



This antenna offers 4 columns (8 Ports) for 3.5GHz beamforming. It is ideal for 5G introduction

FEATURES / BENEFITS

- Beamforming applications in the 3.5GHz band (3300-3800MHz)
- Multiple Individual Beam Control (Unit Beam)
- Single High Powered Beam Option (Broadcast Beam)
- Beam steering flexibility (Service Beam)
- Calibration Port functionality for precise steering performance
- Integrated and field replaceable SRET
- ACU HW Version: 2.02
- Compliant with AISG V2.0 and 3GPP



Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Cal.board and S parameter (3300-3800 MHz)	
Frequency Band	MHz	3300-3600	3600-3800
Coupling between cal. Port to input port	dB	-26+/-2	
Coupling amplitude accuracy	dB	≤ 0.7	
Coupling phase accuracy	deg	≤ 5	
VSWR	-	≤ 1.5	
Maximum Power	Watt	50	
ISO co-polor @2-6 deg tilt	dB	≥ 20	
ISO co-polor @7-12 deg tilt	dB	≥ 25	
ISO cross-polor @2-6 deg tilt	dB	≥ 25	
ISO cross-polor @7-12 deg tilt	dB	≥ 27	

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Radiation Parameter - Unit Beam (3300-3800 MHz)	
Frequency Band	MHz	3300-3600	3600-3800
Gain Typical	dBi	16.4	16.3
Gain Over all Tilts	dBi	15.6 +/- 0.8	15.7 +/- 0.6
Azimuth Beamwidth 3dB	Deg	88.2 +/- 8.1	80.5 +/- 5.7
Elevation Beamwidth 3dB	Deg	6.2 +/- 0.5	5.9 +/- 0.4
Cross Polar Discrimination at Boresight	dB	20.7	22.5
Cross Polar Discrimination over Sector	dB	16.3	14.6
F/B at +/-30deg Total Power	dB	18.5	19.8
First Upper Side Lobe Suppression	dB	16.4	17.2
Electrical Downtilt	Deg	2 to 12	
VSWR	-	1.5	



ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Radiation Parameter - Broadcasting Beam (3300-3800 MHz)	
Frequency Band	MHz	3300-3600	3600-3800
Gain Typical	dBi	17.6	17.6
Gain Over all Tilts	dBi	17.0 +/- 0.6	17.0 +/- 0.6
Azimuth Beamwidth 3dB	Deg	62.2 +/- 15.3	59.1 +/- 5.7
Elevation Beamwidth 3dB	Deg	6.2 +/- 0.7	5.9 +/- 0.5
Cross Polar Discrimination at Boresight	dB	21.2	25.4
Cross Polar Discrimination over Sector	dB	13.7	13.1
F/B at +/-30deg Total Power	dB	20.6	21.6
First Upper Side Lobe Suppression	dB	12.8	17
Electrical Downtilt	Deg	2 to 12	
VSWR	-	1.5	

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Radiation Parameter - Working Beam (3300-3800 MHz)	
Frequency Band	MHz	3300-3600	3600-3800
Gain Typical	dBi	21.3	20.9
Gain Over all Tilts	dBi	20.7 +/- 0.6	20.5 +/- 0.4
Azimuth Beamwidth 3dB	Deg	24.9 +/- 1	23.5 +/- 0.6
Elevation Beamwidth 3dB	Deg	6.1 +/- 0.6	5.9 +/- 0.4
Cross Polar Discrimination at Boresight	dB	23.1	25.6
Cross Polar Discrimination over Sector	dB	8.3	3.6
F/B at +/-30deg Total Power	dB	24.9	23.8
First Upper Side Lobe Suppression	dB	15.6	19.1
Electrical Downtilt	Deg	2 to 12	
VSWR	-	1.5	

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50
Polarization	Deg	±45°

MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	1050 x 288 x 118 (41.3 x 11.3 x 4.6)
Weight (Antenna Only)	kg (lb)	10.5 (23.1)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	1300 x 370 x 196 (51.2 x 14.6 x 7.7)
Shipping Weight	kg (lb)	19 (41.9)
Connector type		8x 4.3-10 female + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		ASA / Light Grey RAL7035



APXV9TY10AB_43-C-I20

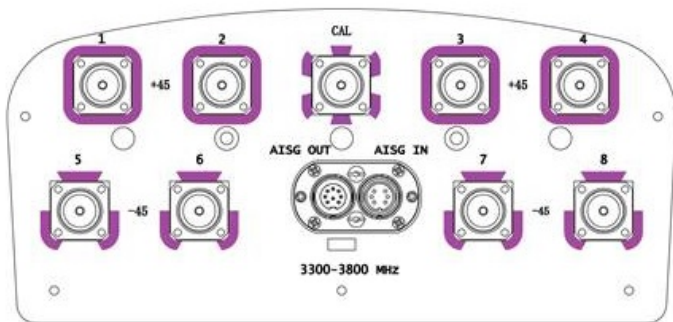
TDD 8T8R Antenna, X-Pol, 1.0m, 3300-3800MHz, 90deg unit beam, Integrated RET

TESTING AND ENVIRONMENTAL

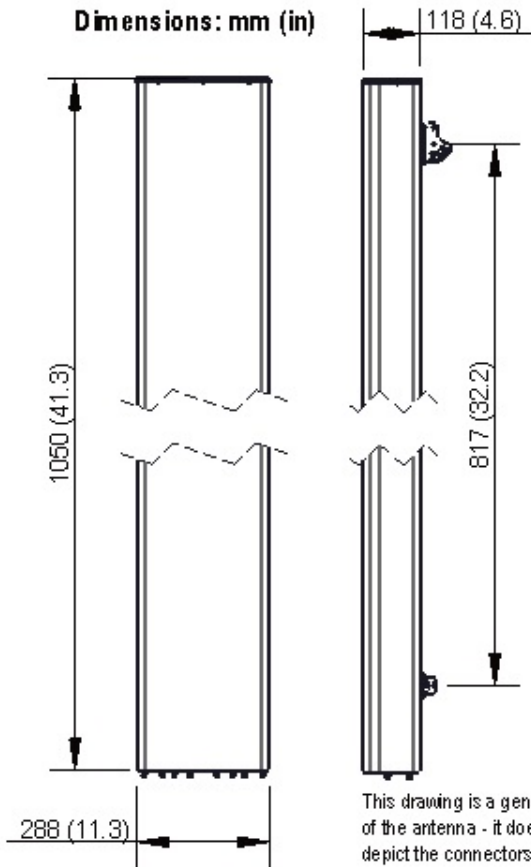
Temperature Range	°C (°F)	-40 to 60 (-40 to 140)
Lightning protection		DC Ground
Survival/Rated Wind Velocity	km/h	200 (150)
Wind Load @Rated Wind Front	N	218
Wind Load @Rated Wind Side	N	224
Wind Load @Rated Wind Rear	N	253

ORDERING INFORMATION

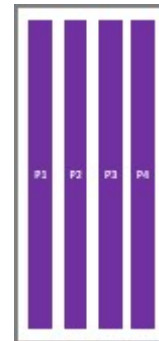
Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXV9TY10AB_43-C-I20	Internal RET(ACU-I20-B1)	APM50-B1	50-110mm	19.0 Kg



Dimensions: mm (in)



This drawing is a general representation of the antenna - it does NOT accurately depict the connectors or radome shape.



External Document Links

[APM50_Series_Installation_Instructions](#)

Notes

- All electrical parameters are compliant with BASTA NGMN 11.1



requirements.

- Horizontal dipole column spacing: 42mm.
- For additional mounting information please click "External Document Links".
- **Radiating patterns:** [Request pattern files](#)