



APXVBRRMM15EXD_43-C-I20

RF X-TREME™ 10-port Antenna, 1.5m, 1x(694-960)/2x(1695-2170)/2x(2490-2690) MHz, 65deg, 13.6/16.1/16.2/16.5/16.5dBi, 2-16/2-12/2-12/2-12/2-12deg, Internal RET

This antenna provides a 10-port multi-band flexible platform for advanced use in both low and high bands.

FEATURES / BENEFITS

- 2 ports /1 system in the low band (700/800/900 MHz)
- 4 ports /2 systems in the high band 1800/2100 MHz (MIMO 4-way readiness)
- 4 ports /2 systems in the high band 2600 MHz (MIMO 4-way readiness)
- Integrated RET: 5 separate motors for independent tilt management per band (pair of RF ports).
- Slim radome design for better wind load.



Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Low Band Middle Array (694-960 MHz) [R1]			
Frequency Range	MHz	694 - 806	806 - 870	835 - 894	870 - 960
Gain Typical	dBi	13.6	13.5	13.5	13.6
Gain Over All Tilts	dBi	12.8+/-0.8	13.3+/-0.2	13.3+/-0.2	13.2+/-0.4
Azimuth Beamwidth @3dB	Deg	74.9+/-2.2	74.6+/-1.1	74.8+/-1.4	76.7+/-2.8
Elevation Beamwidth @3dB	Deg	18.4+/-2	16.6+/-0.4	16.2+/-0.9	15.5+/-0.8
Front-to-Back Ratio, Total Power, at +/-30°	dB	> 21	> 21.1	> 21.4	> 21.7
First Upper Sidelobe Suppression	dB	> 19.2	> 17.6	> 16.4	> 13.8
Upper Sidelobe Suppression, Peak to 20°	dB	> 18.5	> 18.0	> 17.9	> 17.4
Electrical Downtilt Range	Deg	2 to 16			
Passive Intermodulation	dBc	< -153			
VSWR	-	< 1.5:1			
Return Loss	dB	> 14			
Cross Polar Isolation	dB	> 26			
Maximum Effective Power per Port	Watt	300			



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ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Left Array (1695-2170 MHz) [B1]		
Frequency Range	MHz	1695 - 1890	1860 - 1980	1920 - 2170
Gain Typical	dBi	15.5	15.9	16.1
Gain Over All Tilts	dBi	15.0+/-0.5	15.4+/-0.5	15.5+/-0.6
Azimuth Beamwidth @3dB	Deg	65.9+/-7.8	58.8+/-3.5	59+/-3.3
Elevation Beamwidth @3dB	Deg	8+/-0.3	7.7+/-0.4	7.3+/-0.6
Front-to-Back Ratio, Total Power, at +/-30°	dB	> 19.4	> 18.4	> 18.5
First Upper Sidelobe Suppression	dB	> 13.3	> 15.1	> 15.6
Upper Sidelobe Suppression, Peak to 20°	dB	> 13.3	> 14.9	> 14.4
Electrical Downtilt Range	Deg	2 to 12		
Passive Intermodulation	dBc	< -153		
VSWR	-	< 1.5:1		
Return Loss	dB	> 14		
Cross Polar Isolation	dB	> 26		
Maximum Effective Power per Port	Watt	300		

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Right Array (1695-2170 MHz) [B2]		
Frequency Range	MHz	1695 - 1890	1860 - 1980	1920 - 2170
Gain Typical	dBi	15.5	16.0	16.2
Gain Over All Tilts	dBi	15.0+/-0.5	15.5 +/- 0.5	15.5+/-0.7
Azimuth Beamwidth @3dB	Deg	64.8+/-8.2	58+/-4.2	58.9+/-4.2
Elevation Beamwidth @3dB	Deg	8.2+/-0.3	7.9+/-0.4	7.4+/-0.6
Front-to-Back Ratio, Total Power, at +/-30°	dB	> 19.8	> 18.6	> 19
First Upper Sidelobe Suppression	dB	> 14.1	> 14.9	> 15.8
Upper Sidelobe Suppression, Peak to 20°	dB	> 14.1	> 14	> 14.2
Electrical Downtilt Range	Deg	2 to 12		
Passive Intermodulation	dBc	< -153		
VSWR	-	< 1.5:1		
Return Loss	dB	> 14		
Cross Polar Isolation	dB	> 26		
Maximum Effective Power per Port	Watt	300		



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ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Left Array (2490-2690MHz) [Y1]
Frequency Range	MHz	2490 - 2690
Gain Typical	dBi	16.5
Gain Over All Tilts	dBi	15.8+/-0.7
Azimuth Beamwidth @3dB	Deg	63.9+/-4.9
Elevation Beamwidth @3dB	Deg	5.7+/-0.3
Front-to-Back Ratio, Total Power, at +/-30°	dB	> 18.7
First Upper Sidelobe Suppression	dB	> 20.9
Upper Sidelobe Suppression, Peak to 20°	dB	> 16
Electrical Downtilt Range	Deg	2 to 12
Passive Intermodulation	dBc	< -153
VSWR	-	< 1.5:1
Return Loss	dB	> 14
Cross Polar Isolation	dB	> 26
Maximum Effective Power per Port	Watt	300

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		High Band Right Array (2490-2690MHz) [Y2]
Frequency Range	MHz	2490 - 2690
Gain Typical	dBi	16.5
Gain Over All Tilts	dBi	15.8+/-0.7
Azimuth Beamwidth @3dB	Deg	63.6+/-6.4
Elevation Beamwidth @3dB	Deg	5.7+/-0.4
Front-to-Back Ratio, Total Power, at +/-30°	dB	> 18.4
First Upper Sidelobe Suppression	dB	> 18.7
Upper Sidelobe Suppression, Peak to 20°	dB	> 15
Electrical Downtilt Range	Deg	2 to 12
Passive Intermodulation	dBc	< -153
VSWR	-	< 1.5:1
Return Loss	dB	> 14
Cross Polar Isolation	dB	> 26
Maximum Effective Power per Port	Watt	300

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°



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MECHANICAL SPECIFICATIONS

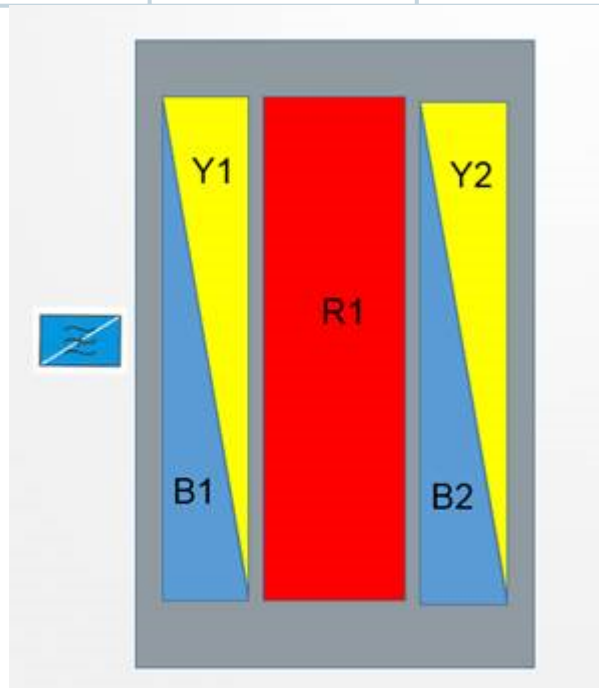
Dimensions - H x W x D	mm (in)	1497 x 370 x 206 (58.9 x 14.6 x 8.1)
Weight (Antenna Only)	kg (lb)	20 (44.1)
Weight (Mounting Hardware only)	kg (lb)	3 (6.6)
Packing size- HxWxD	mm (in)	1625 x 485 x 365 (64 x 19.1 x 14.4)
Shipping Weight	kg (lb)	27 (59.5)
Connector type		10 x 4.3-10 female at bottom
Radome 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	200 (150)
Wind Load @Rated Wind Front	N	752
Wind Load @Rated Wind Side	N	424
Wind Load @Rated Wind Rear	N	765
Environmental		ETSI 300-019-2-4 Class 4.1E

ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Antenna Weight
APXVBRMM15EXD_43-C-I20	Internal RET included	APM40-6	50-120mm	23.0 Kg



External Document Links

[APM40_Series_Installation_Instructions](#)

Notes

NOTE:
All electrical parameters are compliant with BASTA NGMN 10.0 requirements.

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



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