



FEATURES / BENEFITS

Narrow 499 mm radome for reduced windloading and easier zoning

- MIMO 4x4 in low-band and mid-band x2(L/LC & RC/R)
- Integrated and field replaceable mRET
- ACU model number: ACU-X20-N3,
- Compliant with AISG V2.0 and 3GPP
- 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	14.8	15.4	14.9
Azimuth Beamwidth 3dB	Deg	71 +/- 8	66 +/- 8	67 +/- 8
Elevation Beamwidth 3dB	Deg	14.1 +/- 1	12.9 +/- 1	11.4 +/- 1
Cross-Pol at Boresight	dB	17	19	18
F/B at 180 Copolar	dB	30	28	29
Electrical Downtilt	Deg	2 to 12	2 to 12	2 to 12
First Upper Side Lobe	dB	19	21	22
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	400	400	400
Gain Over All Tilts	dBi	14.1 +/- 0.7	14.6 +/- 0.8	14.4 +/- 0.5
Cross-Pol over Sector	dB	9	6	3
F/B at +/-30 Total Power	dB	17	19	20
Upper Side Lobe Peak to +20	dB	21	22	21



ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Mid Band Arrays (1695-2690 MHz) Ports 5-12				
Frequency Band	MHz	1695-1880	1850-1990	1920-2200	2200-2500	2500-2690
Gain	dBi	17.7	17.8	18.6	18.6	18.3
Azimuth Beamwidth 3dB	Deg	69 +/- 9	67 +/- 6	60 +/- 8	53 +/- 8	55 +/- 5
Elevation Beamwidth 3dB	Deg	5.8 +/- 0.4	5.4 +/- 0.3	4.9 +/- 0.4	4.4 +/- 0.3	4.2 +/- 0.3
Cross-Pol at Boresight	dB	19	18	17	18	16
F/B at 180 Copolar	dB	28	28	28	29	30
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	19	19	20
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	16.8 +/- 0.9	17.4 +/- 0.4	17.9 +/- 0.7	18.0 +/- 0.6	17.6 +/- 0.7
Cross-Pol over Sector	dB	7	5	2	1	2
F/B at +/-30 Total Power	dB	22	22	22	22	22
Upper Side Lobe Peak to +20	dB	15	16	16	15	11

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)	31 (69)
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)	46 (101)
Connector type		12 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

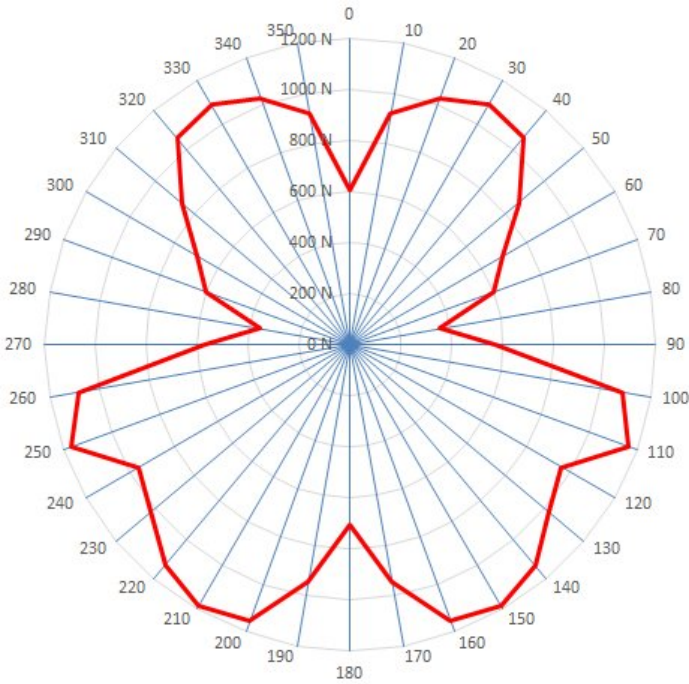
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVAA4L18N_43-U-I20	ACU-X20-N3 Field Replace RET included	APM40-5E Beam tilt kit & APM40-E10T (included)	60-120mm	46 kg (101 lb)



APXVAA4L18N_43-U-I20

12-Ports, X-Pol, Panel Antenna, 1.8m, 2x 617-894/ 4x 1695-2690 MHz 65deg, Integrated RET



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	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		
9	Y3	1695-2690	Y2	RFxxxxxxxxxx-2Y2
10		1695-2690		
11	Y4	1695-2690		
12		1695-2690		

RET Information		
Frequency	617-894	1695-2690
Model	ACU-X20-N3	
Location	Semi-internal	
Field Replaceable	Yes	
Quantity	1	
RET ID	R1	Y1 & Y2



