PRODUCT DATASHEET

APXVLL13P_43-C-A20

Dual Slant Polarized Dual Band (4 Port) Antenna, x2 1695-2690MHz, 65deg, 1.3m (4.5ft), 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 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	17.9	17.4	17.6	18.1	18.3
Azimuth Beamwidth 3dB	Deg	67+/-3	66+/-3	66+/-4	66+/-5	61+/-2
Elevation Beamwidth 3dB	Deg	7.8+/-0.5	7.3+/-0.3	7.1+/-0.4	6.8+/-0.4	5.7+/-0.5
Cross-Pol at Boresite	dB	25	30	32	25	22
F/B at 180 Copolar	dB	32	32	32	33	35
Electrical Downtilt	Deg	0 to 12	0 to 12	0 to 12	0 to 12	0 to 12
First Upper Side Lobe	dB	16	20	19	18	14
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 43dBm	dBc	-153	-153	-153	-153	-153
Maximum CW Power per Port	Watt	300	300	300	300	300
Gain Over All Tilts	dBi	17.4+/-0.5	16.9+/-0.5	17.1+/-0.5	17.6+/-0.5	17.8+/-0.5
Cross-Pol over Sector	dB	11	12	11	11	12
F/B at +/-30 Total Power	dB	26	26	26	27	27
Upper Side Lobe Peak to +20	dB	16	19	19	18	14

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	+/- 45

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MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	1390 x 288 x 118 (54.7 x 11.3 x 4.6)
Weight (Antenna Only)	kg (lb)	13 (28.5)
Weight (Mounting Hardware only)	kg (lb)	3.4 (7.5)
Packing size- HxWxD	mm (in)	1585 x 380 x 260 (62.4 x 15 x 10.2)
Shipping Weight	kg (lb)	20.8 (45.7)
Connector type		4 x 4.3-10 female at bottom
Radome Material / Color		ASA / Light Grey RAL7035

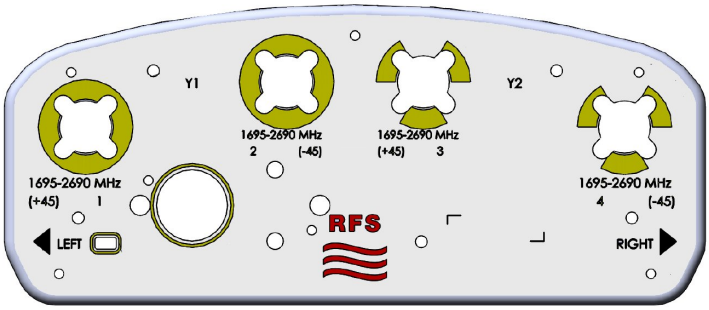
TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		Direct Ground
Survival/Rated Wind Velocity	km/h	240 (160)
Wind Load @Rated Wind Front	N	456
Wind Load @Rated Wind Side	N	187
Wind Load @Rated Wind Rear	N	492

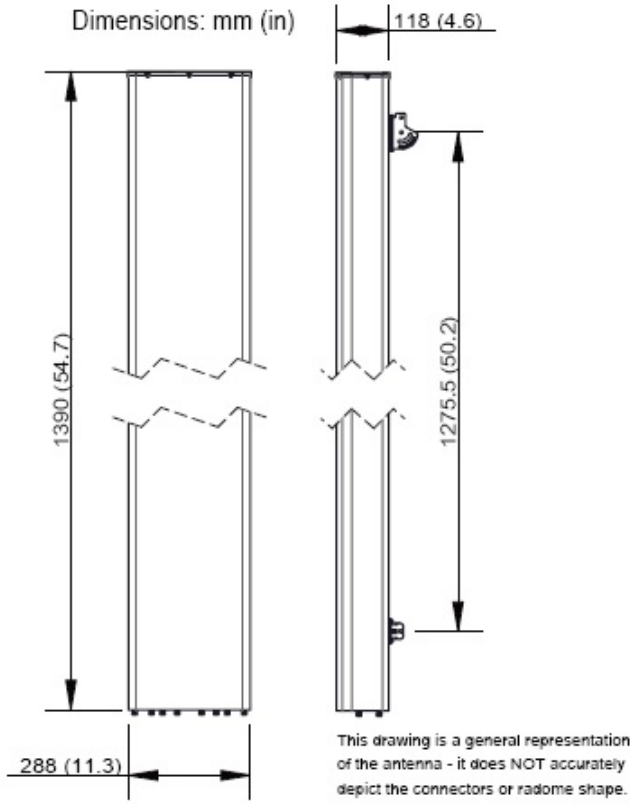
ORDERING INFORMATION

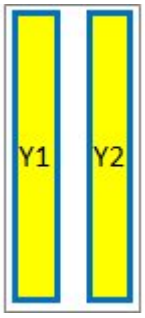
Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVLL13P_43-C-A20	x1 ACU-A20-S External RET included	APM40-2	50-120mm	20.8 Kg

Port	Array	Frequency	RET	AISG RET UID
1	Y1	1695-2690	Y1	RFxxxxxxxxxxx-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





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