polar Discrimination at Boresight	dB	21.3	23.5	21.3
Cross Polar Discrimination over Sector	dB	11.9	11	11.2
F/B at +/-30deg Total Power	dB	21.2	21.7	22.6
First Upper Side Lobe Suppression	dB	16.4	18.3	17.9
Electrical Downtilt	Deg	2 to 12		
Cross Polar Isolation	dB	25		
Interband Isolation	dB	25		
VSWR	-	1.5		
Passive Intermodulation (3rd Order, 2 x 43dBm)	dBc	-153		
Maximum Effective Power per Port	Watt	250		

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering.

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Low Band Array (690-960 MHz) [R2]		
Frequency Band	MHz	690-806	790-894	880-960
Gain Typical	dBi	14.7	15.2	15.6
Gain Over all Tilts	dBi	13.9 +/- 0.8	14.4 +/- 0.8	14.9 +/- 0.7
Azimuth Beamwidth 3dB	Deg	62.3 +/- 6	56.3 +/- 3.4	53.7 +/- 5.4
Elevation Beamwidth 3dB	Deg	15 +/- 1.3	13.6 +/- 0.7	12.2 +/- 0.9
Cross Polar Discrimination at Boresight	dB	17.6	20.9	21.9
Cross Polar Discrimination over Sector	dB	10.2	10.3	9.6
F/B at +/-30deg Total Power	dB	20.5	22.4	23.8
First Upper Side Lobe Suppression	dB	14	17.8	17.3
Electrical Downtilt	Deg	2 to 12		
Cross Polar Isolation	dB	25		
Interband Isolation	dB	25		
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	16.8	17.5	18.2	18.1	18.1
Gain Over all Tilts	dBi	16.1 +/- 0.7	17.1 +/- 0.4	17.5 +/- 0.7	17.5 +/- 0.6	17.6 +/- 0.5
Azimuth Beamwidth 3dB	Deg	62.8 +/- 7.7	58.6 +/- 3.9	56.7 +/- 3.8	52.7 +/- 4.1	54.2 +/- 3.8
Elevation Beamwidth 3dB	Deg	7.5 +/- 0.7	6.6 +/- 0.5	6.1 +/- 0.6	5.4 +/- 0.3	4.8 +/- 0.3
Cross Polar Discrimination at Boresight	dB	20.3	21.4	22	20.6	22.3
Cross Polar Discrimination over Sector	dB	4.7	6.8	5.8	2	0.5
F/B at +/-30deg Total Power	dB	24.4	26.2	26.1	25.2	25.2
First Upper Side Lobe Suppression	dB	19	17.6	16.2	13.8	14.1
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	200				

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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	16.9	17.8	18.1	18.5
Gain Over all Tilts	dBi	16.1 +/- 0.4	16.5 +/- 0.4	17.1 +/- 0.7	17.6 +/- 0.5	17.8 +/- 0.7
Azimuth Beamwidth 3dB	Deg	69.8 +/- 4.8	68.6 +/- 4.1	64 +/- 6.1	57 +/- 2.3	59.3 +/- 5.6
Elevation Beamwidth 3dB	Deg	6.6 +/- 0.4	6.1 +/- 0.3	5.9 +/- 0.4	5.2 +/- 0.3	4.9 +/- 0.3
Cross Polar Discrimination at Boresight	dB	18.4	21.3	22.4	19.8	17.5
Cross Polar Discrimination over Sector	dB	13.6	12.2	9	4.9	1.5
F/B at +/-30deg Total Power	dB	24.5	23.2	23.7	27	27.2
First Upper Side Lobe Suppression	dB	16.1	17.7	14.3	16.3	17.5
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	200				

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Array (1695-2690 MHz) [Y3]				
Frequency Band	MHz	1695-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain Typical	dBi	16.6	17.4	18.2	18.1	18.3
Gain Over all Tilts	dBi	16 +/- 0.6	17 +/- 0.4	17.4 +/- 0.8	17.5 +/- 0.6	17.7 +/- 0.6
Azimuth Beamwidth 3dB	Deg	62.8 +/- 8.2	58.8 +/- 4.8	57.2 +/- 4	52.5 +/- 4	53.8 +/- 4.2
Elevation Beamwidth 3dB	Deg	7.6 +/- 0.6	6.6 +/- 0.5	6.1 +/- 0.6	5.4 +/- 0.3	4.9 +/- 0.3
Cross Polar Discrimination at Boresight	dB	19.4	19.6	21.3	20.1	21.5
Cross Polar Discrimination over Sector	dB	4.2	7.2	6.1	1.1	0.6
F/B at +/-30deg Total Power	dB	23.1	25.3	26.1	25.9	24.8
First Upper Side Lobe Suppression	dB	18.3	17.3	16.6	13.6	14.4
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	200				

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ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

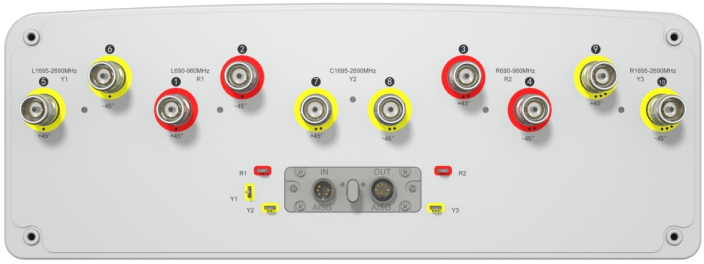
Dimensions - H x W x D	mm (in)	1498 x 468 x 168 (59 x 18.4 x 6.6)
Weight (Antenna Only)	kg (lb)	24.5 (54)
Weight (Mounting Hardware only)	kg (lb)	5.5 (12.1)
Packing size- HxWxD	mm (in)	1698 x 544 x 278 (66.9 x 21.4 x 10.9)
Shipping Weight	kg (lb)	36 (79.4)
Connector type		10 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiber Glass / Light Grey RAL7035

TESTING AND ENVIRONMENTAL

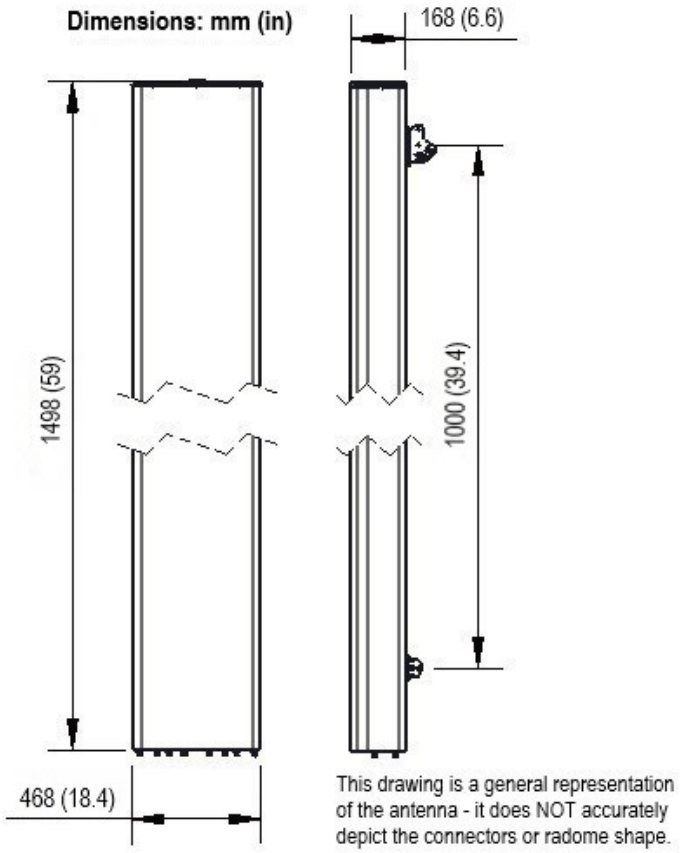
Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		Direct Ground
Survival/Rated Wind Velocity	km/h	200 (150)
Wind Load @Rated Wind Front	N	645
Wind Load @Rated Wind Side	N	285
Wind Load @Rated Wind Rear	N	720

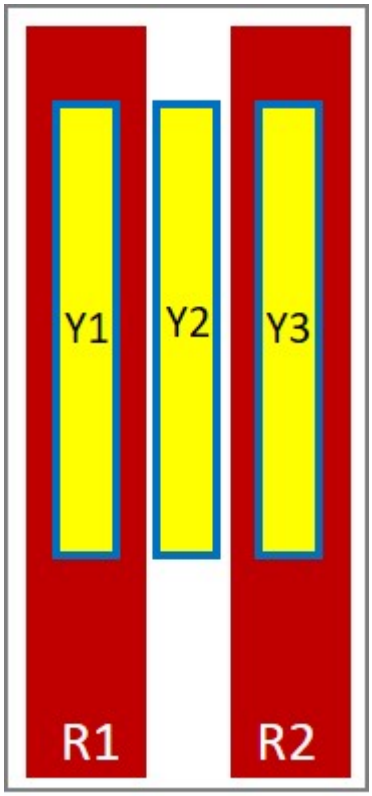
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting Pipe Diameter	Shipping Weight
APXVBB3L15H_43-C-I20	Internal RET (ACU-I20-H12I)	APM50-H2	50-125mm	36.0 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

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