

PRODUCT DATASHEET

APXVAA24_43-U-A20

Dual Slant Polarized Dual Band (4 Port) Antenna, 617-746MHz, 65 deg, 15.6dBi, 2.4m(8ft), VET, RET, 0-11° Tilt Range



FEATURES / BENEFITS

This antenna provides a four port platform for advanced use in 600MHz and 700MHz deployment scenarios in a high quality package design built to withstand harsh environments.

- 24-Inch Width for Easier Zoning
- Field Replaceable (Integrated) AISG RET platform for reduced environmental exposure and long lasting quality.
- Superior elevation performance across the entire electrical down tilt range.
- High Gain performance for optimum site coverage, reduced power and signal integrity.
- Excellent Front-to-Back Ratio for less interference from neighboring cells.
- Manual Override feature for electrical downtilt adjustment.
- Both arrays driven by one RET



Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Antenna Performance - LEFT R1	
Frequency Range	MHz	617-698MHz	698-746MHz
Gain Over All Tilts	dBi	15.3 +/- .5	15.7 +/- .4
Horizontal Beamwidth	deg	68 +/- 2	65 +/- 3
Vertical Beamwidth	deg	10.6 +/- .5	9.8 +/- .3
Electrical Downtilt Range	deg	0-11	0-11
Upper Side Lobe Suppression Peak to +20	dB	21	21
Upper Side Lobe Suppression 0 to +20	dB	20	21
Front to Back Ratio +/-30 Copolar	dB	27	28
Cross Polar Isolation Between Ports	dB	26	26
Cross Polarization (XPD) @ Boresight	dB	27	27
Cross Polarization (XPD) @ +/-60	dB	10	7
VSWR	-	1.5:1	1.5:1
3rd Order IMP 2 x 43dBm	dBc	-	-153
Maximum Power Input	Watts	250	250

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ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Antenna Performance - RIGHT R2	
Frequency Range	MHz	617-698	698-746
Gain Over All Tilts	dBi	15.2 +/- .3	15.5 +/- .4
Horizontal Beamwidth	deg	68 +/- 2	64 +/- 3
Vertical Beamwidth	deg	10.6 +/- .5	9.8 +/- .3
Electrical Downtilt Range	deg	0-11	0-11
Upper Side Lobe Suppression Peak to +20	dB	21	23
Upper Side Lobe Suppression 0 to +20	dB	19	20
Front to Back Ratio +/-30 Copolar	dB	27	28
Cross Polar Isolation Between Ports	dB	26	26
Cross Polar Discrimination (XPD) @ Boresight	dB	24	24
Cross Polar Discrimination (XPD) @ +/- 60	dB	10	7
VSWR	-	1.5:1	1.5:1
3rd Order IMP 2 x 43dBm	dBc	-	-153
Maximum Power Input	Watts	250	250

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	2435 x 609 x 215 (95.9 x 24 x 8.5)
Weight (Antenna Only)	kg (lb)	45 (99)
Weight (Mounting Hardware only)	kg (lb)	11.5 (25.3)
Packing size- HxWxD	mm (in)	2550 x 714 x 365 (100.4 x 28.1 x 14.4)
Shipping Weight	kg (lb)	67 (147.4)
Connector type		4 x 4.3-10 Long Neck Female/Bottom + 2 AISG connectors (1 male, 1 female)
Adjustment mechanism		Integrated RET solution AISG compliant (Field Replaceable) + Manual Override + External Tilt Indicator
Mounting Hardware Material		Galvanized steel
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	241 (150)

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ORDERING INFORMATION

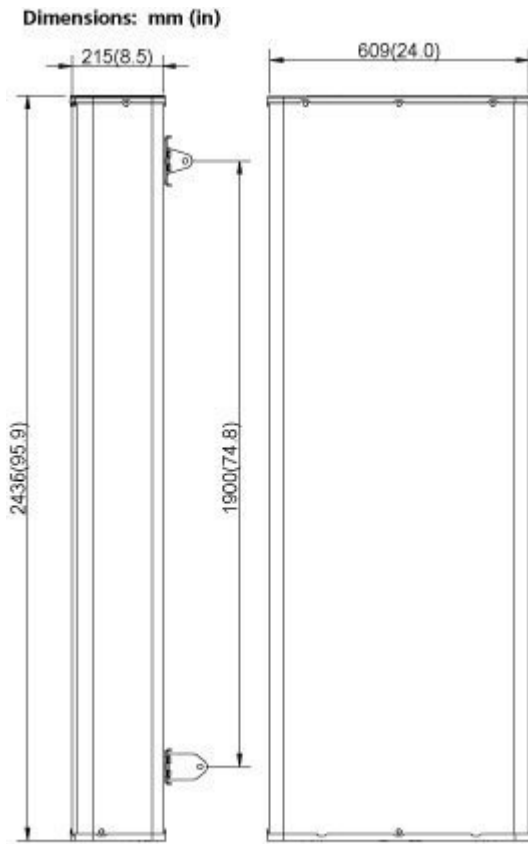
Model Number	Configuration	Mounting Hardware	Mounting pipe Diameter	Antenna Weight
APXVAA24_43-U-A20	Field Replaceable RET Included (1)	APM40-5E Beam tilt kit (Included)	60-120mm	67.0kg (147 lbs)



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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

[Installation Instructions APM40-5E](#)

Notes

All electrical parameters are compliant with BASTA NGMN 9.6 requirements.

For additional mounting information please click ""External Document Links"".

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