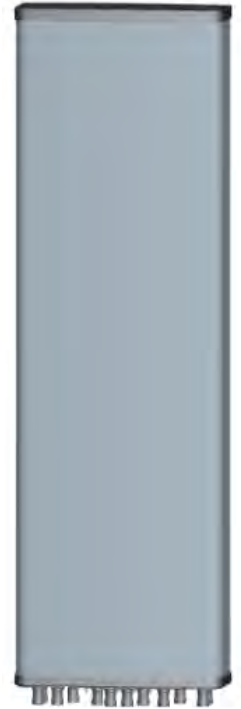


Frequency Range	617-894x2 1695-2690x4 2300-3800
Polarization	±45°
Half-Power Beam Width	65°
Electrical Downtilt	4°-14°x2 2°-12°x5

2 x 617-894 / 4 x 1695-2690 / 2300-3800MHz 65°, 2 x 16 / 4 x 18 / 16 dBi, 2 x 4°-14° / 4 x 2°-12° / 2°-12°
Tilt Antenna With 7 Integrated RCUs.

Electrical Specifications

General parameters	Frequency range (MHz)		2300-3800	
			2300-2690	3300-3800
	Polarization		±45	±45
	Electrical downtilt(°)		2~12	2~12
	Electrical downtilt tolerance(°)		±1	±1
Calibration and electrical parameters	Coupling factor between calibration port and each antenna port (dB)		-26±2	-26±2
	Max.amplitude tolerance from calibration port to input ports(dB)		≤0.9	≤0.9
	Max.phase tolerance from calibration port to input ports(°)		≤8	≤8
	Ports VSWR		<1.5	<1.5
	Avg. power per capacity (W)		40	40
	Co-polarization isolation between ports(dB)		≥20	≥20
	Cross-polarization isolation between ports(dB)		≥23	≥23
Radiation parameters	Single column Beam	Gain(dBi)	15±0.5	15.7±0.5
		Horizontal 3dB beam width(°)	90±15	70±15
		Vertical 3dB beam width(°)	8	5.5
		Cross polar ratio(dB, 0°)	≥16	≥16
		Front to back ratio(dB)	≥25	≥25
		Vertical sidelobe suppression for first sidelobe above main beam(dB)	≥15	≥15
	65° Broadcast beam	Gain(dBi)	16±0.5	17.1±0.5
		Horizontal 3dB beam width(°)	65±6	60±6
		Vertical 3dB beam width(°)	8±1	5.5±1
		Cross polar ratio(dB, 0°)	≥16	≥16
		Front to back ratio(dB)	≥25	≥25
		Vertical sidelobe suppression for first sidelobe above main beam(dB)	≥15	≥15
	Service beam	0°direct beam gain(dBi)	20±0.5	21±0.5
		0°direct beam horizontal 3dB beam width(°)	26±3	18±3
		0°direct beam front to back ratio(dB)	≥28	≥28
		0°direct beam cross polar ratio(axial)(dB)	≥18	≥18





Base Station Antennas

Type **BMF7-2A4J1M-RG65**

Frequency Range	617-894x2 1695-2690x4 2300-3800
Polarization	±45°
Half-Power Beam Width	65°
Electrical Downtilt	4°-14°x2 2°-12°x5

Frequency Range(MHz)		2x617-894			4x1695-2690			
		617-698	698-798	814-894	1695-1920	1920-2180	2300-2400	2490-2690
Polarization		±45°						
Horizontal 3dB Beamwidth(°)		71±5	65±4	60±4	66±5	63±3	60±4	61±4
Vertical 3dB Beamwidth(°)		12.5±1.2	11±0.8	9.5±0.7	7.5±0.5	6.5±0.5	6±0.4	5.5±0.3
Gain (dBi)		14.1±0.5	14.7±0.5	15.2±0.5	16.8±0.5	17±0.5	17.4±0.5	17.8±0.5
Electrical Downtilt		4°-14°			2°-12°			
Upper Sidelobe Suppression(dB)	First	≥16	≥16	≥16	≥16	≥16	≥16	≥16
Front-to-Back Ratio Total Power, ± 30° (dB)		≥22	≥23	≥24	≥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		≥25 dB						
Isolation Frequency		≥28 dB						
VSWR		< 1.5						
Intermodulation IM3		< -150 dBc(2x43dBm carrier)						
Impedance		50 Ω						
Max. Power per Input (at 50°C ambient temperature)		500 W			250 W			
Lightning Protection		DC Ground						

Mechanical Specifications

Radome Material	Fiberglass
Connector Type and Location	4.3-10 Female x12, Bottom 1xMQ5 Male+1xMQ4 Male iRCU in:1 x 8 pin male iRCU out:1 x 8 pin female
Dimensions,HxWxD(mm)/(inches)	2100 x 499 x 180 / 82.6 x 19.6 x 7.1
Packing Size(mm)/(inches)	2445 x 599 x 311 / 96.2 x 23.6 x 12.2
Weight ,w/o Mounting kit(kg)/(lbs)	53 / 116.6
Weight with Downtilt Bracket(kg)/(lbs)	60 / 129.8
Weight with Fixed Bracket(kg)/(lbs)	58 / 127.6
Packing Weight (with Downtilt Bracket) (kg)/(lbs)	71 / 156.2
Packing Weight (with Fixed Bracket) (kg)/(lbs)	69 / 151.8
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))	1291/207/967

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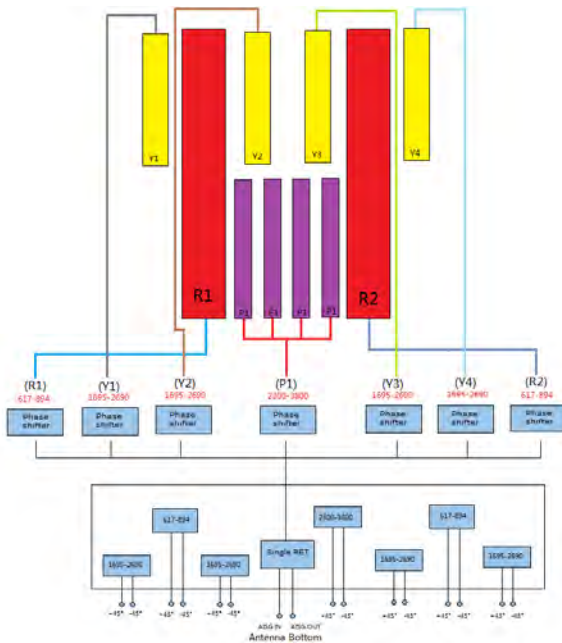
BMF7-2A4J1M-RG65 A02

Frequency Range	617-894x2 1695-2690x4 2300-3800
Polarization	±45°
Half-Power Beam Width	65°
Electrical Downtilt	4°-14°x2 2°-12°x5

Integrated RET Properties

RET Type		7x 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

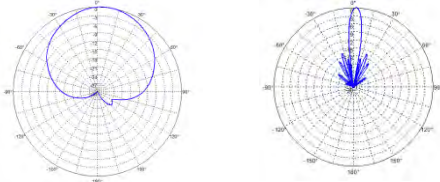
COMPREHENSIVE TILT CONFIGURATION



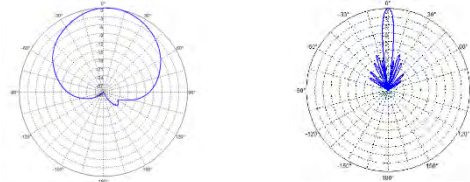
Frequency Range	Array	RET Unique ID
617-894MHz	R1	NDPMXXXXXXXX-6089R1
617-894MHz	R2	NDPMXXXXXXXX-6089R2
1695-2690MHz	Y1	NDPMXXXXXXXX-1727Y1
1695-2690MHz	Y2	NDPMXXXXXXXX-1727Y2
1695-2690MHz	Y3	NDPMXXXXXXXX-1727Y3
1695-2690MHz	Y4	NDPMXXXXXXXX-1727Y4
2300-3800MHz	P1	NDPMXXXXXXXX-2338P1

Frequency Range	617-894x2 1695-2690x4 2300-3800
Polarization	$\pm 45^\circ$
Half-Power Beam Width	65°
Electrical Downtilt	4° - 14° x2 2° - 12° x5

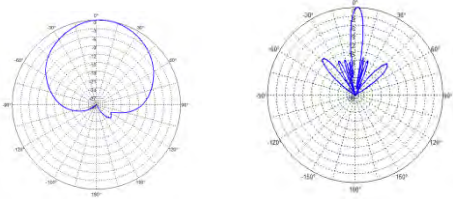
Radiation Pattern (617 - 824MHz)


Horizontal Pattern Vertical Pattern

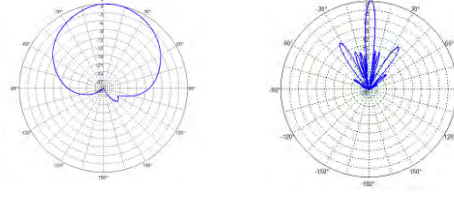
Radiation Patterns (824 - 894 MHz)


Horizontal Pattern Vertical Pattern

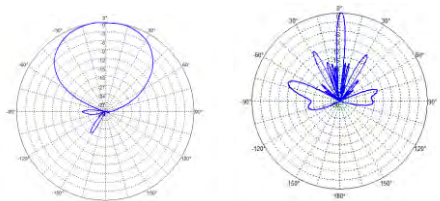
Radiation Patterns (1695 - 2170 MHz)


Horizontal Pattern Vertical Pattern

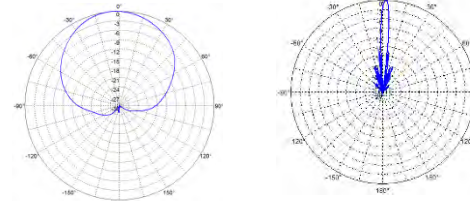
Radiation Patterns (2300 - 2400 MHz)


Horizontal Pattern Vertical Pattern

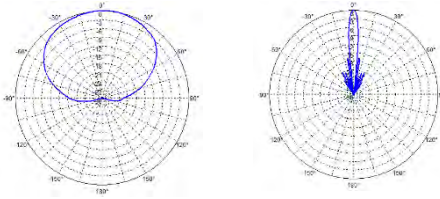
Radiation Pattern (2490- 2690 MHz)


Horizontal Pattern Vertical Pattern

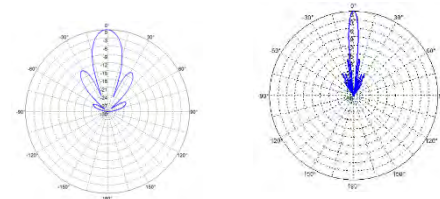
Radiation Pattern (2300- 2690 MHz)


Horizontal Pattern Vertical Pattern

Radiation Pattern (3300- 3800 MHz)

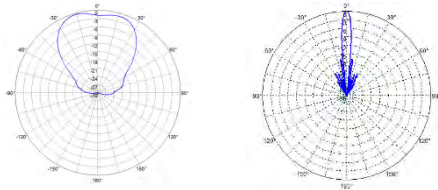

Horizontal Pattern Vertical Pattern

Radiation Pattern (2300- 2690 MHz)(Service Beam)


Horizontal Pattern Vertical Pattern

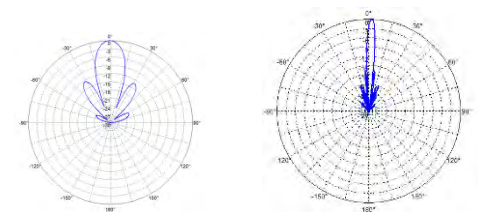
Frequency Range	617-894x2 1695-2690x4 2300-3800
Polarization	$\pm 45^\circ$
Half-Power Beam Width	65°
Electrical Downtilt	4° - 14° x2 2° - 12° x5

Radiation Pattern (2300- 2690 MHz)(Broadcast Beam)



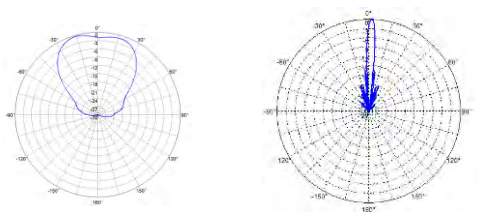
Horizontal Pattern Vertical Pattern

Radiation Pattern (3300- 3800 MHz)(Service Beam)



Horizontal Pattern Vertical Pattern

Radiation Pattern (3300- 3800 MHz)(Broadcast Beam)



Horizontal Pattern Vertical Pattern