

Frequency Range	617-894x1 1695-2690x2
Polarization	±45°
Half-Power Beam Width	33°
Electrical Downtilt	2° - 12°x3

Type HEX6-1A2J-RB33

Base Station Antenna

6-ports 617-894 / 1695-2690 / 1695-2690 MHz 33°, 17.5 / 20.0 / 20.0 dBi, 2°-12° / 2°-12° / 2°-12° Tilt Antenna
With 2 Integrated RCUs.

Electrical Specifications

Frequency Range(MHz)		617-894			2x1695-2690			
		617-698	698-824	824-894	1695-1920	1920-2180	2300-2400	2490-2690
Polarization		±45°						
Horizontal 3dB Beamwidth(°) ¹		35±3	33±3	32±3	35±3	34±3	29±3	27+3
Vertical 3dB Beamwidth(°) ¹		15.0±1.0	13.1±1.0	12.0±0.8	5.4±0.5	5.0±0.5	4.3±0.5	3.9±0.5
Gain over all tilts ,max,(dBi)		16.4	16.9	17.5	19.6	19.9	20.1	20.3
Average gain over all tilts,dBi		15.8±0.6	16.3±0.6	16.9±0.6	19.2±0.4	19.5±0.4	19.7±0.4	19.9±0.4
Electrical Downtilt		2°-12°			2°-12°			
Upper Sidelobe Suppression(dB) ¹	First	≥17	≥17	≥17	≥19	≥19	≥19	≥19
	Boresight to 20° ¹	≥16	≥16	≥16	≥16	≥16	≥16	≥16
Front-to-Back Ratio Co-polar power (dB)	@180°	≥26	≥28	≥28	≥30	≥30	≥30	≥32
	@180±30°	≥25	≥27	≥27	≥28	≥28	≥29	≥28
Cross polar ratio	Main direction(dB)	≥20	≥20	≥20	≥20	≥20	≥20	≥20
Minimum cross-polar isolation, port-to-port, dB ¹		≥25dB						
Isolation Frequency		≥30 dB						
VSWR		< 1.5						
Intermodulation IM3		< -153 dBc(2x43dBm carrier)						
Impedance		50 Ω						
Max. Power per Input (at 50°C ambient temperature)		500 W			300 W			
Lightning Protection		DC Ground						


¹Typical value over frequency and tilt

Mechanical Specifications

Radome Material	FiberGlass
Connector Type and Location	4.3-10x6 ,Bottom iRCU in:1 x 8 pin male iRCU out:1 x 8 pin female
Dimensions,HxWxD(mm)/(inches)	1828 x 630 x 175 / 72 x 24.8x 6.9
Packing Size(mm)/(inches)	2190 x 695 x 310 / 86.2 x 27.4 x 12.2
Weight ,w/o Mounting kit(kg)/(lbs)	38 / 83.6
Weight w/ Downtilt Bracket(kg)/(lbs)	45 / 99
Weight,w/ Fixed Bracket (kg)/(lbs)	43 / 94.6
Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)	54 / 118.8
Packing Weight (w/ Fixed Bracket) (kg)/(lbs)	52/114.4
Max. Wind Velocity(mph)	150
Mounting hardware	⌀ 50 mm ~ ⌀ 115 mm
Operational Temperature(°C)	-40 to +65
Operational Humidity(%)	<95
Wind Load at 100mph (Frontal/lateral/Rearside(N))	1344/232/910

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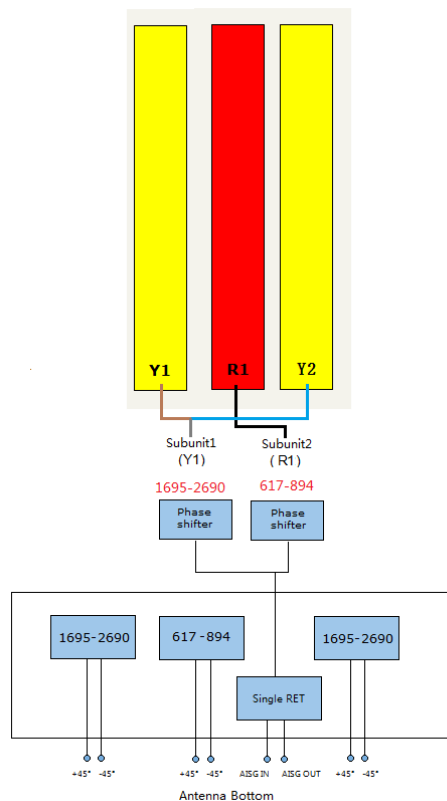
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Integrated RET Properties

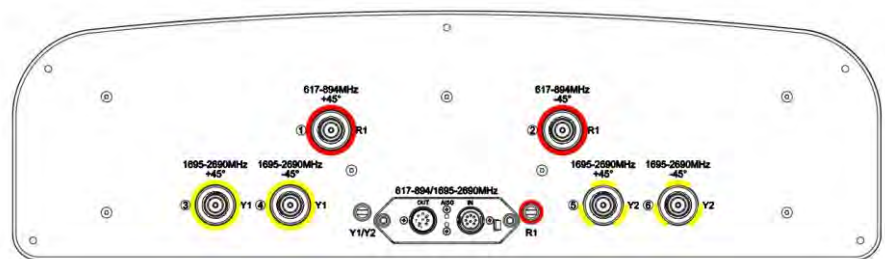
RET Type	2x Type 1 Single RET	
Protocols	Compliant to AISG 2.0/3GPP	
Input voltage range	+10~+30VDC(pin 6)	
Power consumption	<2W(stand by);<13W(motor activated)	
Connectors	AISG	2 x 8 pin connector acc. To IEC 60130-9 Acc.to AISG Daisy chain in:male Daisy chain out:female
	Antenna	Two motor shaft(Embedded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



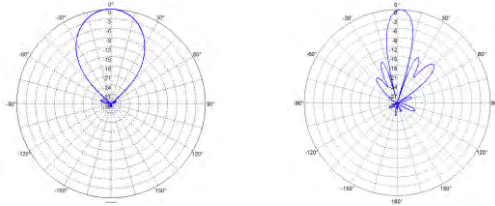
Frequency Range	Array	RET Unique ID
617-894MHz	R1	NDPMXXXXXXXX-6089R1
1695-2690MHz	Y1/Y2	NDPMXXXXXXXX-1727Y1

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



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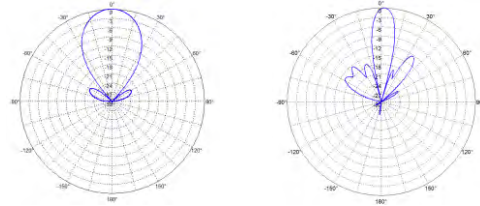
Radiation Pattern (617 - 824 MHz)



Horizontal Pattern

Vertical Pattern

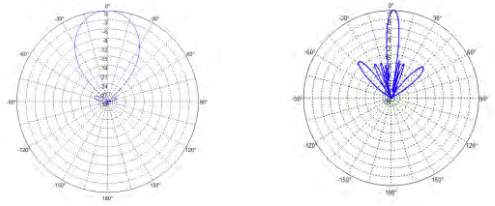
Radiation Patterns (824 - 894 MHz)



Horizontal Pattern

Vertical Pattern

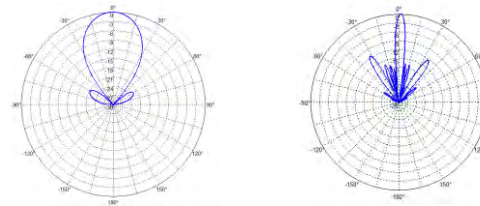
Radiation Pattern (1695 - 1920 MHz)



Horizontal Pattern

Vertical Pattern

Radiation Patterns (1920 - 2180 MHz)



Horizontal Pattern

Vertical Pattern

Radiation Pattern (2300 - 2690 MHz)



Horizontal Pattern

Vertical Pattern