

Frequency Range	690-960x2 1710-2690x2 1427-2690x2
Polarization	±45°
Half-Power Beam Width	65°
Electrical Downtilt	2° - 12°x6

Type DOD7-2B2J2H-RF65



Base Station Antenna

12-ports 690-960 / 690-960 /1710-2690 /1710-2690 /1427-2690 /1427-2690 MHz 65°, 16 / 16 / 18 / 18 / 18 / 18 dBi, 2°-12° / 2°-12° / 2°-12° / 2°-12° / 2°-12° / 2°-12° Tilt Antenna With 6 Integrated RCUs.

Electrical Specifications

Frequency Range(MHz)		2x690-960(R1&R2)			2x1710-2690(Y1&Y4)			
		690-824	824-894	880-960	1695-1920	1920-2180	2300-2400	2490-2690
Polarization		±45°						
Horizontal 3dB Beamwidth(°)		68±5	65±5	63±5	66±5	63±5	58±5	60±5
Vertical 3dB Beamwidth(°)		11.6±0.8	10.2±0.5	9.3±0.5	7.5±0.6	6.5±0.6	6±0.6	5.5±0.6
Gain (dBi)		15.0±0.5	15.3±0.5	15.8±0.5	16.5±0.5	17.0±0.5	17.5±0.5	17.8±0.5
Electrical Downtilt		2°-12°			2°-12°			
Upper Sidelobe Suppression(dB)	First	≥16	≥16	≥16	≥16	≥16	≥16	≥16
Front-to-Back Ratio Total Power, ±30° (dB)		≥25	≥25	≥25	≥25	≥25	≥25	≥25
Cross polar ratio	Main direction(dB)	≥17	≥17	≥17	≥17	≥17	≥17	≥17
	±60° (dB)	≥7	≥7	≥7	≥7	≥7	≥7	≥7
Isolation ports(dB)		≥25						
Isolation Frequency(dB)		≥30						
VSWR		< 1.5						
Intermodulation IM3		< -153 dBc(2x43dBm carrier)						
Impedance		50 Ω						
Max. Power per Input (at 50°C ambient temperature)		500 W			250 W			

Frequency Range(MHz)		2x1427-2690(Y2&Y3)				
		1427-1518	1695-1920	1920-2180	2300-2400	2490-2690
Polarization		±45°				
Horizontal 3dB Beamwidth(°)		69±5	66±5	63±5	58±5	60±5
Vertical 3dB Beamwidth(°)		9.0±0.8	7.5±0.8	6.5±0.6	6±0.6	5.5±0.6
Gain (dBi)		15.5±0.5	16.5±0.5	17.0±0.5	17.5±0.5	17.8±0.5
Electrical Downtilt		2°-12°				
Upper Sidelobe Suppression(dB)	First	≥16	≥16	≥16	≥16	≥16
Front-to-Back Ratio Total Power, ±30° (dB)		≥25	≥25	≥25	≥25	≥25
Cross polar ratio	Main direction(dB)	≥17	≥17	≥17	≥17	≥17
	±60° (dB)	≥7	≥7	≥7	≥7	≥7
Isolation ports(dB)		≥25				
Isolation Frequency(dB)		≥30				
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				



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Mechanical Specifications

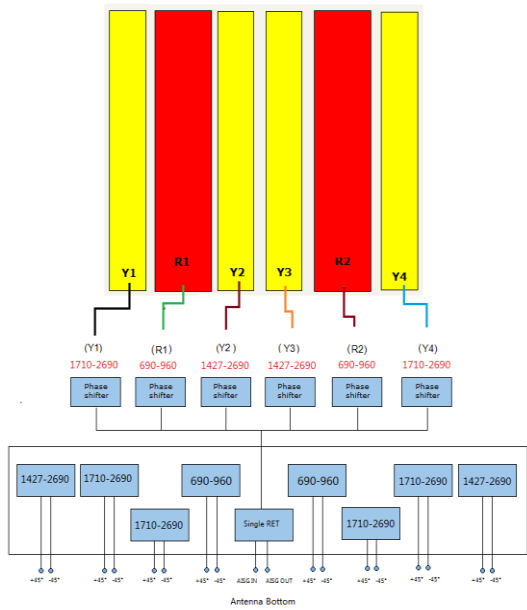
Radome Material	Fiberglass
Connector Type and Location	4.3-10x12 ,Bottom iRCU in:1 x 8 pin male iRCU out:1 x 8 pin female
Dimensions,HxWxD(mm)	1998 x 499 x 180
Packing Size(mm)	2300 x 600 x 330
Weight ,w/o Mounting kit(kg)	39
Weight w/ Downtilt Bracket(kg)	46
Packing Weight (w/ Downtilt Bracket) (kg)/(lbs)	52
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))	1155/274/694

Integrated RET Properties

RET Type	6 x 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	

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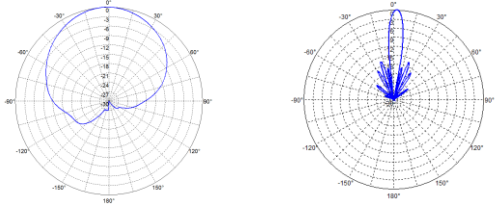
COMPREHENSIVE TILT CONFIGURATION



Frequency Range	Array	RET Unique ID
690-960MHz	R1	NDPMXXXXXXXX-7090R1
690-960MHz	R2	NDPMXXXXXXXX-7090R2
1710-2690MHz	Y1	NDPMXXXXXXXX-1727Y1
1427-2690MHz	Y2	NDPMXXXXXXXX-1427Y2
1427-2690MHz	Y3	NDPMXXXXXXXX-1427Y3
1710-2690MHz	Y4	NDPMXXXXXXXX-1727Y4

Note: (1) Physical RET Unit containing (6) Single RET

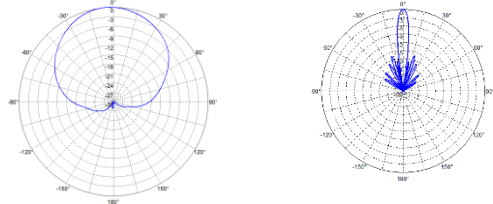
Radiation Pattern (690 - 824 MHz)



Horizontal Pattern

Vertical Pattern

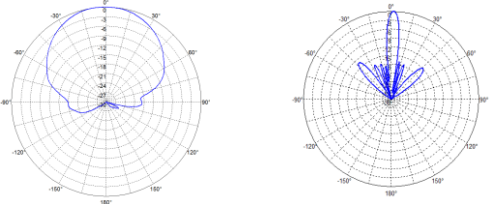
Radiation Patterns (824 - 894 MHz)



Horizontal Pattern

Vertical Pattern

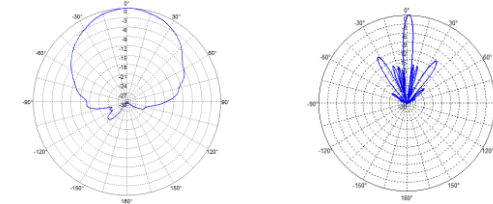
Radiation Pattern (1427 - 2180 MHz)



Horizontal Pattern

Vertical Pattern

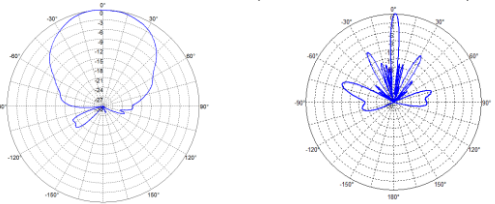
Radiation Patterns (2300 - 2400 MHz)



Horizontal Pattern

Vertical Pattern

Radiation Pattern (2490 - 2690 MHz)



Horizontal Pattern

Vertical Pattern