

Type QUA8-2HX-BR65

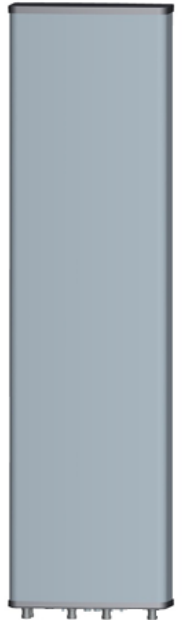


Base Station Antenna

4-ports 1695-2690 /1695-2690 MHz 65° , 20.5 / 20.5 dBi, $2^\circ - 8^\circ$ / $2^\circ - 8^\circ$ Tilt Antenna With 2 Integrated RCUs.

Electrical Specifications

Frequency Range(MHz)		2x1695-2690				
		1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Polarization		$\pm 45^\circ$				
Horizontal 3dB Beamwidth($^\circ$)		67	66	63	62	60
Vertical 3dB Beamwidth($^\circ$)		3.8	3.5	3.3	2.8	2.6
Gain (dBi)		18.8	19.1	19.4	20	20.3
Electrical Downtilt		$2^\circ - 8^\circ$				
Upper Sidelobe Suppression(dB)	First	≥ 18	≥ 18	≥ 18	≥ 18	≥ 18
Front-to-Back Ratio Total Power, $\pm 30^\circ$ (dB)		≥ 25	≥ 27	≥ 27	≥ 27	≥ 27
Isolation ports		≥ 28 dB				
VSWR		< 1.5				
Intermodulation IM3 dBc (2x43dBm carrier)		< -153				
Impedance		50 Ω				
Max. Power per Input (at 50°C ambient temperature)		200 W				
Lightning Protection		DC Ground				



Electrical Specifications,BASTA

Frequency Range(MHz)		2x1695-2690				
		1695-1880	1850-1990	1920-2200	2300-2500	2500-2690
Polarization		$\pm 45^\circ$				
Beamwidth, Horizontal Tolerance ($^\circ$)		± 3.2	± 3.8	± 4.1	± 4.0	± 4.0
Beamwidth, Vertical Tolerance ($^\circ$)		± 0.2	± 0.3	± 0.3	± 0.2	± 0.2
Gain by all Beam Tilts, average, (dBi)		18.2	18.5	18.8	19.4	19.6
Gain by all Beam Tilts, Tolerance, (dB)		± 0.3	± 0.3	± 0.4	± 0.4	± 0.4
Gain by all Beam Tilt, average (dBi)		2 18.5	2 18.6	2 18.8	2 19.6	2 19.7
		5 18.6	5 18.8	5 19.2	5 19.8	5 19.9
		8 18.4	8 18.5	8 19	8 19.2	8 19.8
Front-to-Back Ratio Total Power, $\pm 30^\circ$ (dB)		≥ 27	≥ 27	≥ 27	≥ 27	≥ 27
Cross polar ratio	≥ 20	≥ 20	≥ 20	≥ 20	≥ 20	≥ 17
	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10	≥ 7

Frequency Range	1695-2690x2
Polarization	±45°
Half-Power Beam Width	65°
Electrical Downtilt	2° - 8°x2

Type QUA8-2HX-BR65

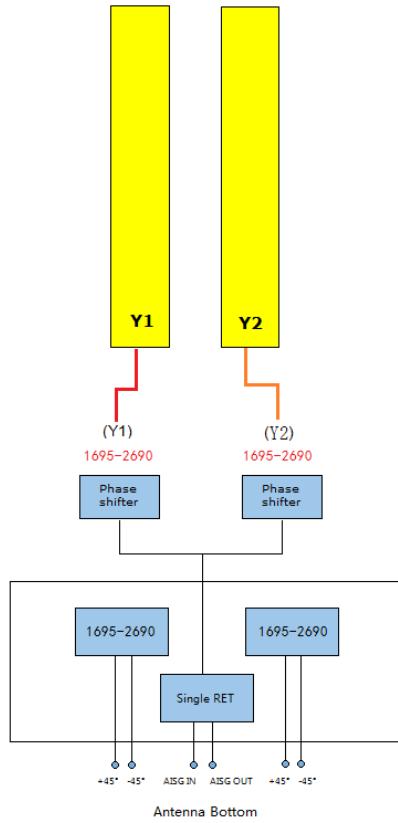
Mechanical Specifications

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)	2430 x 320 x 105 / 95.7 x 12.6x 4.1
Packing Size(mm)/(inches)	2750 x 440 x 250 / 108.3 x 17.3 x 9.8
Weight ,w/o Mounting kit(kg)/(lbs)	24.5/53.9
Weight w/ Downtilt Bracket(kg)/(lbs)	30.5/67.1
Weight w/ Fixed Bracket(kg)/(lbs)	28.5/62.7
Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)	38.5/84.7
Packing Weight (w/ Fixed Bracket) (kg)/(lbs)	36.5/80.3
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))	1108/187/798

Integrated RET Properties

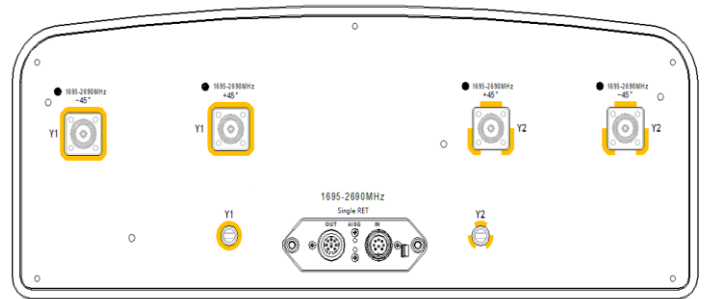
RET Type		2x Type 1 Single RET
Protocols		Compliant to AISG 2.0/3GPP
Input voltage range		+10~+30VDC(pin 6)
Power consumption		<2W(stand by);<13W(motor activated)
Connectors	AISG	2 x 8 pin connector acc. To IEC 60130-9 Acc.to AISG Daisy chain in:male Daisy chain out:female
	Antenna	Two motor shaft(Embedded 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

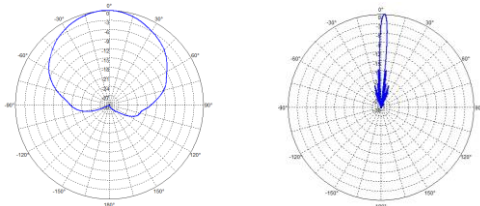


Frequency Range	Array	RET Unique ID
1695-2690MHz	Y1	NDPMXXXXXXXXX-1727Y1
1695-2690MHz	Y2	NDPMXXXXXXXXX-1727Y2

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



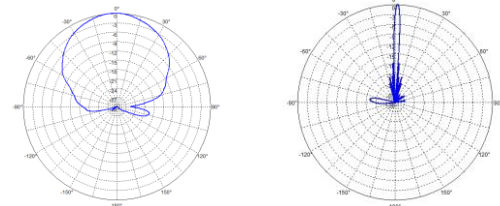
Radiation Pattern (1695 - 2200 MHz)



Horizontal Pattern

Vertical Pattern

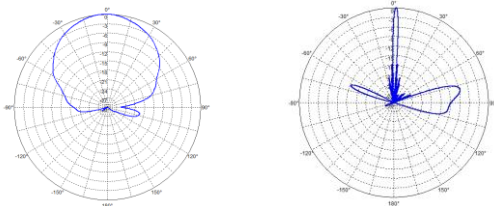
Radiation Patterns (2300 - 2500 MHz)



Horizontal Pattern

Vertical Pattern

Radiation Pattern (2500 - 2690 MHz)



Horizontal Pattern

Vertical Pattern