RDM-MBF6-A-8414-1M-X-001

■ ELECTRICAL SPECIFICATION

GPS ANTENNA

Parameters	Value	Unit
Frequency Range	1575.420 ±3	MHz
Band Width	CF ±5	MHz
Polarization	RHCP	-
Gain (Zenith)	2.0	dBic
VSWR, max	1.5	-
Impedance	50	Ω
Axial Ratio, max	3	dB

LNA

Parameters	Value	Unit
Gain, typ	28 ±2	dB
Noise Figure, max	1.5	dB
VSWR, max	2.0	-
Supply Voltage	2.2 ~ 5	VDC
Current Consumption, max	15	mA

GSM ANTENNA

Parameters	Value		Unit
Frequency Range	824 ~ 960	1710 ~ 2170	MHz
Polarization	Linear		-
Gain	2.0		dBi
VSWR, max	2.0		-
Impedance	50		Ω

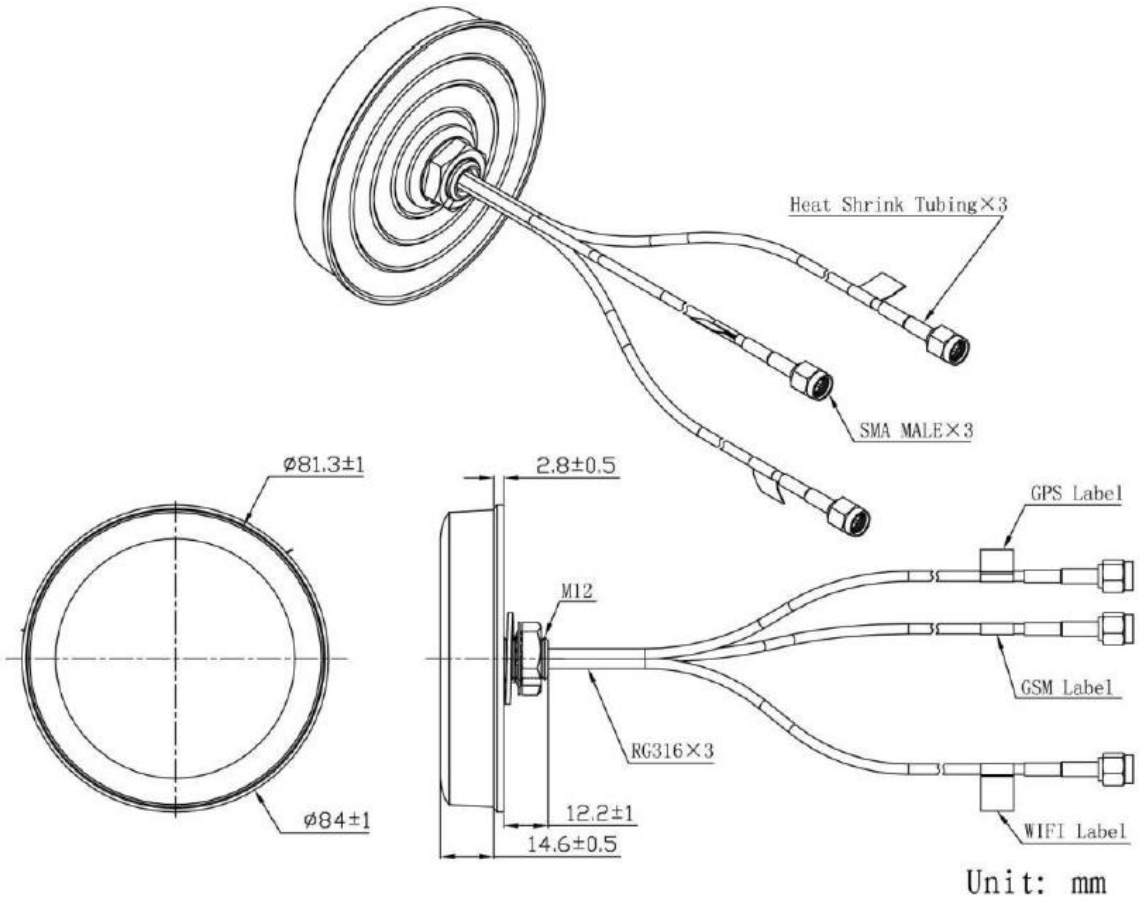
WIFI ANTENNA

Parameters	Value	Unit
Frequency Range	2400 ~ 2483.5	MHz
Band Width	83.5	MHz
Polarization	Linear	-
Gain	3.0	dBi
VSWR, max	2.0	-
Impedance	50	Ω

■ MECHANICAL SPECIFICATION

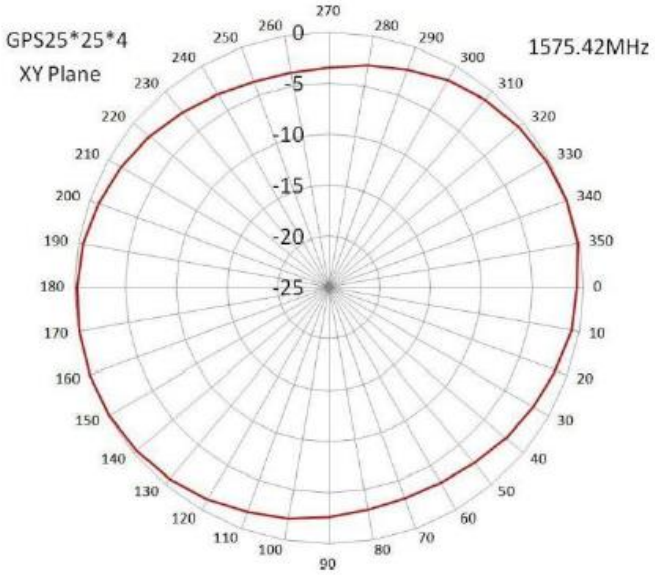
Parameters		Value	Unit
Connector		SMA	-
Cable		RG174	-
Radome Material		ABS	-
Mounting Method		Screw	-
Operating Temperature Range		-40 ~ +85	˚C
Relative Humidity, max		95	%
Ingress Protection	@ Exclude Cable Outlet	IP65 ~ IP66	-
Vibration	@ 1.5 mm amplitude 2hours	10 ~ 55	Hz
ROHS Compliant		YES	-

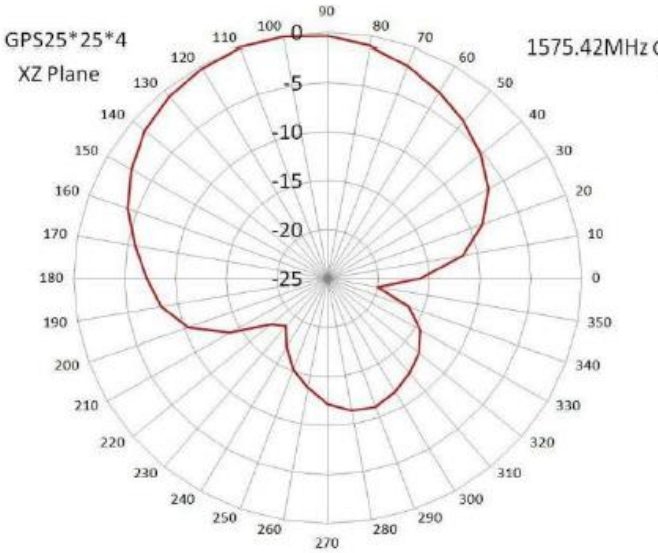
■ DIMENSIONS

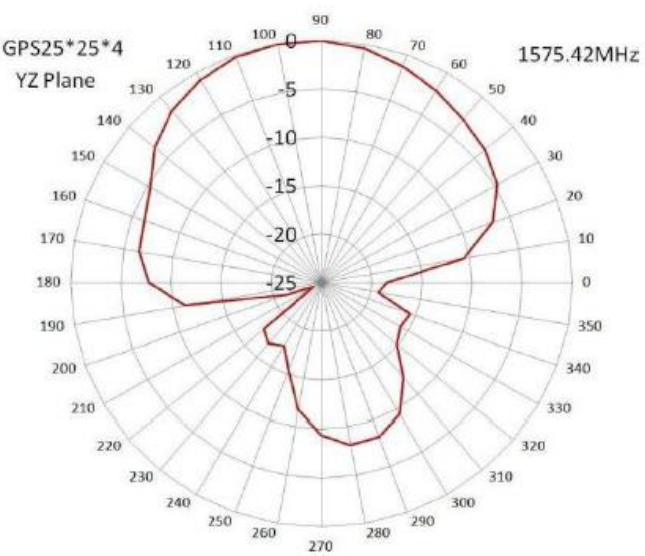


■ RADIATION PATTERN

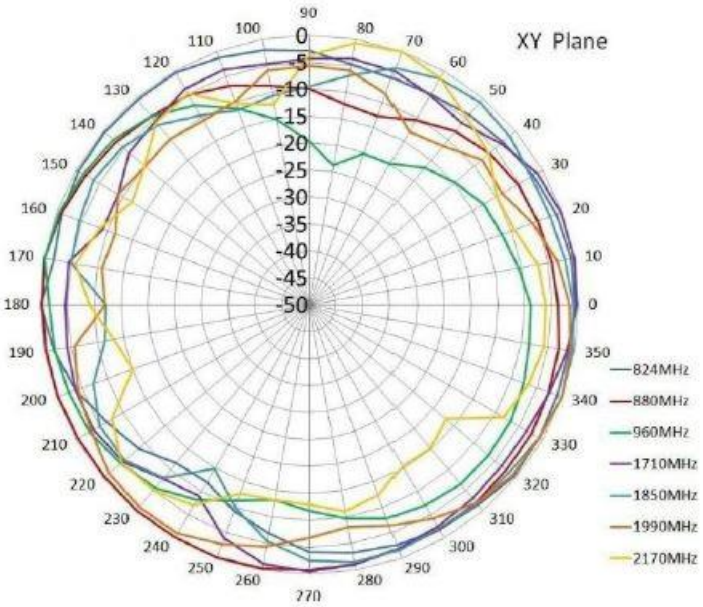
GPS ANTENNA

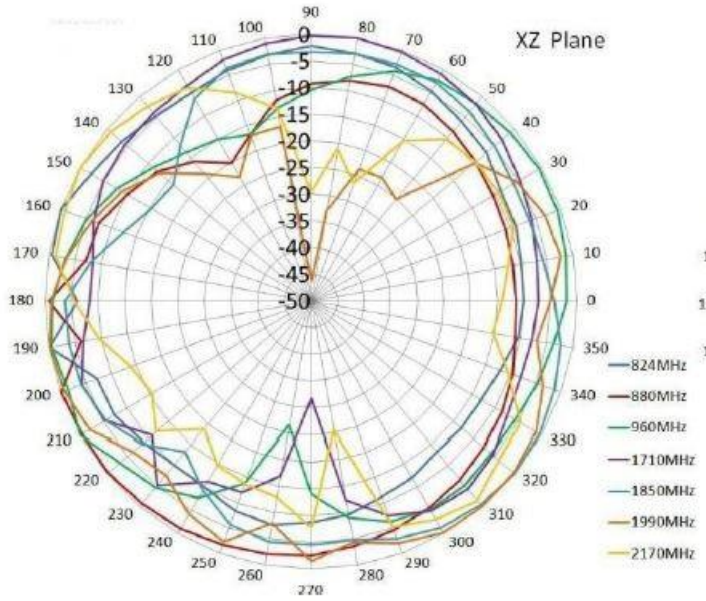


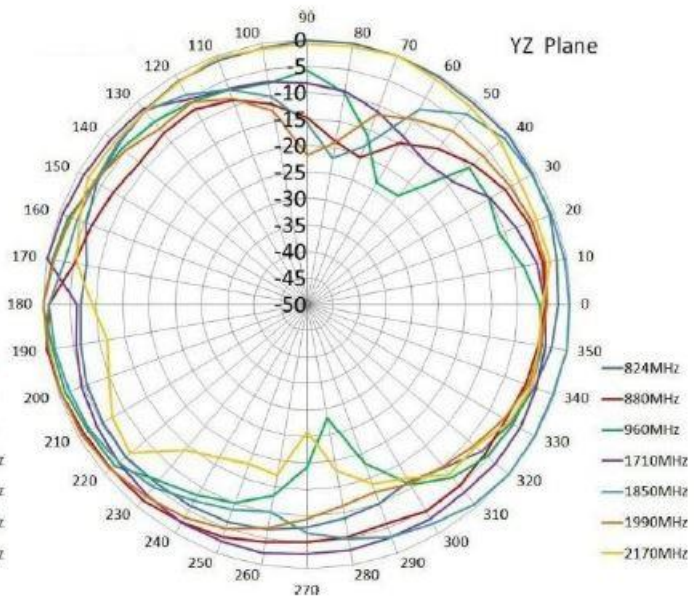




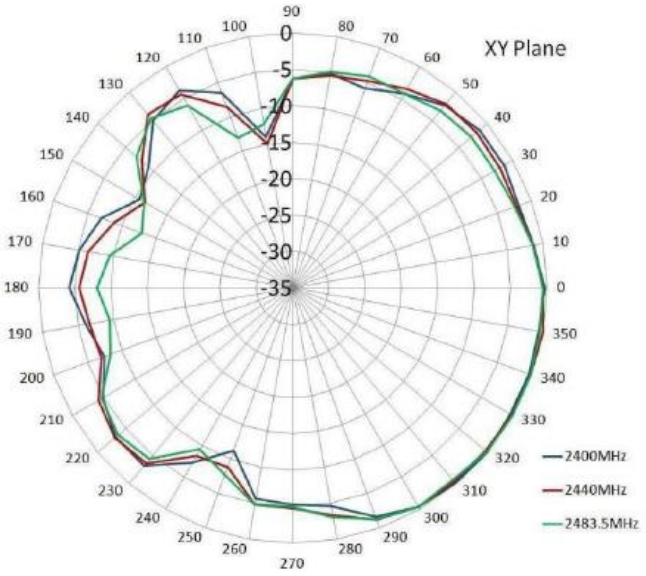
GSM ANTENNA

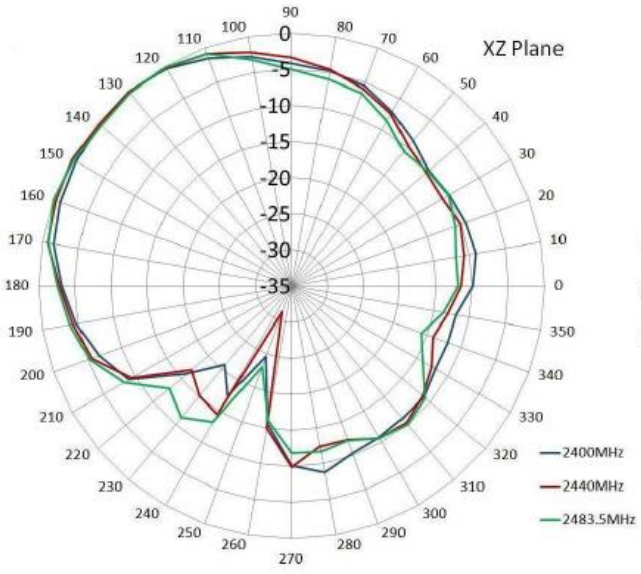

XY Plane
824MHz
880MHz
960MHz
1710MHz
1850MHz
1990MHz
2170MHz

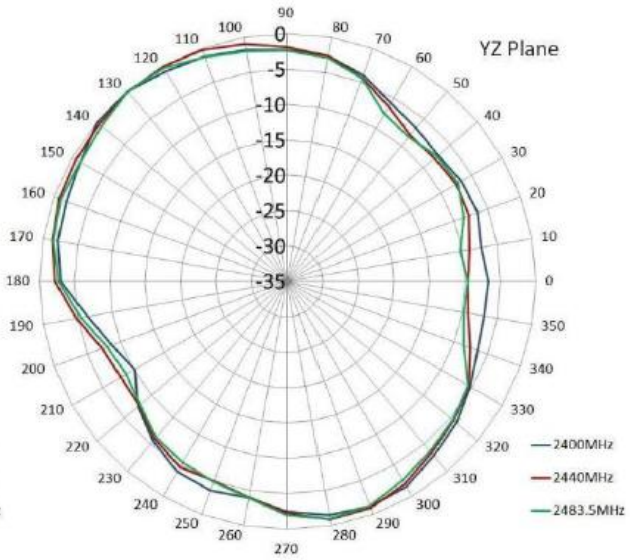

XZ Plane
824MHz
880MHz
960MHz
1710MHz
1850MHz
1990MHz
2170MHz


YZ Plane
824MHz
880MHz
960MHz
1710MHz
1850MHz
1990MHz
2170MHz

WIFI ANTENNA







ENVIRONMENTAL

PARAMETER	VALUE
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant

APPROVAL

RALTRON	
DRAWN BY:	AR, July 13, 2022
APPROVED BY:	CP, July 13, 2022
REVISION:	A, Initial Release