

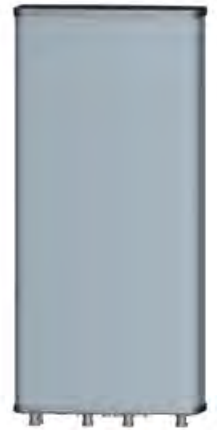
Frequency Range	3300-4200x4
Polarization	±45°
Half-Power Beam Width	80°
Electrical Downtilt	2°-12°x4

Type **BMF3-1R-RA80**

9-Ports 4x3300-4200 MHz 80°, 4x16 dBi, 2°-12°Tilt Antenna With 1 Integrated RCUs.

Electrical Specifications

General parameters	Frequency range (MHz)		3300~3600	3600~4200
	Polarization		±45	
	Electrical downtilt(°)		2~12	
	Electrical downtilt tolerance(°)		±1	
Calibration and electrical parameters	Coupling factor between calibration port and each antenna port (dB)		-26±2	
	Max.amplitude tolerance from calibration port to input ports(dB)		≤1	
	Max.phase tolerance from calibration port to input ports(°)		≤10	
	Ports VSWR		<1.5	
	Avg. power per capacity (W)		40	
	Co-polarization isolation between ports(dB)		≥20	
	Cross-polarization isolation between ports(dB)		≥23	
Radiation parameters	Single column Beam	Gain(dBi)	15.4	15.7
		Horizontal 3dB beam width(°)	95	70
		Vertical 3dB beam width(°)	6.5	5.5
		Cross polar ratio(dB, 0°)	≥16	
		Front to back ratio(dB)	≥25	
		Vertical sidelobe suppression for first sidelobe above main beam(dB)	≥15	
	65° Broadcast beam	Gain(dBi)	16.3	16.5
		Horizontal 3dB beam width(°)	65	
		Vertical 3dB beam width(°)	6.5	5
		Cross polar ratio(dB, 0°)	≥16	
		Front to back ratio(dB)	≥25	
		Vertical sidelobe suppression for first sidelobe above main beam(dB)	≥15	
	Service beam	0°direct beam gain(dBi)	20	21
		0°direct beam horizontal 3dB beam width(°)	≤28	
		0°direct beam front to back ratio(dB)	≥28	
		0°direct beam cross polar ratio(axial)(dB)	≥18	



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Mechanical Specifications

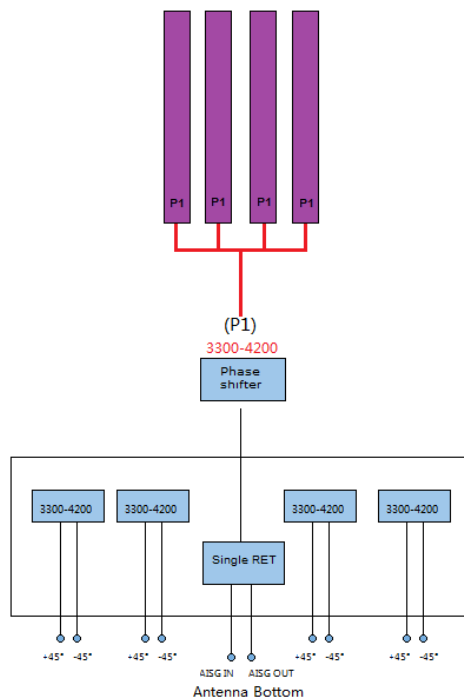
Radome Material	Fiberglass
Connector Type and Location	8x4.3-10 +1x4.3-10 iRCU in:1 x 8 pin male iRCU out:1 x 8 pin female
Dimensions,HxWxD(mm)/(inches)	900 x 280 x 125 / 35.4 x 11.0 x 4.9
Packing Size(mm)/(inches)	1200 x 410 x 270 / 47.2 x 16.1 x 10.6
Weight ,w/o Mounting kit(kg)/(lbs)	15.5 / 34.1
Weight with Downtilt Bracket(kg)/(lbs)	22.5 / 49.5
Weight with Fixed Bracket(kg)/(lbs)	20.5 / 45.1
Packing Weight (with Downtilt Bracket) (kg)/(lbs)	28.5 / 62.7
Packing Weight (with Fixed Bracket) (kg)/(lbs)	26.5 / 58.3
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))	307/74/219

Integrated RET Properties

Integrated RET-1 Repetitive		
RET Type		1 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

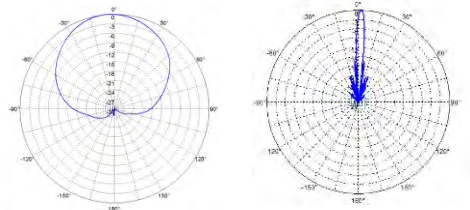
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COMPREHENSIVE TILT CONFIGURATION



Frequency Range	Array	RET Unique ID
3300-4200MHz	P1	NDPMXXXXXXXX-3342P1

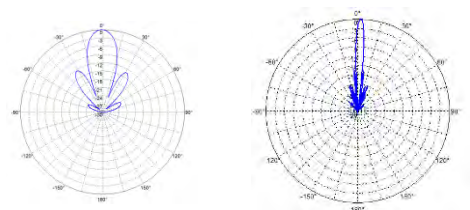
Radiation Pattern (3300- 4200 MHz)



Horizontal Pattern

Vertical Pattern

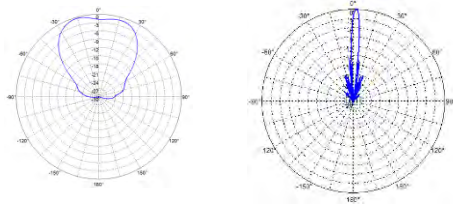
Radiation Pattern (3300 - 4200 MHz)(Service Beam)



Horizontal Pattern

Vertical Pattern

Radiation Pattern (3300 - 4200 MHz)(Broadcast Beam)



Horizontal Pattern

Vertical Pattern