PRODUCT DATASHEET

APXVAALL12N_43-U-NA20

8-Ports, X-Pol, Panel Antenna, 1.2m, 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	13.0	13.9	14.3
Azimuth Beamwidth 3dB	Deg	70 +/- 8	63 +/- 6	57 +/-6
Elevation Beamwidth 3dB	Deg	19.1 +/- 0.8	17.4 +/- 1.3	15.2 +/- 1.0
Cross-Pol at Boresight	dB	20	21	17
F/B at 180 Copolar	dB	26	24	29
Electrical Downtilt	Deg	2 to 18	2 to 18	2 to 18
First Upper Side Lobe	dB	14	15	16
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	12.4 +/- .6	13.4 +/- .5	13.7 +/- .6
Cross-Pol Over Sector	dB	8	7	6
F/B at +/-30 Total Power	dB	18	20	21
Upper Side Lobe Peak to +20	dB	22	22	17

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	16.2	16.6	17.1	17.4
Azimuth Beamwidth 3dB	Deg	69 +/- 8	64 +/- 8	61 +/- 5	57+/- 7
Elevation Beamwidth 3dB	Deg	9.5 +/- 0.9	8.7 +/- 0.5	7.7 +/- 0.7	6.5 +/- 0.8
Cross-Pol at Boresight	dB	15	21	17	19
F/B at 180 Copolar	dB	29	28	29	27
Electrical Downtilt	Deg	2 to 12	2 to 12	2 to 12	2 to 12
First Upper Side Lobe	dB	19	19	16	17
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	15.2 +/- 1.0	15.9 +/- 0.7	16.3 +/- 0.8	16.7 +/- 0.7
Cross-Pol over Sector	dB	5	6	5	3
F/B at +/-30 Total Power	dB	23	22	23	21
Upper Side Lobe Peak to +20	dB	16	17	16	14

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	+/- 45

MECHANICAL SPECIFICATIONS

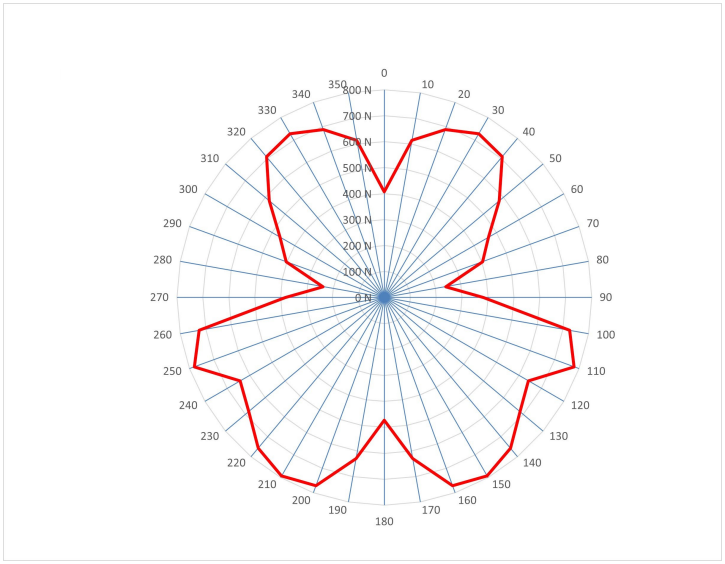
Dimensions - H x W x D	mm (in)	1219 x 499 x 215 (48 x 19.7 x 8.5)
Weight (Antenna Only)	kg (lb)	22 (49)
Weight (Mounting Hardware only)	kg (lb)	4.5 (10)
Packing size- HxWxD	mm (in)	1430 x 560 x 265 (56.3 x 22 x 10.4)
Shipping Weight	kg (lb)	30 (66)
Connector type		8 x 4.3-10 female at bottom
Radome Material / 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	407
Wind Load @Rated Wind Side	N	382
Wind Load @Rated Wind Rear	N	473

ORDERING INFORMATION

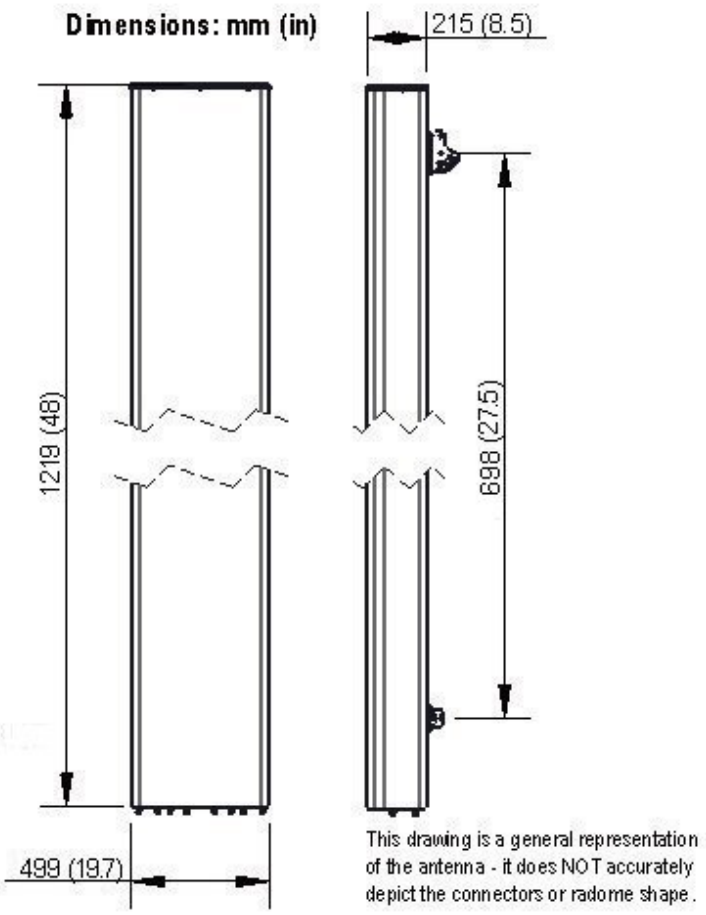
Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVAALL12N_43-U-NA20	ACU-A20-SR Field Replace RET included (2)	APM40-2 Beam tilt kit & APM40-E10 (included)	60-120mm	30 Kg (66 lb)

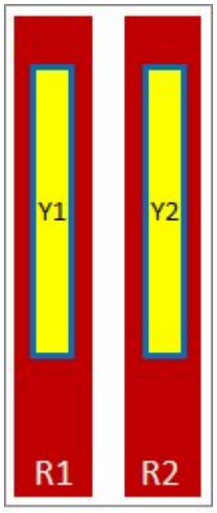


Rated Wind Speed, Km/h	150
Windload Frontal, Resultant, N	407
Windload Lateral , Resultant, N	382
Windload Rear, Resultant, N	473
Windload Maximum, Resultant, N	793
Windload Maximum, Drag Force, N	701

Port	Array	Frequency	RET	AISG RET UID
1	R1	617-894	R1	RFxxxxxxxxxx-2R1
2		617-894		
3	R2	617-894		
4		617-894		
5	Y1	1695-2690	Y1	RFxxxxxxxxxx-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





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