PRODUCT DATASHEET

APXVARR15_43-C-NA20

Dual Slant Polarized Triple Band (6 Port) Antenna, 617-746/1695-2200/1695-2200MHz,65 deg, 14.7/18.8/19.1dBi, 1.5m (5ft), VET, RET, 5-20°/2-12°/2-12° Tilt Range

FEATURES / BENEFITS

This antenna provides a 6 Port multi-band flexible platform for advanced use for flexible use in deployment scenarios for encompassing 600MHz, 700MHz, AWS & PCS applications.



- 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 point of high band AISG tilt control.

Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		LOW BAND ARRAY (617-746 MHZ) [R1]	
Frequency Range	MHz	617-698	698-746
Gain Typical	dBi	14.2	14.7
Gain Over All Tilts	dBi	13.8+/-0.4	14.3+/-0.4
Horizontal Beamwidth	deg	65.4+/-1.4	63.7+/-1.2
Vertical Beamwidth	deg	18.0 +/- 1.3	16.2+/-0.9
Electrical Down Tilt Range	deg	5 to 20	
Upper Side Lobe Suppression Peak to +20	dB	22	
Upper Side Lobe Suppression 0 to +20	dB	18.6	16.4
Front to Back Ratio +/-30 Copolar	dB	27.6	28.4
Cross Polar Isolation between ports	dB	25	
Cross Polar Discrimination (XPD) @ Boresight	dB	22.7	22.5
Cross Polar Discrimination (XPD) at +/- 60	dB	10.9	8.5
VSWR	-	1.5:1	
3rd Order IMP 2 x 43dBm	dBc	-153	
Maximum Power Input	Watts	250	

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering.

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		HIGH BAND LEFT ARRAY (1695-2200 MHZ) [B1]		
Frequency Range	MHz	1695-1880	1850-1990	1910-2200
Gain Typical	dBi	17.8	18.1	18.8
Gain Over All Tilts	dBi	17.2 +/- 0.6	17.6+/-0.5	18.1+/-0.7
Horizontal Beamwidth	deg	61.4+/-2.9	62.9+/-1.4	61.8+/-2.0
Vertical Beamwidth	deg	7.3 +/- 0.6	6.7 +/- 0.3	6.1 +/- 0.5
Electrical Down Tilt Range	deg	2 to 12		
Upper Side Lobe Suppression Peak to +20	dB	17.5	18.8	18.5
Upper Side Lobe Suppression 0 to +20	dB	17.0	16.2	13.8
Front to Back Ratio +/-30 Copolar	dB	28.6	27.7	27.8
Cross Polar Isolation between ports	dB	25		
Cross Polarization (XPD) @ Boresight	dB	27.8	26.4	18.5
Cross Polarization (XPD) @ +/-60	dB	8.1	12.5	8.5
VSWR	-	1.5:1		
3rd Order IMP 2 x 43dBm	dBc	-153		
Maximum Power Input	Watts	250		

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		HIGH BAND RIGHT ARRAY (1695-2200 MHZ) [B2]		
Frequency Range	MHz	1695-1880	1850-1990	1910-2200
Gain Typical	dBi	17.8	18.1	19.1
Gain Over All Tilts	dBi	17.3+/-0.5	17.6+/-0.5	18.3 +/- 0.8
Horizontal Beamwidth	deg	62 +/- 3.2	64.1 +/- 1.7	61.6+/-3.2
Vertical Beamwidth	deg	7.2 +/- 0.5	6.7 +/- 0.3	6.1 +/- 0.5
Electrical Down Tilt Range	deg	2 to 12		
Upper Side Lobe Suppression Peak to +20	dB	17.0	17.6	17.7
Upper Side Lobe Suppression 0 to +20	dB	16.6	15.7	14.2
Front to Back Ratio +/-30 Copolar	dB	29.3	27.7	27.6
Cross Polar Isolation between Ports	dB	25		
Cross Polarization (XPD) @ Boresight	dB	26.6	22.7	19.8
Cross Polarization (XPD) @ +/-60	dB	8.7	12.6	9.9
VSWR	-	1.5:1		
3rd Order IMP 2 x 43dBm	dBc	-153		
Maximum Power Input	Watts	250		

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ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	+/-45°

MECHANICAL SPECIFICATIONS

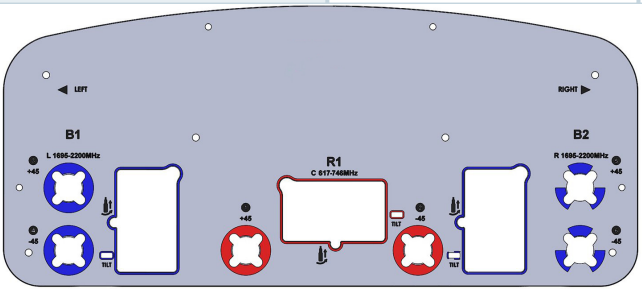
Dimensions - H x W x D	mm (in)	1524 x 500 x 216 (60 x 19.7 x 8.5)
Weight (Antenna Only)	kg (lb)	27.8 (61.1)
Weight (Mounting Hardware only)	kg (lb)	3.3 (7.3)
Packing size- HxWxD	mm (in)	1640 x 560 x 410 (64.6 x 22 x 16.21)
Shipping Weight	kg (lb)	36.8 (81.1)
Connector type		6 x 4.3-10 Long Neck Female/Bottom + 6 AISG RET connectors (3 male, 3 female)
Adjustment mechanism		Integrated RET solution AISG compliant (Field Replaceable)
Mounting Hardware Material		Diecast Aluminium and Galvanized steel
Radome Material / Color		ASA / Light Grey RAL7035
Mechanical Distance between Mointing Points	mm (in)	1300 (51.2)

TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		Direct Ground
Survival/Rated Wind Velocity	km/h	240 (150)
Wind Load @Rated Wind Front	N	483
Wind Load @Rated Wind Side	N	248
Wind Load @Rated Wind Rear	N	574

ORDERING INFORMATION

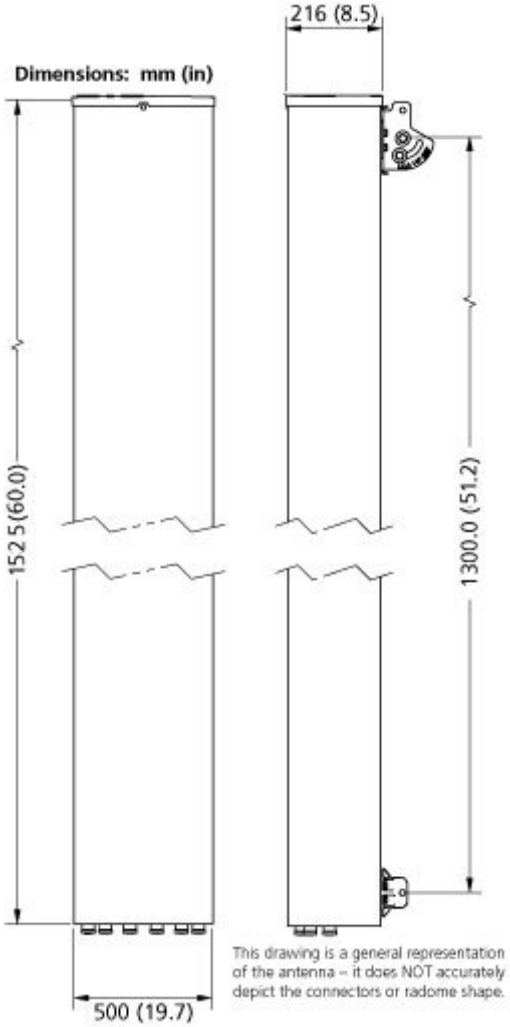
Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Weight
APXVARR15_43-C-NA20	Field Replaceable RET (3)	APM40-2	60-120mm	36.8 kg (81.1 lbs)

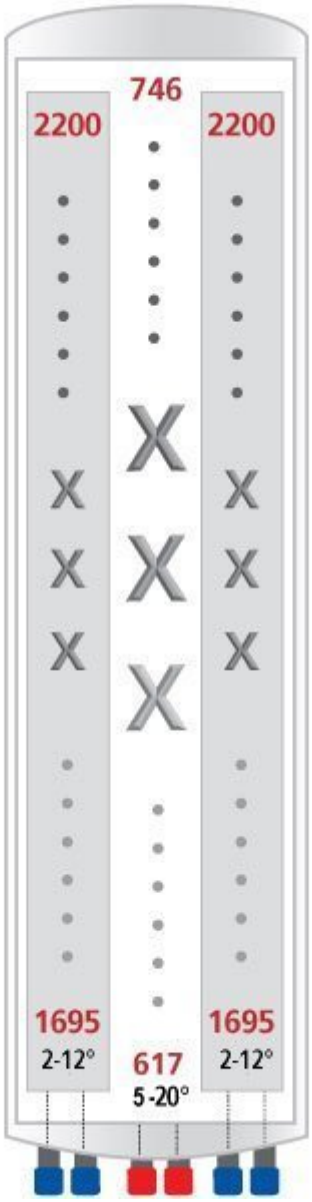


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External Document Links

APM40_Series_Installation_Instructions

Notes

All electrical parameters are compliant with BASTA NGMN 10.0 requirements.

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

This data is provisional and subject to changes.

- **Radiating patterns:** Request pattern files

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