

Frequency Range	617-894 1695-2400
Polarization	±45°
Half-Power Beam Width	90°
Electrical Downtilt	2° - 12°x2

Type QUA8-1LX1HX-BW90

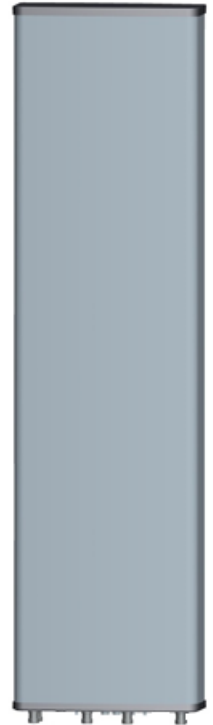
Base Station Antenna

4-ports 617-894 /1695-2400 MHz 90°, 15 / 17 dBi, 2°-12° / 2°-12° Tilt Antenna With 2 Integrated RCUs.



Electrical Specifications

Frequency Range(MHz)		617-894			1695-2400		
		617-698	698-824	824-894	1695-1920	1920-2180	2300-2400
Polarization		±45°					
Horizontal 3dB Beamwidth(°)		88	83	78	88	83	78
Vertical 3dB Beamwidth(°)		10.4	9.1	8.0	5.5	5	4.3
Gain (dBi)		14.1	14.6	15.0	16.6	17.0	17.1
Electrical Downtilt		2°-12°			2°-12°		
Upper Sidelobe Suppression(dB)	First	≥16	≥16	≥16	≥16	≥16	≥16
Front-to-Back Ratio Total Power, ± 30° (dB)		≥23	≥23	≥23	≥23	≥23	≥23
Cross polar ratio	Main direction(dB)	≥16	≥16	≥16	≥16	≥16	≥16
	± 60° (dB)	≥8	≥8	≥8	≥8	≥8	≥8
Isolation ports		≥25 dB					
Isolation Frequency		≥30 dB					
VSWR		< 1.5					
Intermodulation IM3		< -150 dBc(2x43dBm carrier)					
Impedance		50 Ω					
Max. Power per Input (at 50°C ambient temperature)		500 W			300 W		
Lightning Protection		DC Ground					



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 355 x 165 / 95.9 x 14.0x 6.5
Packing Size(mm)/(inches)	2660 x 456 x 296 / 104.7 x 17.9 x 11.6
Weight ,w/o Mounting kit(kg)/(lbs)	29 / 63.8
Weight w/ Downtilt Bracket(kg)/(lbs)	36 / 79.2
Weight w/ Fixed Bracket(kg)/(lbs)	34 / 77
Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)	42 / 92.4
Packing Weight (w/ Fixed Bracket) (kg)/(lbs)	40 / 90.2
Max. Wind Velocity(mph)	150
Mounting hardware	Φ 50 mm ~ Φ 115 mm
Operational Temperature(°C)	-40 to +65
Operational Humidity(%)	<95
Wind Load at 100mph (Frontal/lateral/Rearside(N))	1001/271/723

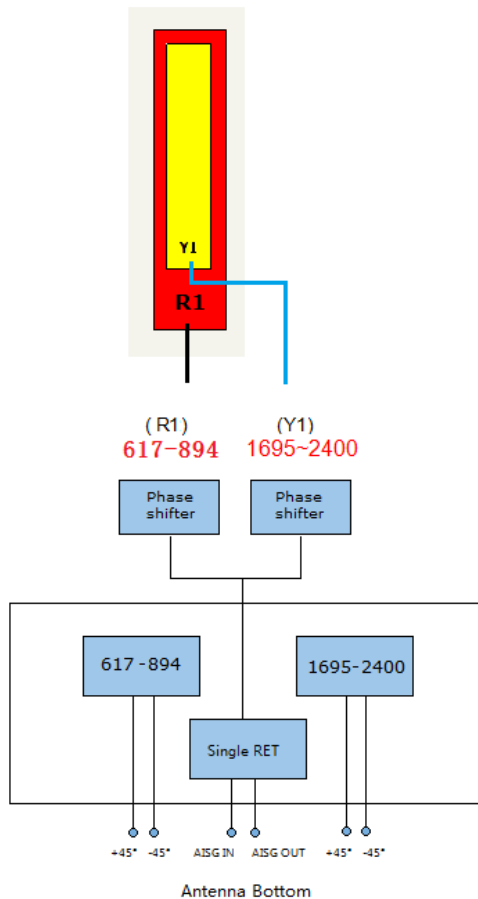
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Integrated RET Properties

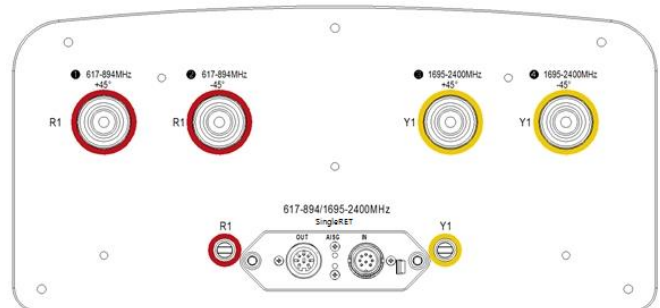
RET Type	2x Type 1 Single RET	
Protocols	Compliant to AISG 2.0/3GPP	
Input voltage range	+10~+30VDC(pin 6)	
Power consumption	<2W(stand by);<13W(motor activated)	
Connectors	AISG	2 x 8 pin connector acc. To IEC 60130-9 Acc.to AISG Daisy chain in:male Daisy chain out:female
	Antenna	Two motor shaft(Embedded 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	
Torque Max	≥160mN.m	
Lightning Protection Rating	IEC 61000-4-5 Current Pulse Profile,8/20 μs 10 Repetitions Min.@ 6kA IEC 61312-1 Annex B Current Pulse Profile, 10/350 μs,200 Repetitions Min. @ 0.6kA	

COMPREHENSIVE TILT CONFIGURATION



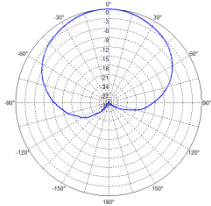
Frequency Range	Array	RET Unique ID
617-894MHz	R1	NDPMXXXXXXXX-6089R1
1695-2400MHz	Y1	NDPMXXXXXXXX-1724Y1

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

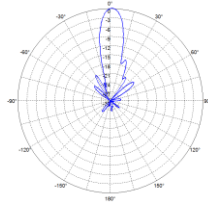


Frequency Range	617-894 1695-2400
Polarization	$\pm 45^\circ$
Half-Power Beam Width	90°
Electrical Downtilt	2° - 12°x2

Radiation Pattern (617 - 824 MHz)

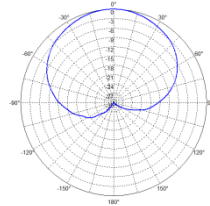


Horizontal Pattern

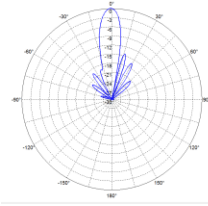


Vertical Pattern

Radiation Patterns (824 - 894 MHz)

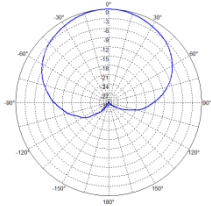


Horizontal Pattern

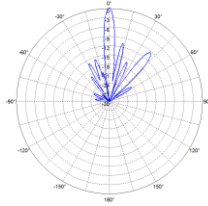


Vertical Pattern

Radiation Pattern (1695 - 1920 MHz)

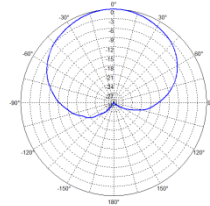


Horizontal Pattern

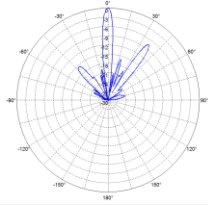


Vertical Pattern

Radiation Patterns (1920 - 2180 MHz)

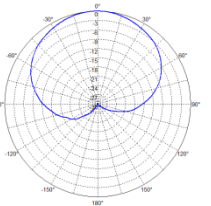


Horizontal Pattern

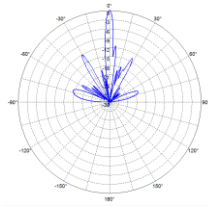


Vertical Pattern

Radiation Pattern (2180 - 2400 MHz)



Horizontal Pattern



Vertical Pattern