



Dual Slant Polarized Quad Band (8 Port) Antenna, 617-894/617-894/1695-2690/1695-2690MHz, 65deg, 16.2/16.1/18.9/18.7dBi, 2.4m (8ft), VET, RET, 2-12°/2-12°/2-12°/2-12°

FEATURES / BENEFITS

This antenna provides a 8 Port multi-band flexible platform for advanced use for flexible use in deployment scenarios for encompassing 600, 700, 800, AWS, PCS & BRS applications.

- ➔ 24 Inch Width For Easier Zoning
- ➔ Field Replaceable (Integrated) AISG RET platform for reduced environmental exposure and long lasting quality
- ➔ Superior elevation pattern performance across the entire electrical down tilt range
- ➔ Includes three AISG RET motors - Includes 0.5m AISG jumper for optional daisy chain of two high band RET motors for one single AISG point of high band tilt control.
- ➔ Low band arrays driven by a single RET motor



Technical Features

LOW BAND LEFT ARRAY (617-894 MHZ) [R1]

Frequency Band	MHz	617-698	698-806	806-894
Gain Typical	dBi	15.5	16.1	16.2
Gain Over All Tilts	dBi	15.2 +/- .3	15.6 +/- .5	15.8 +/- .4
Horizontal Beamwidth @3dB	Deg	65 +/-3	64 +/-2	62 +/-3
Vertical Beamwidth @3dB	Deg	9.9 +/- .7	8.6 +/- .7	7.6 +/- .4
Electrical Downtilt Range	Deg	2 to 12		
Upper Side Lobe Suppression Peak to +20	dB	15	14	14
Front-to-Back, at +/-30°, Copolar	dB	25	25	29
Cross Polar Discrimination (XPD) @ Boresight	dB	18	18	17
Cross Polar Discrimination (XPD) @ +/-60	dB	5	5	6
3rd Order PIM 2 x 43dBm	dBc	-153		
VSWR	-	1.5:1		
Cross Polar Isolation	dB	25		
Maximum Effective Power per Port	Watt	400		



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LOW BAND RIGHT ARRAY (617-894 MHz) [R2]

Frequency Band	MHz	617-698	698-806	806-894
Gain Typical	dBi	15.4	15.8	16.1
Gain Over All Tilts	dBi	15.1 +/- .3	15.3 +/- .5	15.6 +/- .5
Horizontal Beamwidth @3dB	Deg	65 +/- 2	65 +/- 2	62 +/- 4
Vertical Beamwidth @3dB	Deg	9.9 +/- .6	8.6 +/- .8	7.6 +/- .4
Electrical Downtilt Range	Deg	2 to 12		
Upper Side Lobe Suppression Peak to +20	dB	16	14	13
Front-to-Back, at +/-30°, Copolar	dB	25	25	27
Cross Polar Discrimination (XPD) @ Boresight	dB	17	17	17
Cross Polar Discrimination (XPD) @ +/-60	dB	4	5	7
3rd Order PIM 2 x 43dBm	dBc	-153		
VSWR	-	1.5:1		
Cross Polar Isolation	dB	25		
Maximum Effective Power per Port	Watt	400		

HIGH BAND LEFT ARRAY (1695-2690 MHz) [Y1]

Frequency Band	MHz	1695-1880	1850-1990	1920-2200	2200-2490	2490-2690
Gain Typical	dBi	17.7	18.0	18.9	18.8	18.4
Gain Over All Tilts	dBi	17.1 +/- .6	17.6 +/- .4	18.1 +/- .8	18.2 +/- .6	17.8 +/- .6
Horizontal Beamwidth @3dB	Deg	66 +/- 5	65 +/- 4	66 +/- 6	63 +/- 6	60 +/- 9
Vertical Beamwidth @3dB	Deg	5.6 +/- .5	5.2 +/- .3	4.7 +/- .6	4.1 +/- .3	4.1 +/- .2
Electrical Downtilt Range	Deg	2 to 12				
Upper Side Lobe Suppression Peak to +20	dB	14	14	14	13	12
Front-to-Back, at +/-30°, Copolar	dB	27	26	26	24	22
Cross Polar Discrimination (XPD) @ Boresight	dB	24	19	14	18	20
Cross Polar Discrimination (XPD) @ +/-60	dB	9	9	8	3	1
3rd Order PIM 2 x 43dBm	dBc	-153				
VSWR	-	1.5:1				
Cross Polar Isolation	dB	25				
Maximum Effective Power per Port	Watt	300				



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HIGH BAND RIGHT ARRAY (1695-2690 MHZ) [Y2]

Frequency Band	MHz	1695-1880	1850-1990	1920-2200	2200-2490	2490-2690
Gain Typical	dBi	17.7	18.1	18.7	18.5	18.0
Gain Over All Tilts	dBi	17.1 +/- .6	17.6 +/- .5	18 +/- .7	17.9 +/- .6	17.4 +/- .6
Horizontal Beamwidth @3dB	Deg	67 +/- 5	64 +/- 5	65 +/- 5	62 +/- 7	60 +/- 9
Vertical Beamwidth @3dB	Deg	5.7 +/- .5	5.2 +/- .3	4.7 +/- .6	4.2 +/- .3	4.2 +/- .3
Electrical Downtilt Range	Deg	2 to 12				
Upper Side Lobe Suppression Peak to +20	dB	15	15	14	14	13
Front-to-Back, at +/-30°, Copolar	dB	27	28	26	23	21
Cross Polar Discrimination (XPD) @ Boresight	dB	21	17	14	16	18
Cross Polar Discrimination (XPD) @ +/-60	dB	10	8	7	4	1
3rd Order PIM 2 x 43dBm	dBc	-153				
VSWR	-	1.5:1				
Cross Polar Isolation	dB	25				
Maximum Effective Power per Port	Watt	300				

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50.0
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

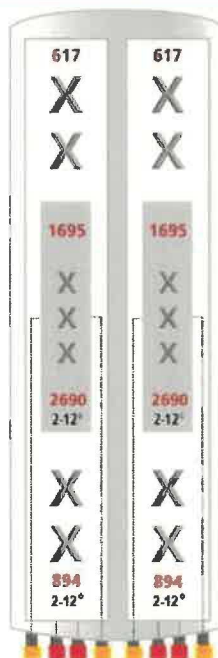
Dimensions - H x W x D	mm (in)	2436 x 609 x 215 (95.9 x 24 x 8.5)
Weight (Antenna Only)	kg (lb)	55.7 (122.8)
Weight (Mounting Hardware only)	kg (lb)	12.3 (27.1)
Packing size- HxWxD	mm (in)	2565 x 735 x 390 (101 x 28.9 x 15.4)
Shipping Weight	kg (lb)	77.9 (171.7)
Connector type	8 x 4.3-10 female at bottom + 6 AISG connectors (3 male, 3 female)	
Adjustment mechanism	Integrated RET solution AISG compliant (Field Replaceable) + Manual Override + External Tilt Indicator	
Radome Material / Color	Fiber Glass / Light Grey RAL7035	

TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Grounding type	DC Grounded	
Lightning protection	IEC 61000-4-5	
Survival/Rated Wind Velocity	km/h	240 (150)
Wind Load @Rated Wind Front	N	1428.0
Wind Load @Rated Wind Side	N	434.0
Wind Load @Rated Wind Rear	N	1544.0
Environmental	ETSI 300-019-2-4 Class 4.1E	



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ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Antenna Weight
APXVAALL24_43-U-NA20	Field Replace RET included (3)	APM40-5E Beam tilt kit (included)	60-120mm	68 Kg

External Document Links

APM40_Series_Installation_Instructions
Manual Overdrive Instructions
Global RFS Website

Notes

- ⊕ All electrical parameters are compliant with BASTA NGMN 11.1 requirements.
- ⊕ For additional mounting information please click "External Document Links".

External Link Reference

Global RFS Website <http://www.rfsworld.com>



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