

Type DOD7-2A4J-RD45

Base Station Antenna

12-ports 617-894 / 617-894 /1695-2690 /1695-2690 /1695-2690 /1695-2690 MHz 45°, 17.0 / 17.0 / 19.0 / 19.0 / 19.0 / 19.0 dBi, 2°-12° / 2°-12° / 2°-12° / 2 - 12 ° / 2°-12° / 2°-12 °Tilt Antenna With 4 Integrated RCUs.



Electrical Specifications

Frequency Range(MHz)		2x617-894			4x1695-2690			
		617-698	698-824	824-894	1695-1920	1920-2180	2300-2400	2400-2690
Polarization		±45°						
Horizontal 3dB Beamwidth(°)		50	46	42	48	45	41	38
Vertical 3dB Beamwidth(°)		11.5	10.0	9.0	5.7	5.2	4.5	4.1
Gain (dBi)		16.0	16.5	17.0	19.0	19.5	19.9	20.1
Electrical Downtilt		2°-12°			2°-12°			
Upper Sidelobe Suppression(dB)	First	≥17	≥17	≥17	≥17	≥17	≥17	≥17
Front-to-Back Ratio Total Power, ± 30° (dB)		≥27	≥27	≥27	≥27	≥27	≥27	≥27
Cross polar ratio	Main direction(dB)	≥17	≥17	≥17	≥17	≥17	≥17	≥17
	± 30° (dB)	≥7	≥7	≥7	≥7	≥7	≥7	≥7
Isolation ports		≥25 dB						
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						



Mechanical Specifications

Radome Material	ASA
Connector Type and Location	4.3-10x12 ,Bottom iRCU in:1 x 8 pin male iRCU out:1 x 8 pin female
Dimensions,HxWxD(mm)/(inches)	2100 x 635 x 180 / 82.7 x 25.0 x 7.1
Packing Size(mm)/(inches)	2455 x 735 x 390 / 96.7 x 29.0 x 15.3
Weight ,w/o Mounting kit(kg)/(lbs)	39 / 85.8
Weight w/ Downtilt Bracket(kg)/(lbs)	45 / 99
Weight w/ Fixed Bracket(kg)/(lbs)	43 / 94.6
Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)	58 / 127.6
Packing Weight (w/ Fixed Bracket) (kg)/(lbs)	56 / 123.2
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))	1530/260/1100

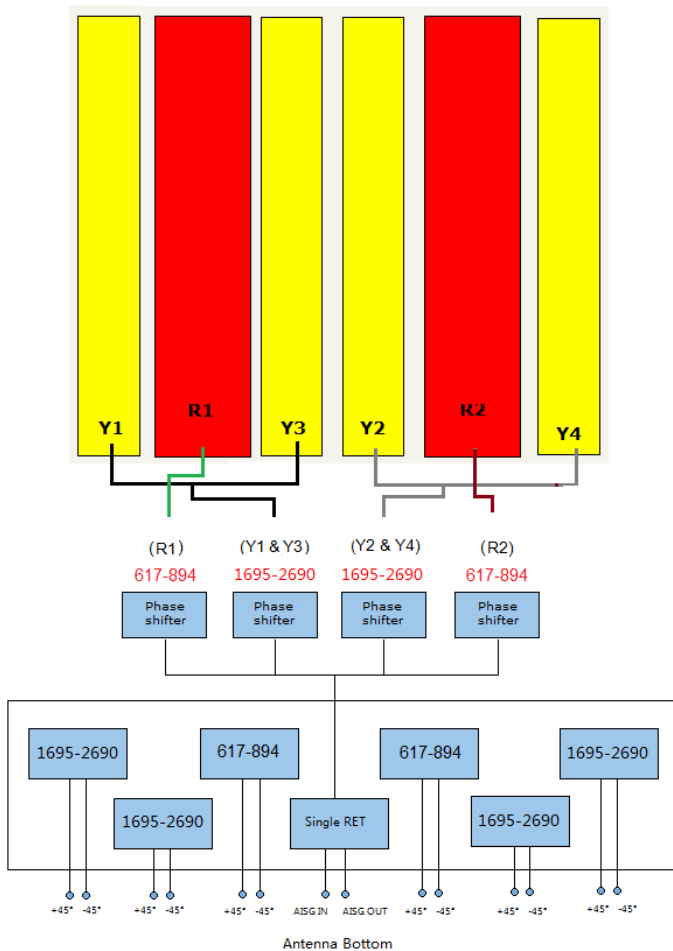
Frequency Range	617-894x2 1695-2690x4
Polarization	±45°
Half-Power Beam Width	45°
Electrical Downtilt	2° - 12°x6

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Integrated RET Properties

RET Type	4x 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

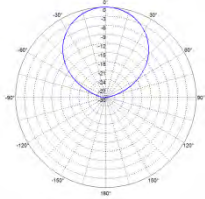


Frequency Range	Array	RET Unique ID
617-894MHz	R1	NDPMXXXXXXXX-6089R1
617-894MHz	R2	NDPMXXXXXXXX-6089R2
1695-2690MHz	Y1/Y3	NDPMXXXXXXXX-1727Y1
1695-2690MHz	Y2/Y4	NDPMXXXXXXXX-1727Y2

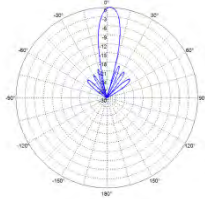
Note: (1) Physical RET Unit
containing (4) Single RET

Frequency Range	617-894x2 1695-2690x4
Polarization	$\pm 45^\circ$
Half-Power Beam Width	45°
Electrical Downtilt	2° - 12°x6

Radiation Pattern (617 - 824 MHz)

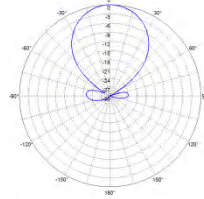


Horizontal Pattern

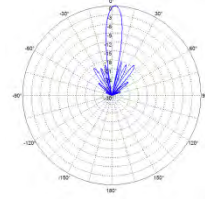


Vertical Pattern

Radiation Patterns (824 - 894 MHz)

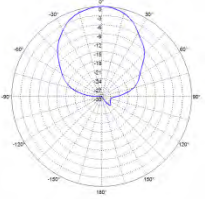


Horizontal Pattern

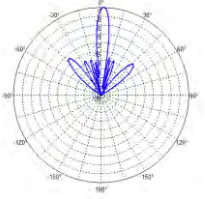


Vertical Pattern

Radiation Pattern (1695 - 1920 MHz)

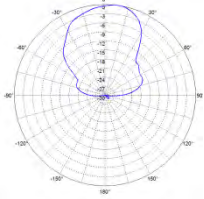


Horizontal Pattern

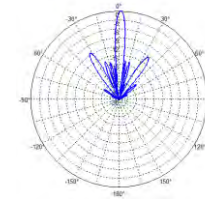


Vertical Pattern

Radiation Patterns (1920 - 2180 MHz)

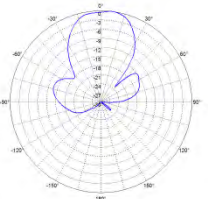


Horizontal Pattern

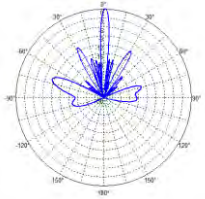


Vertical Pattern

Radiation Pattern (2300 - 2690 MHz)



Horizontal Pattern



Vertical Pattern