



APXVAALL18N_43-U-NA20

8-Ports, X-Pol, Panel Antenna, 1.8m, 2x 617-894/2x 1695-2690 MHz 65deg, Integrated RET

FEATURES / BENEFITS

Narrow 499 mm radome for reduced windloading and easier zoning

- MIMO 4x4 in low-band and mid-band
- Integrated and field replaceable 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 (617-894 MHz) Ports 1-4		
Frequency Band	MHz	617-698	698-806	806-894
Gain	dBi	14.3	15.1	15.5
Azimuth Beamwidth 3dB	Deg	69 +/-6	63 +/-6	57 +/-7
Elevation Beamwidth 3dB	Deg	14.6 +/--.7	13.2 +/--.1	11.6 +/--.7
Cross-Pol at Boresight	dB	17	19	17
F/B at 180 Copolar	dB	29	27	31
Electrical Downtilt	Deg	2 to 12	2 to 12	2 to 12
First Upper Side Lobe	dB	18	20	20
VSWR	-	1.5:1	1.5:1	1.5:1
Return Loss	dB	-14	-14	-14
Cross Polar Isolation	dB	25	25	25
3rd Order PIM 2 x 43dBm	dBc	-153	-153	-153
Maximum CW Power per Port	Watt	300	300	300
Gain Over All Tilts	dBi	13.4 +/- .9	14.7 +/- .4	14.9 +/- .6
Cross-Pol over Sector	dB	7	7	5
F/B at +/-30 Total Power	dB	20	20	22
Upper Side Lobe Peak to +20	dB	20	21	19

**ELECTRICAL SPECIFICATIONS**

Electrical Specification Header		Mid Band Arrays (1695-2690 MHz) Ports 5-8			
Frequency Band	MHz	1695-1880	1850-1990	1920-2200	2200-2690
Gain	dBi	17.9	17.9	18.7	18.6
Azimuth Beamwidth 3dB	Deg	69 +/-7	62 +/-9	58 +/-4	54 +/-7
Elevation Beamwidth 3dB	Deg	5.7 +/- .3	5.3 +/- .3	4.8 +/- .5	4.2 +/- .4
Cross-Pol at Boresight	dB	17	20	15	20
F/B at 180 Copolar	dB	29	28	30	29
Electrical Downtilt	Deg	2 to 12	2 to 12	2 to 12	2 to 12
First Upper Side Lobe	dB	18	19	17	18
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	250	250	250	250
Gain Over All Tilts	dBi	17.0 +/- .9	17.4 +/- .5	18.0 +/- .7	17.9 +/- .7
Cross-Pol over Sector	dB	8	9	7	4
F/B at +/-30 Total Power	dB	23	23	23	23
Upper Side Lobe Peak to +20	dB	13	14	14	14

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	+/- 45

MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	1823 x 499 x 215 (71.8 x 19.7 x 8.5)
Weight (Antenna Only)	kg (lb)	28.3 (62.4)
Weight (Mounting Hardware only)	kg (lb)	8.8 (19.4)
Packing size- HxWxD	mm (in)	2030 x 560 x 285 (79.9 x 22 x 11.2)
Shipping Weight	kg (lb)	37 (81.6)
Connector type		8 x 4.3-10 female at bottom
Radome Material / Color		ASA / 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	609
Wind Load @Rated Wind Side	N	572
Wind Load @Rated Wind Rear	N	707

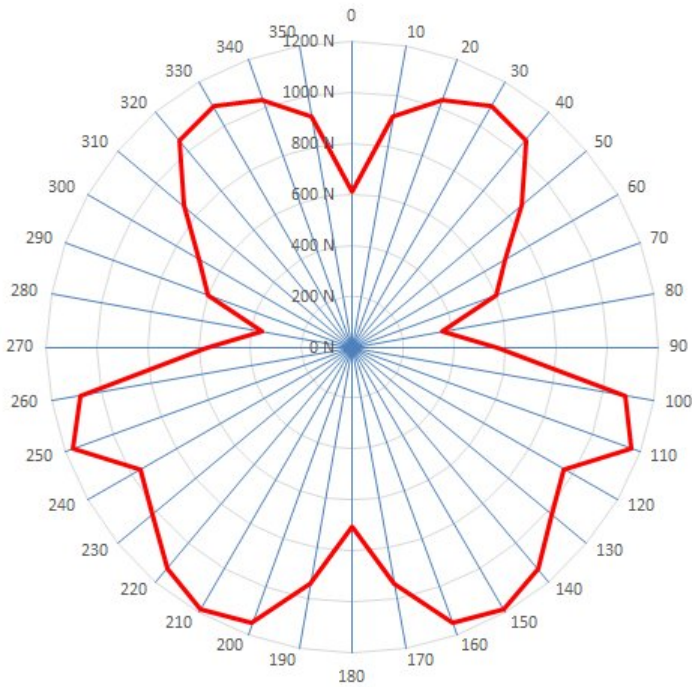
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVAALL18N_43-U-NA20	ACU-A20-SR Field Replace RET included (2)	APM40-5E Beam tilt kit & APM40-E10T (included)	60-120mm	37 kg (81.6 lb)



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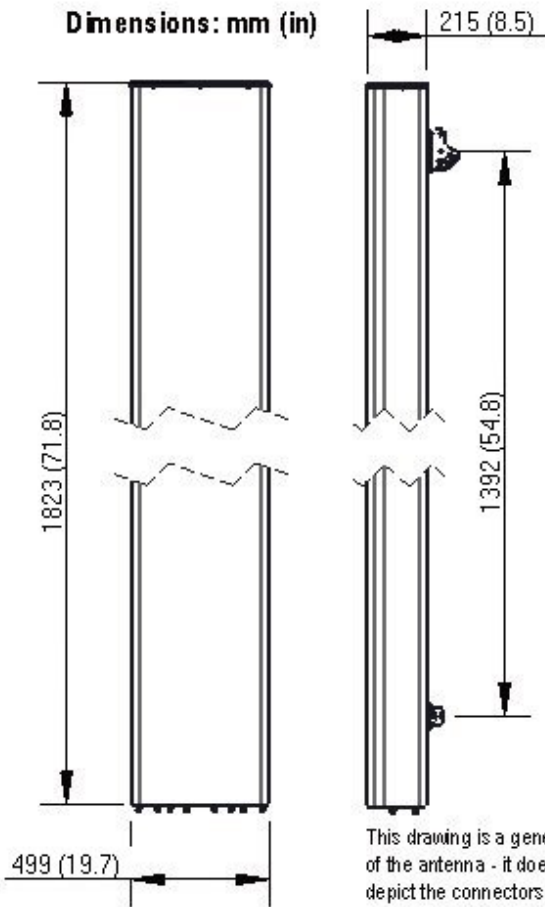


Rated Wind Speed, Km/h	150
Wind Load Front, Resultant, N	609
Wind Load Side, Resultant, N	572
Wind Load Rear, Resultant, N	707
Wind Load Maximum, Resultant, N	1186
Wind Load Maximum, Drag Force, N	1049

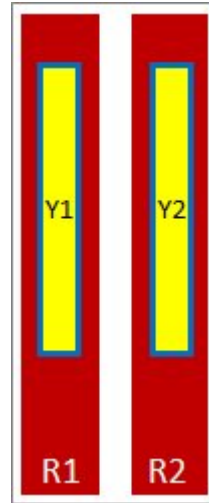


Port	Array	Frequency	RET	AISG RET UID
1	R1	617-894	R1	RFxxxxxxxx-2R1
2		617-894		
3	R2	617-894		
4		617-894		
5	Y1	1695-2690	Y1	RFxxxxxxxx-2Y1
6		1695-2690		
7	Y2	1695-2690		
8		1695-2690		

RET Information		
Frequency	617-894	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



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](#)