

Type QUA8-2A-RB33

Base Station Antenna

4-ports 617-894 MHz / 617-894 MHz, HBW 33° , 18.5 dBi / 18.5 dBi, $2^\circ - 12^\circ$ / $2^\circ - 12^\circ$ Tilt Antenna With 2 Integrated RCU.

Electrical Specifications

Frequency Range (MHz)	(2x) 617-894	
	617-698	698-894
Polarization	$\pm 45^\circ$	
Horizontal 3dB Beamwidth ($^\circ$)	37 ± 4	32 ± 5.1
Vertical 3dB Beamwidth ($^\circ$)	10.3 ± 0.6	8.7 ± 1.2
Gain (dBi)	17.6	18.3
Gain by all Beam Tilts, average, (dBi)	17.5 ± 0.5	17.8 ± 0.6
Electrical Downtilt	$2^\circ - 12^\circ$	
First Upper Sidelobe Suppression (dB)	≥ 17	≥ 17
Cross polar discrimination ratio (dB) at boresight.	≥ 17	≥ 17
Front-to-Back Ratio Total Power, $\pm 30^\circ$ (dB)	≥ 25	≥ 26
Isolation port to port (dB)	≥ 25	
VSWR	< 1.5	
Intermodulation IM3 (dBc) (2x43 dBm carrier)	< -150	< -153
Impedance (Ohms Ω)	50	
Max. Power per Input (Watts) (at 50°C ambient temperature)	500	
Lightning Protection	DC Ground	



All specifications follow BASTA standards

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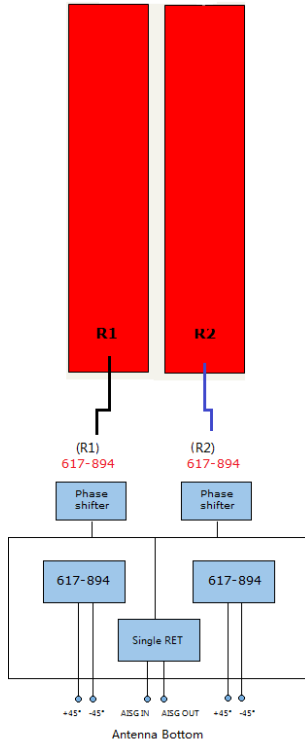
Mechanical Specifications

Radome Material	Fiberglass
Connector Type and Location	4.3-10x4, Bottom iRCU in: 1 x 8 pin male iRCU out: 1 x 8 pin female
Dimensions, HxWxD (mm) / (inches)	2438 x 630 x 165 / 95.9 x 24.8 x 6.5
Packing Size (mm) / (inches)	2860 x 695 x 305 / 112.6 x 27.4 x 12.0
Weight w/o Mounting kit (kg) / (lbs)	39.5 / 86.9
Weight w/ Downtilt Bracket (kg) / (lbs)	45.5 / 100.1
Weight w/ Fixed Bracket (kg) / (lbs)	43.5 / 95.7
Packing Weight (w/ Downtilt Bracket) (kg) / (lbs)	57 / 125.4
Packing Weight (w/ Fixed Bracket) (kg) / (lbs)	55 / 121
Max. Wind Velocity (mph)	150
Mast diameter supported (mm)	$\phi 50 \sim \phi 115$
Operational Temperature ($^\circ\text{C}$)	-40 to +65
Operational Humidity (%)	<95
Wind Load at 100mph (Frontal / lateral / Rearside) (N)	1660 / 287 / 1200

Integrated RET Properties

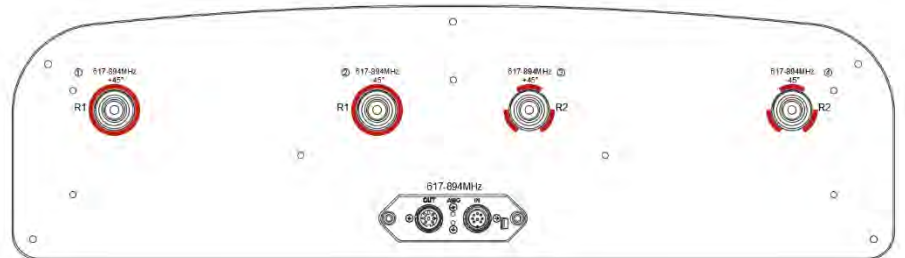
RET Type		2x Type 1 Single RET
Protocols		Compliant to AISG 2.0/3GPP
Input voltage range (DC V)		+10~+30 (pin 6)
Power consumption (W)		<2 (stand by); <13 (motor activated)
Connectors	AISG	2 x 8 pin connector acc. To IEC 60130-9 Acc.to AISG Daisy chain in: male Daisy chain out: female
	Antenna	Two motor shaft (Embedded motor)
Hardware interface	AISG	RS485A/B (pin5/pin3); Power supply (pin6); DC return (pin7) Acc.to AISG
Adjustment time (full range)		40 sec (typically, depending on antenna)
Adjustment Cycles		≥ 10000
Motor Torque Max (mN-m)		≥ 160
Lightning Protection Rating		IEC 61000-4-5 Current Pulse Profile, 8/20 μs , 10 Repetitions Min.@ 6 kA IEC 61312-1 Annex B Current Pulse Profile, 10/350 μs , 200 Repetitions Min. @ 0.6kA

COMPREHENSIVE TILT CONFIGURATION

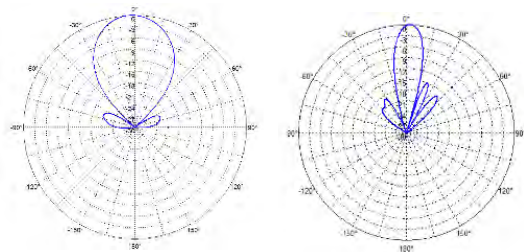


Frequency Range	Array	RET Unique ID
617-894 MHz	R1	NDPMXXXXXXXX-6089R1
617-894 MHz	R2	NDPMXXXXXXXX-6089R2

Note: (1) Physical RET Unit containing (2) Single RET



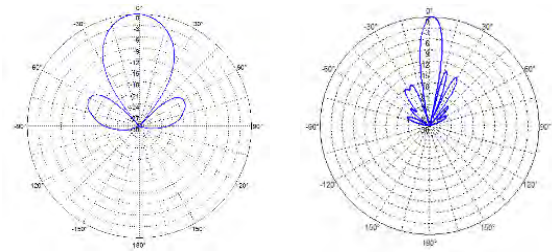
Radiation Pattern (617 - 824 MHz)



Horizontal Pattern

Vertical Pattern

Radiation Patterns (824 - 894 MHz)



Horizontal Pattern

Vertical Pattern