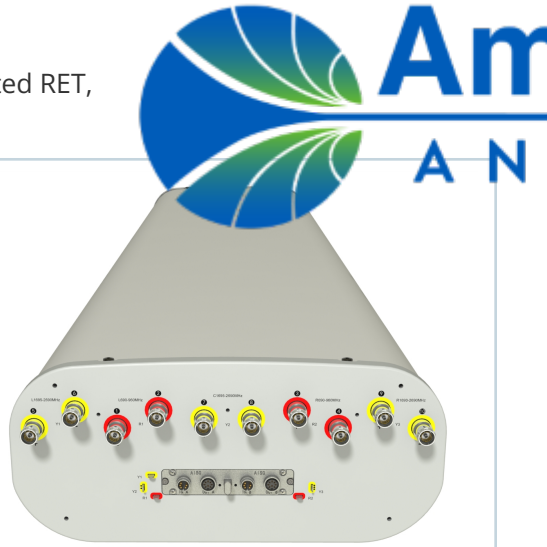
PRODUCT DATASHEET

APXVBB3L20H2_43-C-I20S

10-Ports, X-Pol, Panel Antenna, 2.0m, 2x 690-960/3x 1695-2690MHz, 65deg, Integrated RET, Site Sharing Support



FEATURES / BENEFITS

- 4 ports / 2 cross pol systems in low band (690-960MHz)
- 6 ports / 3 cross pol systems in high band (1710-2690MHz)
- Integrated and field replaceable SRET, Site sharing support
- ACU HW Version: JD6L00001
- 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	16.9	16.8	16.9
Gain Over all Tilts	dBi	16.1 +/- 0.8	16.3 +/- 0.5	16.3 +/- 0.6
Azimuth Beamwidth 3dB	Deg	65.5 +/- 3.6	63.9 +/- 3.7	63.9 +/- 5.4
Elevation Beamwidth 3dB	Deg	10.9 +/- 0.7	10.1 +/- 0.5	9.9 +/- 0.5
Cross Polar Discrimination at Boresight	dB	17.3	23.4	24.6
Cross Polar Discrimination over Sector	dB	9.6	11.3	10.6
F/B at +/-30deg Total Power	dB	18.8	23.1	23.2
First Upper Side Lobe Suppression	dB	17.9	17.3	15.9
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		

APXVBB3L20H2_43-C-I20S

10-Ports, X-Pol, Panel Antenna, 2.0m, 2x 690-960/3x 1695-2690MHz, 65deg, Integrated RET, Site Sharing Support

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Low Band Array (690-960 MHz) [R2]		
Frequency Band	MHz	690-806	790-894	880-960
Gain Typical	dBi	16.9	16.8	17.1
Gain Over all Tilts	dBi	16.2 +/- 0.7	16.4 +/- 0.4	16.5 +/- 0.6
Azimuth Beamwidth 3dB	Deg	66.4 +/- 5.7	64.2 +/- 4.2	63.7 +/- 4.6
Elevation Beamwidth 3dB	Deg	10.7 +/- 0.7	9.9 +/- 0.5	9.6 +/- 0.4
Cross Polar Discrimination at Boresight	dB	17.2	23.5	24
Cross Polar Discrimination over Sector	dB	8.1	11.2	10.3
F/B at +/-30deg Total Power	dB	20.2	23.2	23.8
First Upper Side Lobe Suppression	dB	17.7	17.3	17.4
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		
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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	18.3	18.6	18.8	18.3	18.4
Gain Over all Tilts	dBi	17.6 +/- 0.7	18.1 +/- 0.5	18.2 +/- 0.6	17.7 +/- 0.6	17.8 +/- 0.6
Azimuth Beamwidth 3dB	Deg	63.8 +/- 4.9	59.7 +/- 5.6	59.2 +/- 4.5	59.6 +/- 6	60.5 +/- 6.3
Elevation Beamwidth 3dB	Deg	6.5 +/- 0.3	6.1 +/- 0.3	5.8 +/- 0.5	5.3 +/- 0.3	4.9 +/- 0.4
Cross Polar Discrimination at Boresight	dB	21.1	21.3	20.9	19.2	23.8
Cross Polar Discrimination over Sector	dB	6.3	9.1	6	2.3	1.7
F/B at +/-30deg Total Power	dB	25	26.4	26.5	26	26
First Upper Side Lobe Suppression	dB	16	17	16.8	16.8	17.2
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				

APXVBB3L20H2_43-C-I20S

10-Ports, X-Pol, Panel Antenna, 2.0m, 2x 690-960/3x 1695-2690MHz, 65deg, Integrated RET, Site Sharing Support

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	18.5	18.7	18.8	18.3	18.7
Gain Over all Tilts	dBi	17.9 +/- 0.6	18.2 +/- 0.5	18.3 +/- 0.5	17.9 +/- 0.4	18.1 +/- 0.6
Azimuth Beamwidth 3dB	Deg	66.2 +/- 5.5	67.4 +/- 4.9	65.2 +/- 6.8	62.2 +/- 5	61.1 +/- 4
Elevation Beamwidth 3dB	Deg	6.7 +/- 0.4	6.1 +/- 0.3	5.8 +/- 0.4	5.3 +/- 0.2	4.9 +/- 0.2
Cross Polar Discrimination at Boresight	dB	21	20.6	21.9	20.6	23.1
Cross Polar Discrimination over Sector	dB	11.9	13	11.7	9.3	6.4
F/B at +/-30deg Total Power	dB	23.5	26.6	26.6	28.3	27.2
First Upper Side Lobe Suppression	dB	17.6	17.4	17.3	20	19.6
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				

APXVBB3L20H2_43-C-I20S

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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	18.4	18.7	18.8	18.3	18.2
Gain Over all Tilts	dBi	17.9 +/- 0.5	18.3 +/- 0.4	18.3 +/- 0.5	17.7 +/- 0.6	17.7 +/- 0.5
Azimuth Beamwidth 3dB	Deg	62.7 +/- 5.2	60.9 +/- 6	59.4 +/- 5.4	58 +/- 4.5	61 +/- 4.4
Elevation Beamwidth 3dB	Deg	6.6 +/- 0.4	6.2 +/- 0.3	5.9 +/- 0.4	5.4 +/- 0.3	5 +/- 0.3
Cross Polar Discrimination at Boresight	dB	18.6	19.3	20.2	20.3	25.4
Cross Polar Discrimination over Sector	dB	5.7	9	5.9	2.7	0.8
F/B at +/-30deg Total Power	dB	27	27.4	26.8	25.5	23.7
First Upper Side Lobe Suppression	dB	17	17.3	16.8	16.9	15.5
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

Impedance	Ohm	50
Polarization	Deg	+/-45

MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	1998 x 469 x 205 (78.7 x 18.5 x 8.1)
Weight (Antenna Only)	kg (lb)	26.2 (57.8)
Weight (Mounting Hardware only)	kg (lb)	5.5 (12.125)
Packing size- HxWxD	mm (in)	2198 x 544 x 315 (86.5 x 22.2 x 11.3)
Shipping Weight	kg (lb)	36.6 (80.7)
Connector type		10 x 4.3-10 female/bottom + 4 AISG connectors (2 male, 2 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)

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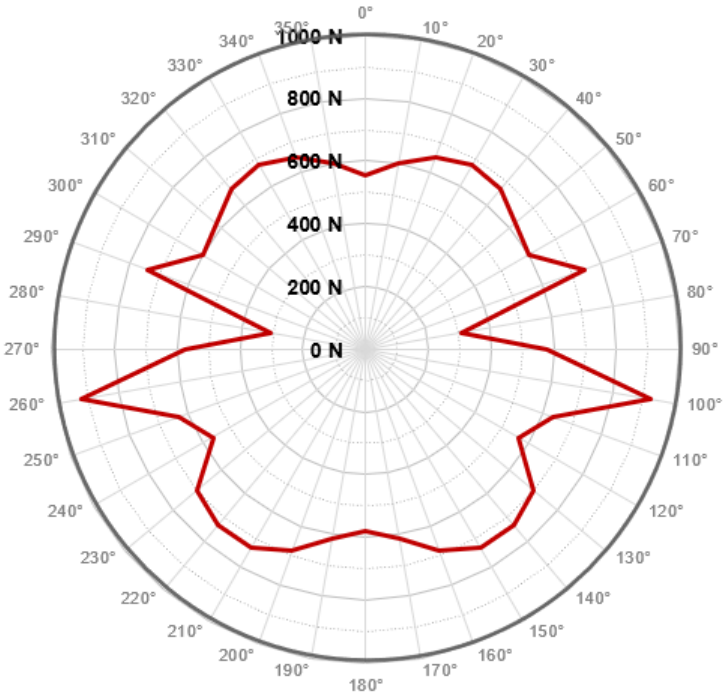
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting Pipe Diameter	Shipping Weight
APXVBB3L20H2_43-C-I20S (Material Code: 50016736)	Internal RET (ACU-X20H) Dynamic Site Sharing mode	APM50-H2	50-125mm	36.6 kg
APXVBB3L20H2_43-C-I20S (Material Code: 50016737)	Internal RET (ACU-X20H) Static Site Sharing mode	APM50-H2	50-125mm	36.6 kg
APXVBB3L20H2_43-C-I20 (Material Code: 50016734)	Internal RET (ACU-I20-H12J)	APM50-H2	50-125mm	36.5 kg



Rated Wind Speed, Km/h	150
Wind Load Frontal, Resultant, N	554
Wind Load Side, Resultant, N	576
Wind Load Rear, Resultant, N	578
Maximum Wind Load, Resultant, N	922
Maximum Wind Load, Drag Force, N	897

APXVBB3L20H2_43-C-I20S

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Port	Array	Frequency	RET	AISG RET UID
1	R1	690-960 MHz	R1	RFxxxxxxxxxxx-R1
2				
3	R2	690-960 MHz	R2	RFxxxxxxxxxxx-R2
4				
5	Y1	1695-2690 MHz	Y1	RFxxxxxxxxxxx-Y1
6				
7	Y2	1695-2690 MHz	Y2	RFxxxxxxxxxxx-Y2
8				
9	Y3	1695-2690 MHz	Y3	RFxxxxxxxxxxx-Y3
10				

NOTE: RET motors will tilt one at a time, not simultaneously

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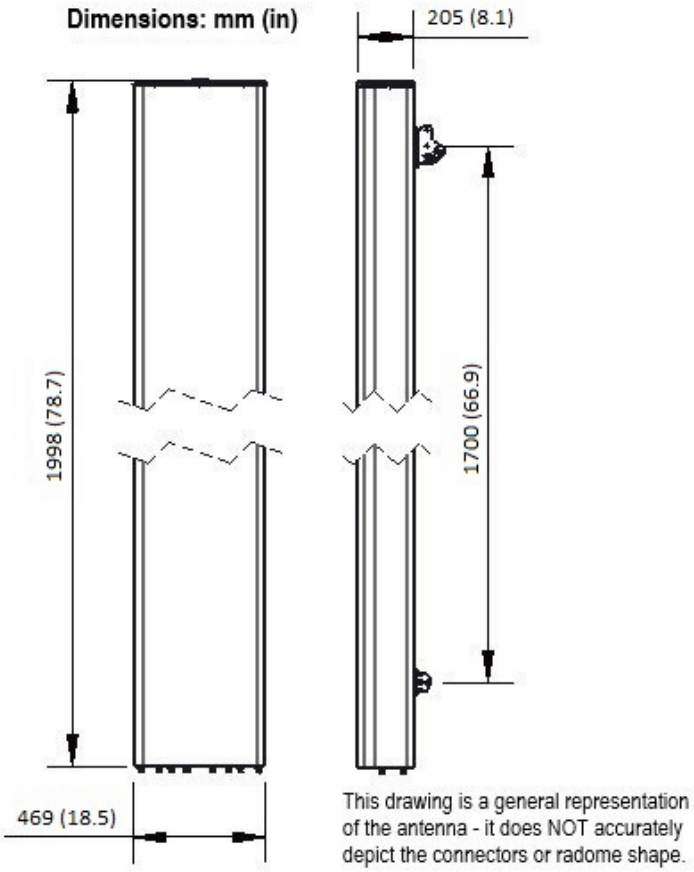

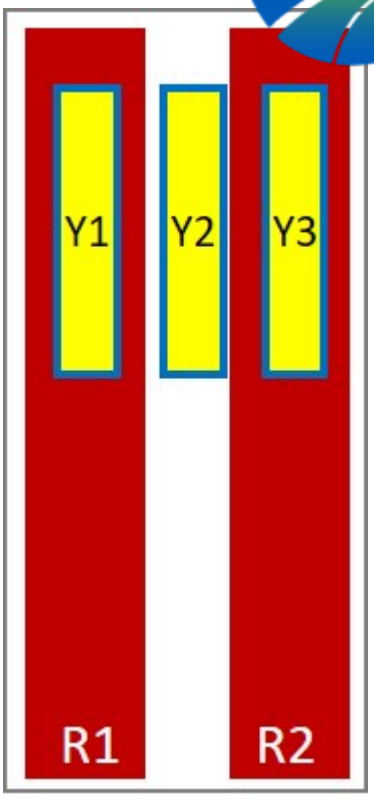

External Document Links

APM50-Series_Installation_Instructions

Notes

- All electrical parameters are compliant with BASTA NGMN 12 requirements.
- For additional mounting information please click"External Document Link".

- **Radiating patterns:** Request pattern files