

APXVAALL12_43-U-NA20

8-Ports, X-Pol, Panel Antenna, 1.2m, 2x 617-960/2x 1695-2690 MHz 65deg, Integrated RET

FEATURES / BENEFITS

- MIMO 4x4 in low-band and mid-band
- Integrated and fieldreplaceable RET
- ACU model number: x2 ACU-A20-SR, ACU HW 05
- Compliant with AISG V2.0 and 3GPP
- AISG jumper cable included
- Mechanical down tilt kit included

**Technical features****ELECTRICAL SPECIFICATIONS**

Electrical Specification Header		Low Band Arrays (617-960 MHz) Ports 1-4			
Frequency Band	MHz	617-698	698-806	806-894	880-960
Gain	dBi	12.9	14.0	14.2	15.2
Azimuth Beamwidth 3dB	Deg	68 +/- 5	62 +/- 6	58 +/- 6	53 +/- 8
Elevation Beamwidth 3dB	Deg	19.7 +/- 1.5	16.9 +/- 1.0	15.1 +/- 1.5	13.5 +/- .5
Cross-Pol at Boresight	dB	20	21	23	26
F/B at 180 Copolar	dB	24	26	27	29
Electrical Downtilt	Deg	2 to 18	2 to 18	2 to 18	2 to 18
First Upper Side Lobe	dB	14	18	16	14
VSWR	-	1.5:1	1.5:1	1.5:1	1.5:1
Return Loss	dB	-14	-14	-14	-14
Cross Polar Isolation	dB	25	25	25	25
3rd Order PIM 2 x 43dBm	dBc	-153	-153	-153	-153
Maximum CW Power per Port	Watt	400	400	400	400
Gain Over All Tilts	dBi	12.4 +/- .5	13.5 +/- .5	13.7 +/- .5	13.9 +/- 1.3
Cross-Pol Over Sector	dB	9	6	2	1
F/B at +/-30 Total Power	dB	17	19	19	19
Upper Side Lobe Peak to +20	dB	22	22	17	14

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Mid Band Arrays (1695-2690 MHz) Ports 5-8				
Frequency Band	MHz	1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Gain	dBi	15.6	15.9	16.3	16.0	17.0
Azimuth Beamwidth 3dB	Deg	69 +/- 4	67 +/- 3	67 +/- 4	64 +/- 6	60 +/- 7
Elevation Beamwidth 3dB	Deg	10.3 +/- .5	10.0 +/- 1	9.0 +/- 1	8.0 +/- 1	7.2 +/- .5
Cross-Pol at Boresight	dB	19	21	22	22	22
F/B at 180 Copolar	dB	32	33	33	29	28
Electrical Downtilt	Deg	2 to 12	2 to 12	2 to 12	2 to 12	2 to 12
First Upper Side Lobe	dB	19	20	18	15	15
VSWR	-	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1
Return Loss	dB	-14	-14	-14	-14	-14
Cross Polar Isolation	dB	25	25	25	25	25
3rd Order PIM 2 x 43dBm	dBc	-153	-153	-153	-153	-153
Maximum CW Power per Port	Watt	300	300	300	300	300
Gain Over All Tilts	dBi	15.1 +/- .5	15.4 +/- .5	15.8 +/- .5	15.5 +/- .5	16.0 +/- 1.0
Cross-Pol over Sector	dB	9	8	6	1	1
F/B at +/-30 Total Power	dB	25	25	26	22	22
Upper Side Lobe Peak to +20	dB	16	16	17	15	14

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	+/- 45

MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	1219 x 609 x 215 (48 x 24 x 8.5)
Weight (Antenna Only)	kg (lb)	27 (60)
Weight (Mounting Hardware only)	kg (lb)	4.5 (10)
Packing size- HxWxD	mm (in)	1420 x 714 x 265 (55.9 x 28.1 x 10.4)
Shipping Weight	kg (lb)	37 (82)
Connector type		8 x 4.3-10 female at bottom
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	240 (150)
Wind Load @Rated Wind Front	N	714
Wind Load @Rated Wind Side	N	217
Wind Load @Rated Wind Rear	N	772

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ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVAALL12_43-U-NA20	ACU-A20-SR Field Replace RET included (2)	APM40-2 Beam tilt kit (included) APM40-E10 Interface (included)	60-120mm	37 Kg (82 lbs)

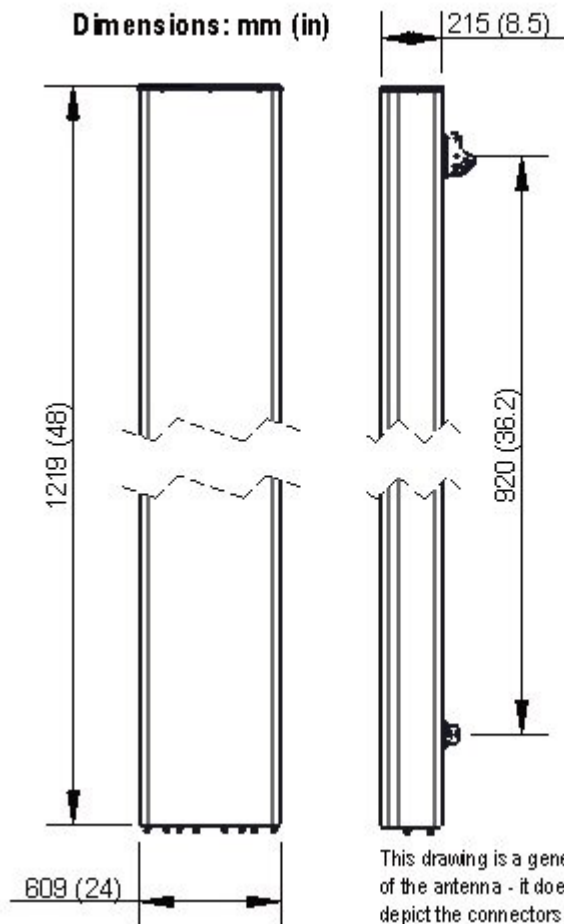
Port	Array	Frequency	RET	AISG RET UID
1	R1	617-960	R1	RFxxxxxxxxxx-2R1
2		617-960		
3	R2	617-960		
4		617-960		
5	Y1	1695-2690	Y1	RFxxxxxxxxxx-2Y1
6		1695-2690		
7	Y2	1695-2690		
8		1695-2690		

RET Information		
Frequency	617-960	1695-2690
Model	ACU-A20-SR	ACU-A20-SR
Location	Semi-internal	Semi-Internal
Field Replaceable	Yes	Yes
Quantity	1	1
RET ID	R1	Y1

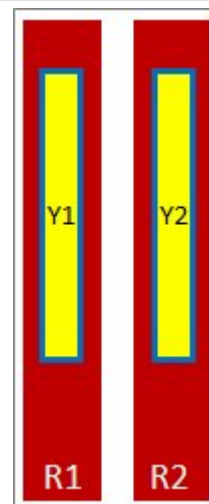


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This drawing is a general representation of the antenna - it does NOT accurately depict the connectors or radome shape.



External Document Links
[APM40_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](#)