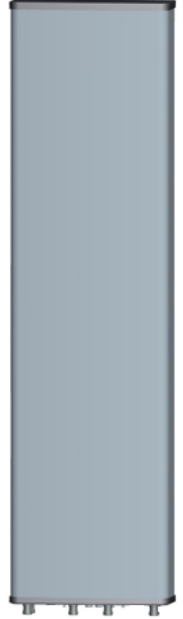


Type QUA4-2HX-BR65

Base Station Antenna

4-ports 1695-2690 /1695-2690 MHz 65° , 18.5/ 18.5 dBi, 2° - 12° / 2° - 12° 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($^\circ$)		7.1	6.5	6	5.3	4.8
Gain (dBi)		17.1	17.4	17.7	18.3	18.6
Electrical Downtilt		2° - 12°				
Upper Sidelobe Suppression(dB)	First	≥ 18	≥ 18	≥ 18	≥ 18	≥ 18
Front-to-Back Ratio Total Power, $\pm 30^\circ$ (dB)		≥ 27	≥ 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 ($^\circ$)		± 4.2	± 4.0	± 4.1	± 3.9	± 4.2
Beamwidth, Vertical Tolerance ($^\circ$)		± 0.5	± 0.5	± 0.4	± 0.3	± 0.3
Gain by all Beam Tilts,average, (dBi)		17	17.1	17.5	18.2	18.4
Gain by all Beam Tilts,Tolerance, (dB)		± 0.4	± 0.4	± 0.5	± 0.5	± 0.5
Gain by all Beam Tilt,average (dBi)		2 16.9	2 17.1	2 17.2	2 17.9	2 17.8
		6 17.1	6 17.2	6 17.4	6 18.2	6 18.2
		10 16.8	10 17	10 17.3	10 17.9	10 17.7
Front-to-Back Ratio Total Power, $\pm 30^\circ$ (dB)		≥ 27	≥ 27	≥ 27	≥ 27	≥ 27
Cross polar ratio	Main direction(dB)	≥ 20	≥ 20	≥ 20	≥ 20	≥ 20
	$\pm 60^\circ$ (dB)	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10

Frequency Range	1695-2690x2
Polarization	±45°
Half-Power Beam Width	65°
Electrical Downtilt	2° - 12°x2

Type QUA4-2HX-BR65

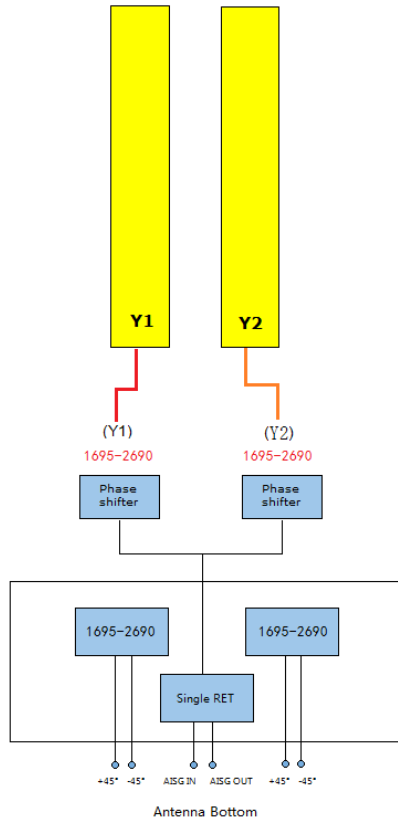
Mechanical Specifications

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)	1360 x 320 x 105 / 53.5 x 12.6x 4.1
Packing Size(mm)/(inches)	1560 x 441 x 240 / 61.4 x 17.4 x 9.4
Weight ,w/o Mounting kit(kg)/(lbs)	16/35.2
Weight w/ Downtilt Bracket(kg)/(lbs)	22/48.4
Weight w/ Fixed Bracket(kg)/(lbs)	20/44
Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)	30/66
Packing Weight (w/ Fixed Bracket) (kg)/(lbs)	28/61.6
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))	620/105/446

Integrated RET Properties

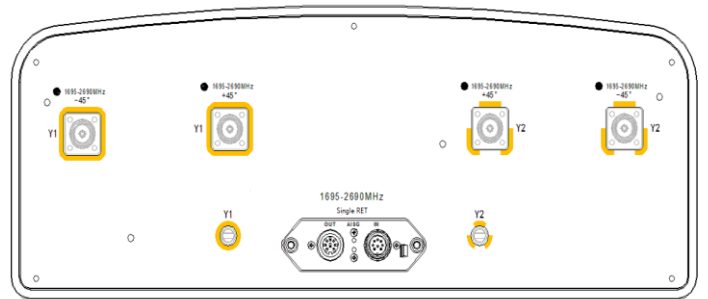
RET Type		2x Type 1 Single RET
Protocols		Compliant to AISG 2.0/3GPP
Input voltage range		+10~+30VDC(pin 6)
Power consumption		<2W(stand by);<13W(motor activated)
Connectors	AISG	2 x 8 pin connector acc. To IEC 60130-9 Acc.to AISG Daisy chain in:male Daisy chain out:female
	Antenna	Two motor shaft(Embedded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

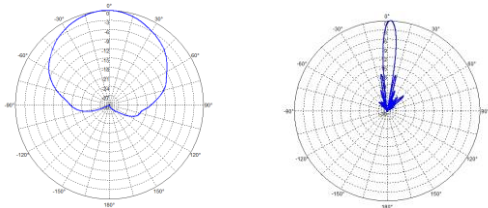


Frequency Range	Array	RET Unique ID
1695-2690MHz	Y1	NDPMXXXXXXXX-1727Y1
1695-2690MHz	Y2	NDPMXXXXXXXX-1727Y2

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



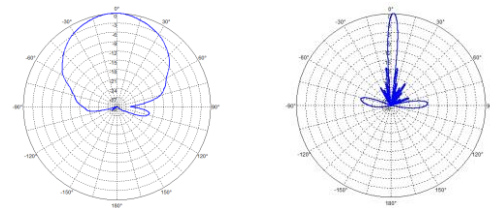
Radiation Pattern (1695 - 2200 MHz)



Horizontal Pattern

Vertical Pattern

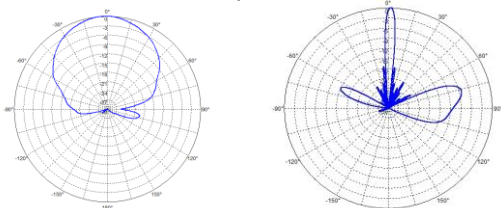
Radiation Patterns (2300 - 2500 MHz)



Horizontal Pattern

Vertical Pattern

Radiation Pattern (2500 - 2690 MHz)



Horizontal Pattern

Vertical Pattern