

Frequency Range	790-960x1 1710-2180x1
Polarization	±45°
Half-Power Beam Width	65°
Electrical Downtilt	2° - 12°x2

Type QUA7-1AA1K-RB65

Base Station Antenna

4-ports 790-960 / 1710-2180 MHz 65°, 16 /18 dBi, 2°-12° / 2°- 12 °Tilt Antenna With 2 Integrated RCUs.

Electrical Specifications



Frequency Range(MHz)		790-960		1710-2180	
		790-894	880-960	1710-1920	1920-2180
Polarization		±45°			
Horizontal 3dB Beamwidth(°)		68±4.5	67±4.5	68±6.5	63±4.5
Vertical 3dB Beamwidth(°)		10.3±0.9	9.3±0.9	6.7±0.6	5.9±0.6
Gain (dBi)		15.2±0.6	15.6±0.6	16.5±0.6	17±0.6
Electrical Downtilt		2°-12°		2°-12°	
Upper Sidelobe Suppression(dB)	First	≥15	≥15	≥16	≥16
Front-to-Back Ratio Total Power, ±30° (dB)		≥25	≥25	≥25	≥25
Cross polar ratio	Main direction(dB)	≥17	≥17	≥15	≥16
	±60° (dB)	≥8	≥8	≥10	≥7
Isolation ports		≥28 dB		≥28 dB	
Isolation Frequency		≥28 dB			
VSWR		< 1.5			
Intermodulation IM3		< -150		< -150	
Impedance		50 Ω		50 Ω	
Max. Power per Input (at 50°C ambient)		500 W		250 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)	1999 x 279 x 169
Packing Size(mm)/(inches)	2179 x 375 x 279
Weight ,w/o Mounting kit(kg)/(lbs)	18
Weight w/ Downtilt Bracket(kg)/(lbs)	25
Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)	31
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 150km/h (Frontal/lateral/Rearside(N))	510/400/570

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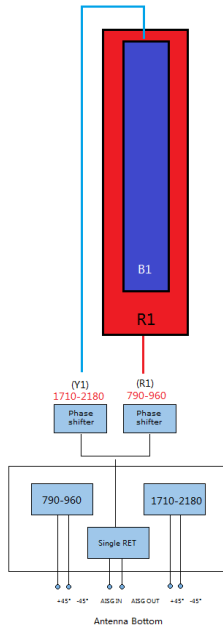
Integrated RET Properties

RET Type	2 x Type 1 Single RET	
Protocols	Compliant to AISG 3.0/3GPP	
Input voltage range	+10~+30VDC(pin 6)	
Power consumption	<2W(stand by); <10W(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	

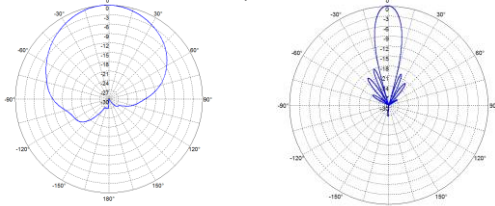
COMPREHESIVE TILT CONFIGURATION

Frequency Range	Array	RET Unique ID
790-960MHz	R1	NDPMXXXXXXXX-7090R1
1710-2180MHz	Y1	NDPMXXXXXXXX-1721Y1

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



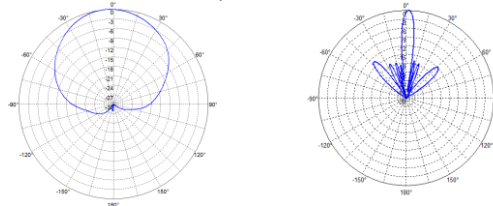
Radiation Pattern (790 - 960 MHz)



Horizontal Pattern

Vertical Pattern

Radiation Pattern (1710 - 2180 MHz)



Horizontal Pattern

Vertical Pattern