



FEATURES / BENEFITS

- 4 ports / 2 cross pol systems in low band (690-960MHz)
- 4 ports / 2 cross pol systems in high band (1695-2690MHz)
- Supports 4x4 MIMO in low band and high band
- Integrated and field replaceable SRET
- ACU HW Version -HRLS170901H1.00
- Compliant with AISG V2.0 and 3GPP
- Optimized radome for low windload.



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	16.3	16.1
Gain Over all Tilts	dBi	15.4 +/- 0.6	15.8 +/- 0.5	15.6 +/- 0.5
Azimuth Beamwidth 3dB	Deg	63.8 +/- 5.9	62.3 +/- 6.6	63.6 +/- 8.8
Elevation Beamwidth 3dB	Deg	10.6 +/- 0.5	10.1 +/- 0.6	9.9 +/- 0.5
Cross Polar Discrimination at Boresight	dB	23	27.6	24.7
Cross Polar Discrimination over Sector	dB	12.5	10.1	8.6
F/B at +/-30deg Total Power	dB	18.2	21.1	21.2
First Upper Side Lobe Suppression	dB	15.1	15.2	14.7
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		



ELECTRICAL SPECIFICATIONS

Electrical Specification Header		LOW BAND ARRAY (690-960 MHz) [R2]		
Frequency Band	MHz	690 - 806	790 - 894	880 - 960
Gain Typical	dBi	15.8	16.1	16
Gain Over all Tilts	dBi	15.3 +/- 0.5	15.7 +/- 0.4	15.6 +/- 0.4
Azimuth Beamwidth 3dB	Deg	64.8 +/- 7.2	62.2 +/- 5.1	63.3 +/- 7.3
Elevation Beamwidth 3dB	Deg	10.5 +/- 0.5	10 +/- 0.5	9.7 +/- 0.5
Cross Polar Discrimination at Boresight	dB	22.8	27.6	25.8
Cross Polar Discrimination over Sector	dB	11.4	10.9	8.6
F/B at +/-30deg Total Power	dB	18.5	21.3	20.9
First Upper Side Lobe Suppression	dB	15.9	15.3	16.1
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		

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	17	17.6	17.9	17.6	17.7
Gain Over all Tilts	dBi	16.4 +/- 0.6	17.2 +/- 0.4	17.3 +/- 0.6	17 +/- 0.6	17.2 +/- 0.5
Azimuth Beamwidth 3dB	Deg	67.4 +/- 4.2	62.8 +/- 4.1	61.8 +/- 4.8	60.7 +/- 7.3	60.6 +/- 5.6
Elevation Beamwidth 3dB	Deg	6.5 +/- 0.4	6.1 +/- 0.2	5.8 +/- 0.4	5.2 +/- 0.3	4.8 +/- 0.3
Cross Polar Discrimination at Boresight	dB	16.9	26.5	22.1	18.8	21.4
Cross Polar Discrimination over Sector	dB	2.9	6	4.4	3.1	0.7
F/B at +/-30deg Total Power	dB	24.6	23.5	24.2	25.3	25.8
First Upper Side Lobe Suppression	dB	15.4	15.6	15.1	17.1	18.5
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	250				



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	16.9	17.4	17.6	17.4	17.5
Gain Over all Tilts	dBi	16.2 +/- 0.7	16.9 +/- 0.5	17.1 +/- 0.5	16.7 +/- 0.7	17 +/- 0.5
Azimuth Beamwidth 3dB	Deg	67.3 +/- 5.1	63.6 +/- 5.2	62.1 +/- 3.9	61.1 +/- 8.4	60.2 +/- 6.6
Elevation Beamwidth 3dB	Deg	6.5 +/- 0.3	6 +/- 0.2	5.7 +/- 0.4	5.2 +/- 0.3	4.8 +/- 0.3
Cross Polar Discrimination at Boresight	dB	18	22.9	20.8	16.6	21.2
Cross Polar Discrimination over Sector	dB	3	6.5	4.7	2.5	0.6
F/B at +/-30deg Total Power	dB	26.6	26.9	26.1	25.4	25.3
First Upper Side Lobe Suppression	dB	14.6	15.1	15	16.6	20.2
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	250				

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 (57.3)
Weight (Mounting Hardware only)	kg (lb)	5.5 (12.1)
Packing size- HxWxD	mm (in)	2198 x 544 x 315 (86.5 x 21.4 x 12.4)
Shipping Weight	kg (lb)	37.3 (82.2)
Connector type		8 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 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)

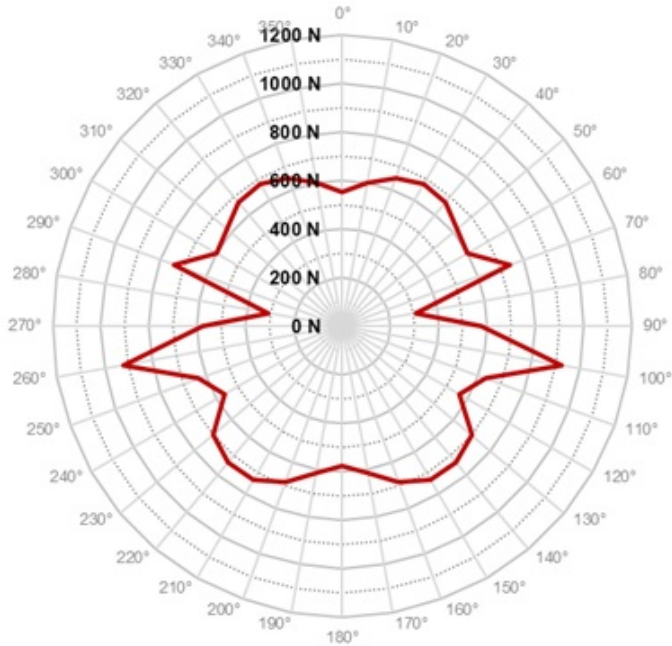


APXVBLL20H2_43-C-I20

8-ports, X-Pol, Panel Antenna, 2.0m, 2x 690-960/2x 1695-2690MHz, 65deg, Integrated RET

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVBLL20H2_43-C-I20	Internal RET(ACU-I20-H12C)	APM50-H2	50-125mm	37.3 Kg
APXVBLL20H2_43-C-I20S (Material Code: 50016377)	Internal RET(ACU-X20H) Dynamic Site Sharing mode	APM50-H2	50-125mm	37.3 Kg
APXVBLL20H2_43-C-I20S (Material Code: 50016464)	Internal RET(ACU-X20H) Static Site Sharing mode	APM50-H2	50-125mm	37.3 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	733



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

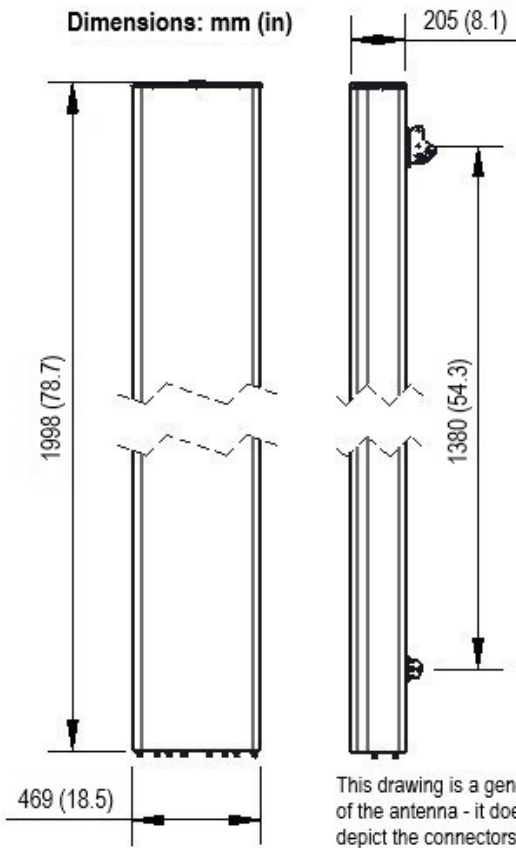
NOTE: RET motors will tilt one at a time, not simultaneously



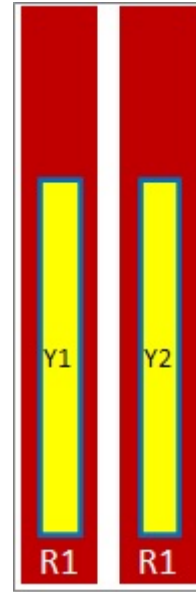


APXVBBLL20H2_43-C-I20

8-ports, X-Pol, Panel Antenna, 2.0m, 2x 690-960/2x 1695-2690MHz, 65deg, Integrated RET



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



External Document Links

[APM50_Series_Installation_Instructions](#)

Notes

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

• Radiating patterns: [Request pattern files](#)