

APXVLL19P_43-C-A20

Dual Slant Polarized Dual Band (4 Port) Antenna, x2 1695-2690MHz, 65deg, 1.9m (6.5ft), RET, 0-12°

A combination of two X-Polarized antennas in a single radome, the RFS Quad-Pol antennas are designed for applications requiring a minimum number of antennas at a cell site and reduced tower loading. They offer the rugged construction of our new series of high band antennas that feature both high RF performance and energy efficiency. They are ideal for 1800 & 2100 & 2600 networks where high gain is required. These antennas are especially well suited for MIMO applications.

FEATURES / BENEFITS

- Ultra-broadband design
- Best-in-the-industry gain values
- Two x-polarized broadband panels in a single narrow radome - reduced tower loading & lower profile
- Variable electrical downtilt - provides enhanced precision in controlling intercell interference
- Single ACU-A20-S RET drives both arrays
- High suppression of all upper sidelobes
- High front-to-back ratio

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

Electrical Specification Header		High Band Arrays (1695-2690 MHz) Ports 1-4				
Frequency Band	MHz	1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Gain	dBi	18.3	18.7	19.4	19.2	19.3
Azimuth Beamwidth 3dB	Deg	66 +/-4	65+/-4	65+/-4	63+/-5	59 +/-3
Elevation Beamwidth 3dB	Deg	5.9 +/- .7	5.3 +/- .6	4.9 +/-0.4	4.2 +/-0.3	4.0 +/-0.1
Cross-Pol at Boresight	dB	29	28	23	26	23
F/B at 180 Copolar	dB	34	35	35	33	33
Electrical Downtilt	Deg	2 to 12	2 to 12	2 to 12	2 to 12	2 to 12
First Upper Side Lobe	dB	17	18	22	23	18
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	28	28	28	28	28
3rd Order PIM 2 x 46dBm	dBc	-153	-153	-153	-153	-153
Maximum CW Power per Port	Watt	300	300	300	300	300
Gain Over All Tilts	dBi	17.7 +/-0.6	18.2 +/-0.5	18.9 +/-0.5	18.7 +/-0.5	18.9 +/-0.4
Cross-Pol over Sector	dB	13	12	10	11	12
F/B at +/-30 total Power	dB	26	28	27	26	27
Upper Side Lobe Peak to +20	dB	17	18	20	20	18

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	+/- 45

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MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	1925 x 288 x 118 (75.8 x 11.3 x 4.6)
Weight (Antenna Only)	kg (lb)	19 (42)
Weight (Mounting Hardware only)	kg (lb)	3.8 (8.4)
Packing size- HxWxD	mm (in)	2275 x 370 x 225 (89.6 x 14.6 x 8.9)
Shipping Weight	kg (lb)	30 (66)
Connector type		4 x 4.3-10 female/bottom + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		ASA / Light Grey RAL7035

TESTING AND ENVIRONMENTAL

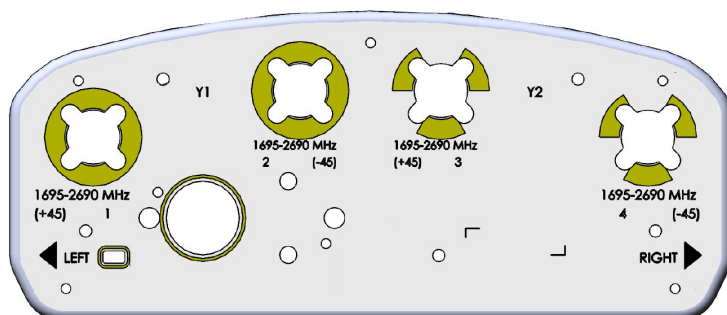
Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		Direct Ground
Survival/Rated Wind Velocity	km/h	241 (160)
Wind Load @Rated Wind Front	N	1000
Wind Load @Rated Wind Side	N	420
Wind Load @Rated Wind Rear	N	1100

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVLL19P_43-C-A20	x1 ACU-A20-S External RET included	APM40-2 Beam tilt kit & APM40-E10 (included)	50-120mm	30 Kg

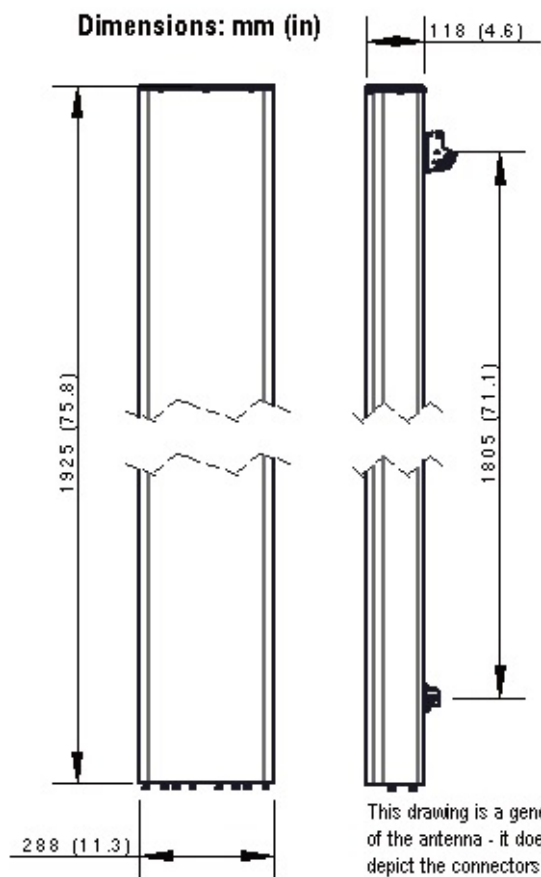
Port	Array	Frequency	RET	AISG RET UID
1	Y1	1695-2690	Y1	RFxxxxxxxxxx-2Y1
2		1695-2690		
3	Y2	1695-2690		
4		1695-2690		

RET Information	
Frequency	1695-2690
Model	ACU-A20-S
Location	External
Field Replaceable	Yes
Quantity	1
RET ID	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](#)