

Type BMF6-2A2J1N1Q-RF65

2x617-894 / 2x1695-2690 / 2490-2690/3300-3800 MHz 2x 65° /2x 65° /80°/65°, 2 x15 / 2 x18 / 14.5/15.0 dBi, 2 x 2° - 12° / 2 x 2° - 12° / 2° - 12° / 2° - 12° Tilt Antenna With 4 Integrated RCUs.

Electrical Specifications

General parameters	Frequency range (MHz)		2490~2690	3300~3800
	Polarization		± 45	
	Electrical downtilt($^\circ$)		2~12	
	Electrical downtilt tolerance($^\circ$)		± 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($^\circ$)		≤ 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)	14.5	15.0
		Horizontal 3dB beam width($^\circ$)	80	65
		Vertical 3dB beam width($^\circ$)	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	
	65° Broadcast beam	Gain(dBi)	15.8	16.0
		Horizontal 3dB beam width($^\circ$)	65	
		Vertical 3dB beam width($^\circ$)	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)	19.5	20.5
		0° direct beam horizontal 3dB beam width($^\circ$)	≤ 28	
		0° direct beam front to back ratio(dB)	≥ 28	
		0° direct beam cross polar ratio(axial)(dB)	≥ 18	





Base Station Antennas

Frequency Range

617-894x2
1695-2690x2
2490-2690x1
3300-3800x1

Polarization

±45°

Half-Power Beam Width

65°

Electrical Downtilt

2°-12°x6

Type **BMF6-2A2J1N1Q-RF65**

Frequency Range(MHz)		2x617-894			2x1695-2690			
		617-698	698-824	824-894	1695-1920	1920-2180	2300-2400	2490-2690
Polarization		±45°						
Horizontal 3dB Beamwidth(°)		71	65	60	66	63	58	60
Vertical 3dB Beamwidth(°)		13.5	12	10.5	7.5	6.5	6	5.5
Gain (dBi)		13.9	14.4	14.9	16.5	17.0	17.5	17.8
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)		≥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		≥30 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 x8, Bottom 2xMLOC5 Male+2xMLOC4 Male(2x8+1Port(Cal port)) iRCU in:1 x 8 pin male iRCU out:1 x 8 pin female
Dimensions,HxWxD(mm)/(inches)	1850 x 499 x 180 / 72.8 x 19.6x 7.1
Packing Size(mm)/(inches)	2220 x 560 x 300 / 87.4 x 22.0 x 11.8
Weight ,w/o Mounting kit(kg)/(lbs)	45 / 99
Weight with Downtilt Bracket(kg)/(lbs)	52 / 114.4
Weight with Fixed Bracket(kg)/(lbs)	50 / 110
Packing Weight(with Downtilt Bracket) (kg)/(lbs)	60 / 132
Packing Weight (with Fixed Bracket)(kg)/(lbs)	58 / 127.6
Max. Wind Velocity(mph)	150
Mounting hardware	Φ 50 mm ~ Φ 115 mm
Mechanical tilt	0-15°
Operational Temperature(°C)	-40 to +65
Operational Humidity(%)	<95
Wind Load at 100mph (Frontal/lateral/Rearside(N))	1067/239/772

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BMF6-2A2J1N1Q-RF65 A02



Base Station Antennas

Frequency Range

617-894x2
1695-2690x2
2490-2690x1
3300-3800x1

Polarization

±45°

Half-Power Beam Width

65°

Electrical Downtilt

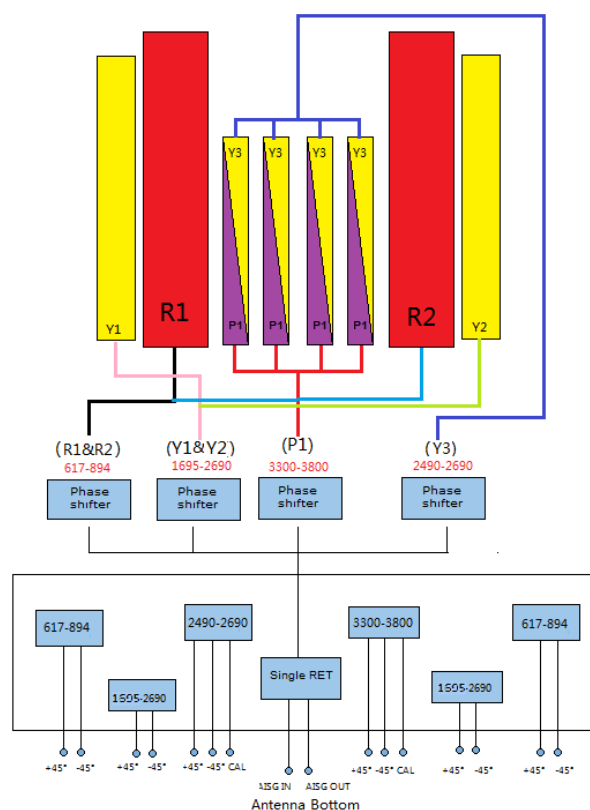
2°-12°x6

Type **BMF6-2A2J1N1Q-RF65**

Integrated RET Properties

RET Type	4 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	

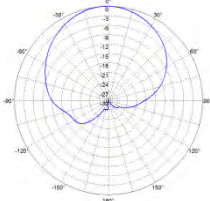
COMPREHENSIVE TILT CONFIGURATION



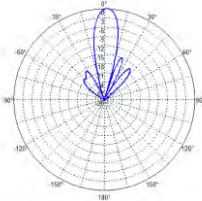
Frequency Range	Array	RET Unique ID
617-894MHz	R1/R2	NDPMXXXXXXXX-6089R1
1695-2690MHz	Y1/Y2	NDPMXXXXXXXX-1727Y1
2490-2690MHz	Y3	NDPMXXXXXXXX-1727Y3
3300-3800MHz	P1	NDPMXXXXXXXX-3338P1

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Radiation Pattern (617 - 824MHz)

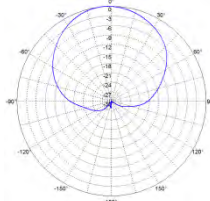


Horizontal Pattern

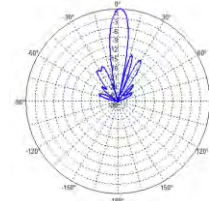


Vertical Pattern

Radiation Patterns (824 - 894 MHz)

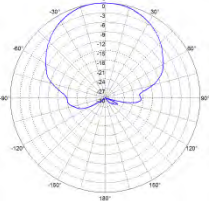


Horizontal Pattern

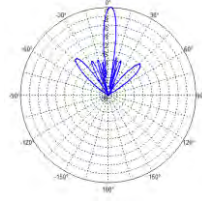


Vertical Pattern

Radiation Patterns (1695 - 2170 MHz)

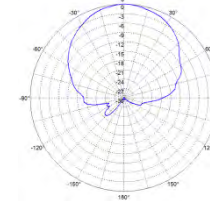


Horizontal Pattern

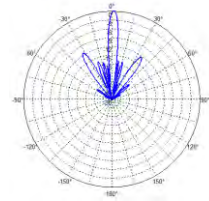


Vertical Pattern

Radiation Patterns (2300 - 2690 MHz)

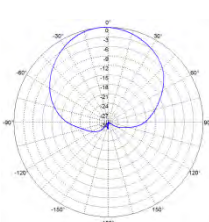


Horizontal Pattern

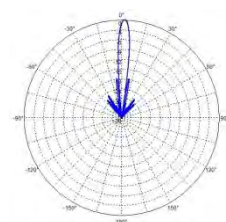


Vertical Pattern

Radiation Pattern (2490- 2690 MHz)

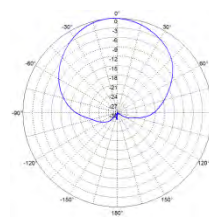


Horizontal Pattern

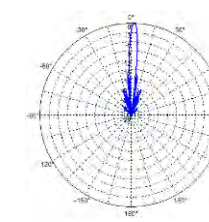


Vertical Pattern

Radiation Pattern (3300- 3800 MHz)

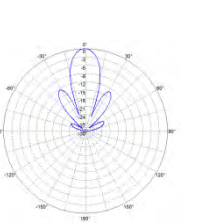


Horizontal Pattern

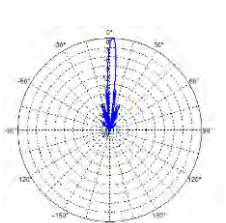


Vertical Pattern

Radiation Pattern (2490- 3800 MHz)(Service Beam)

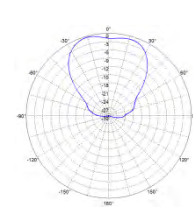


Horizontal Pattern

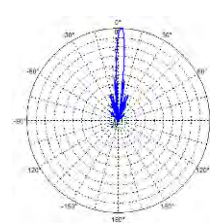


Vertical Pattern

Radiation Pattern (2490- 3800 MHz)(Broadcast Beam)



Horizontal Pattern



Vertical Pattern