

APXVTMTY15AB_MQ-C-I20

TDD 8T8R Antenna, X-Pol, 1.5m, 2300-2690/3300-3800MHz, 90deg unit beam, MQ4/MQ5 Connectors, Integrated RET



FEATURES / BENEFITS

- TDD 2x MQ ports in 2300-2690MHz
- TDD 2x MQ ports in 3300-3800MHz
- 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 (2300-2690/3300-3800 MHz) [Y1/P1]			
Frequency Band	MHz	2300-2490	2490-2690	3300-3600	3600-3800
Coupling between cal. Port to input port	dB	-26+/-2			
Coupling amplitude accuracy	dB	≤ 0.9			
Coupling phase accuracy	deg	≤ 7			
VSWR	-	≤ 1.5			
Maximum Power	Watt	80	80	50	50
ISO co-polor @ 2-6 deg tilt	dB	≥ 19			
ISO co-polor @ 7-12 deg tilt	dB	≥ 25			
ISO cross-polor @ 2-6 deg tilt	dB	≥ 24			
ISO cross-polor @ 7-12 deg tilt	dB	≥ 25			

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ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Radiation Parameter - Unit Beam (2300-2690/3300-3800 MHz) [Y1/P1]			
Frequency Band	MHz	2300-2490	2490-2690	3300-3600	3600-3800
Gain Typical	dBi	18.1	18.3	16.1	16.1
Gain Over all Tilts	dBi	17.6 +/- 0.5	17.3 +/- 1	15.6 +/- 0.5	15.6 +/- 0.5
Azimuth Beamwidth 3dB	Deg	76.9 +/- 7.6	86.8 +/- 4.4	78.7 +/- 6.2	71.5 +/- 4.6
Elevation Beamwidth 3dB	Deg	4.8 +/- 0.5	4 +/- 0.1	6 +/- 0.1	5.8 +/- 0.5
Cross Polar Discrimination at Boresight	dB	16	18	16.4	14
Cross Polar Discrimination over Sector	dB	4.9	9	10.9	13
F/B at +/-30deg Total Power	dB	23.3	21	18	18.1
First Upper Side Lobe Suppression	dB	17	18.5	16	17
Electrical Downtilt	Deg	2 to 12			
VSWR	-	1.5			

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Radiation Parameter - Broad casting Beam (2300-2690/3300-3800 MHz) [Y1/P1]			
Frequency Band	MHz	2300-2490	2490-2690	3300-3600	3600-3800
Gain Typical	dBi	18.4	19.0	17.7	17.9
Gain Over all Tilts	dBi	17.9 +/- 0.5	18.0 +/- 1	17.2 +/- 0.5	17.4 +/- 0.5
Azimuth Beamwidth 3dB	Deg	64.3 +/- 3.1	63 +/- 4.8	50.3 +/- 5.2	48.2 +/- 5.5
Elevation Beamwidth 3dB	Deg	5 +/- 0.1	4.4 +/- 0.5	6 +/- 0.1	5.9 +/- 0.6
F/B at +/-30deg Total Power	dB	23.1	23	20.5	21
First Upper Side Lobe Suppression	dB	16	17.8	15.8	13.7
Electrical Downtilt	Deg	2 to 12			
VSWR	-	1.5			

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		Radiation Parameter - Working Beam (2300-2690/3300-3800 MHz) [Y1/P1]			
Frequency Band	MHz	2300-2490	2490-2690	3300-3600	3600-3800
Gain Typical	dBi	20.9	22.2	21.3	20.8
Gain Over all Tilts	dBi	20.4 +/- 0.5	21.7 +/- 0.5	20.8 +/- 0.5	20.3 +/- 0.5
Azimuth Beamwidth 3dB	Deg	23.6 +/- 0.5	21.5 +/- 0.8	21.9 +/- 1	20.9 +/- 1
F/B at +/-30deg Total Power	dB	20.6	19	19.7	17.6
Electrical Downtilt	Deg	2 to 12			
VSWR	-	1.5			

ELECTRICAL SPECIFICATIONS

Impedance	Ohm	50			
Polarization	Deg	±45°			

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MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	1600 x 499 x 199 (63 x 19.6 x 7.8)
Weight (Antenna Only)	kg (lb)	33.2 (73.2)
Weight (Mounting Hardware only)	kg (lb)	4.5 (9.9)
Packing size- HxWxD	mm (in)	1885 x 595 x 295 (74.2 x 23.4 x 11.6)
Shipping Weight	kg (lb)	43.9 (96.8)
Connector type		4x Cluster connectors MQ4/MQ5 + 2 AISG connectors (1 male, 1 female)
Radome Material / Color		Fiber Glass / Light Grey RAL7035

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	514
Wind Load @Rated Wind Side	N	446
Wind Load @Rated Wind Rear	N	596

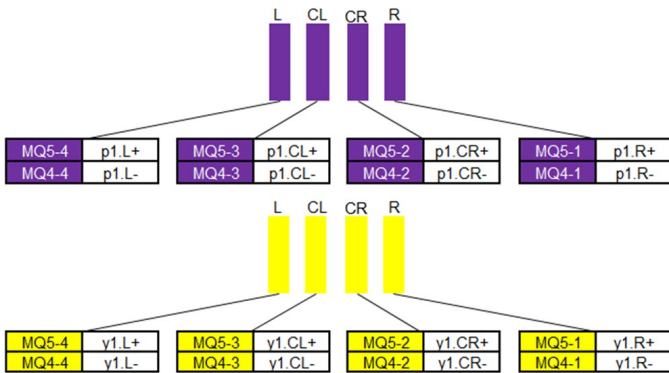
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Shipping Weight
APXVTMTY15AB_MQ-C-I20	Internal RET (ACU-I20-B2)	APM50-B1	50-110mm	43.9 kg

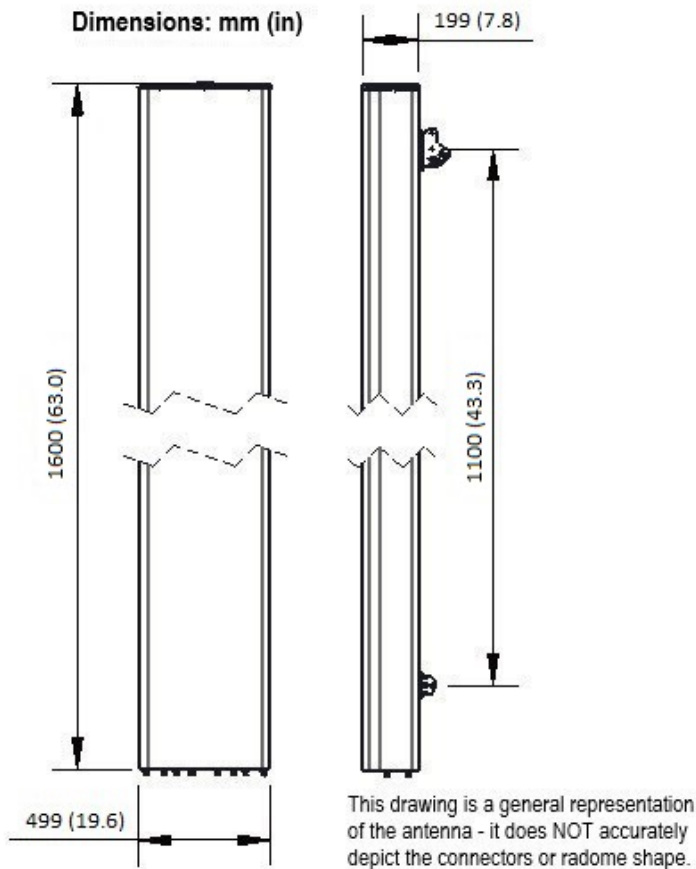


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Physical array & port mapping according to AISG naming convention:
Left - Center Left - Center Right -Right (seen from front of antenna)



External Document Links
[APM50_Series_Installation_Instructions](#)

- Notes**
- All electrical parameters are compliant with BASTA NGMN 11.1 requirements.
 - Horizontal dipole column spacing: 70mm & 50mm.

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- MQ4/MQ5 cluster connectivity follow NGMN.
- For additional mounting information please click "External Document Links".
- **Radiating patterns:** [Request pattern files](#)