



# MEA-1621-GGG

GPS/GLONASS/IRIDIUM/CELLULAR ANTENNA

Ordering Part #: 100-00098-01

## Description

The MEA-1621-GGG is an external antenna designed for the Iridium, GPS, GLONASS, and cellular networks. The antenna provides exceptional pattern control, polarization purity and high efficiency. It offers a low profile design with easy mounting, featuring three cables with integrated SMA connectors and is rated IPX7. This low profile antenna is designed with rugged PC+ABS plastic black housing and is ideal for the most demanding environmental challenges. The MEA-1621-GGG provides outstanding performance for any telematics and fleet management application.

## GPS/GLONASS Electrical Specifications

Parameter	Specifications
Frequency	1575.42 / 1602 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Polarization	Linear
Gain @ Zenith	3 dBi Typ. @ 1575 MHz / 2.5 dBi Typ. @ 1602 MHz

## LNA Electrical Specifications

Parameter	Specifications
Frequency	1575.42 / 1602 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Antenna Gain (@3.3V)	28 dB Typ. / 25 dB Min.
DC Power Input	3 ~ 5 V
Noise Figure	3 dB Typ.
Power Consumption (@3.3V)	9 Typ. mA

## Cellular Electrical Specifications

Parameter	Specifications
Frequency	824~960 / 1710~2170 MHz
VSWR	824~960 MHz < 6.0 / 1710~2170 MHz < 4.0
Impedance	50 Ohm
Peak Gain	-0.56~2.69 dBi @ 824~960 MHz 1.69~5.2 dBi @ 1710~2170 MHz
Average Efficiency	824~960 MHz > 45% 1710~2170 MHz > 50%



## Features

- Optimized for GPS/GLONASS/IRIDIUM/ Cellular networks
- Easy mounting
- 1m cable length
- RG-174, CFD-200 cables
- Rugged housing
- Customer specification connectors
- IPX7 waterproof housing

## Applications

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Iridium (SBD) Short Burst Data
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement





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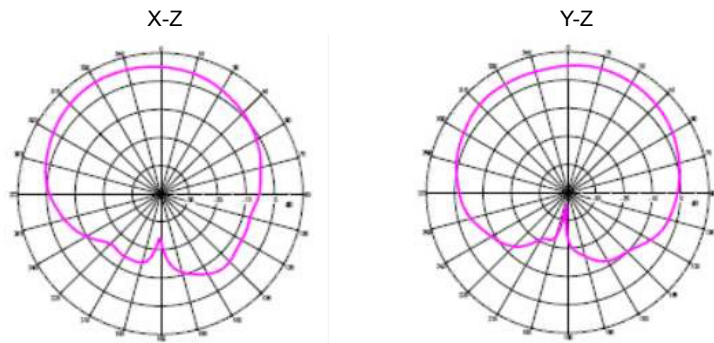
## Iridium Electrical Specifications

Parameter	Specifications
Frequency	1621 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Polarization	RHCP
Gain @ Zenith	3.5 dBic Min. @ 1621 MHz

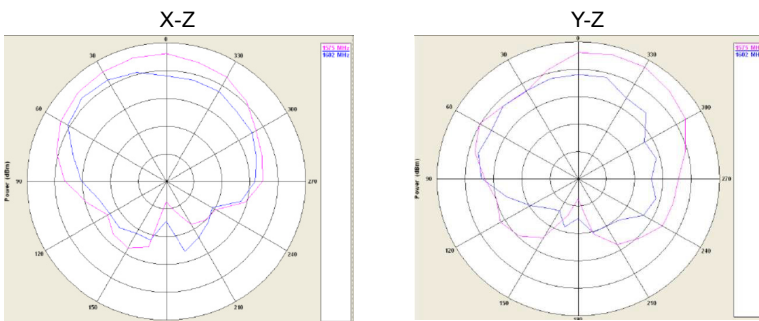
## Mechanical Specifications

Parameter	Specifications
Antenna Dimensions (mm)	Diameter 145 x (H) 32.8 mm
Mounting Function	Screw Mount
Operating Temperature	-40 °C ~ +85 °C
Housing Material & Color	PC + ABS & Black
Cable	RG-174 (GPS) / CFD-200 (Cellular) / CFD-200 (Iridium)
Cable Length	1 meter
Connector	SMA / FAKRA or customer specified
Waterproof	IPX7

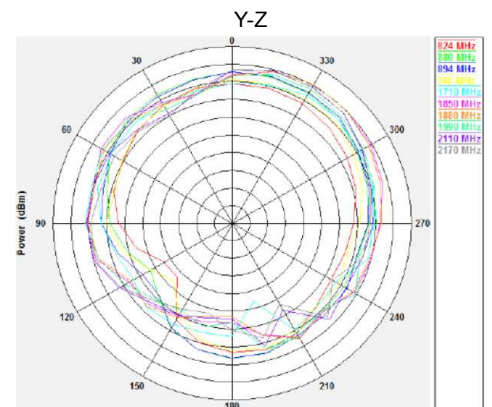
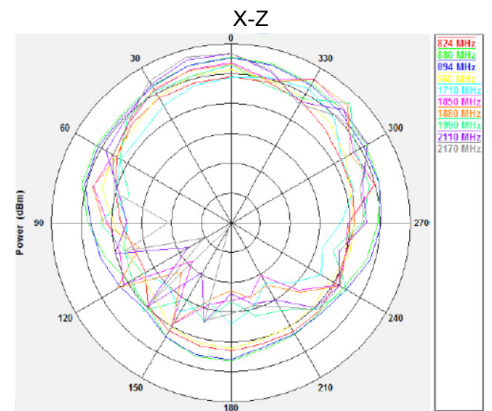
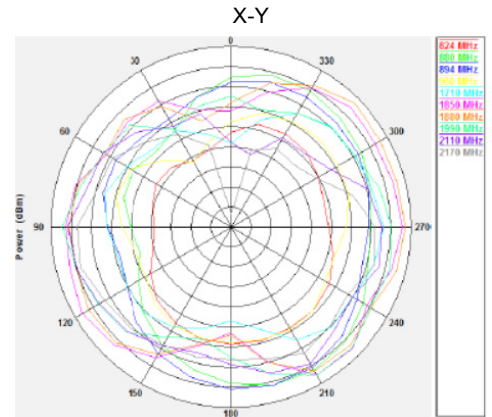
## Iridium Patterns

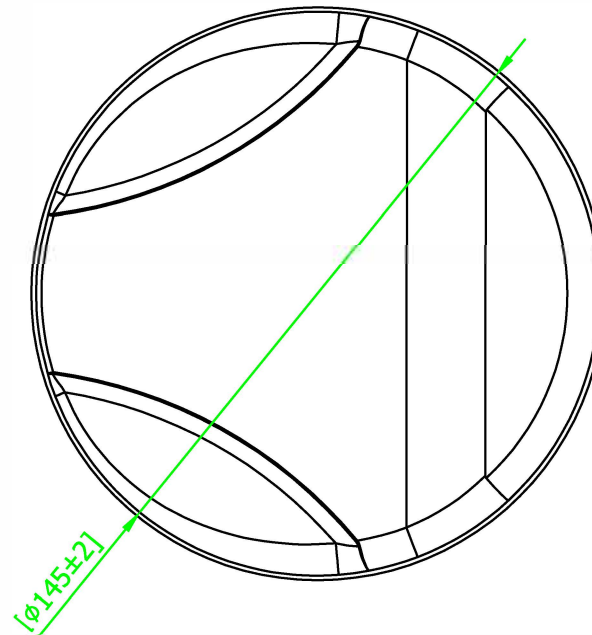
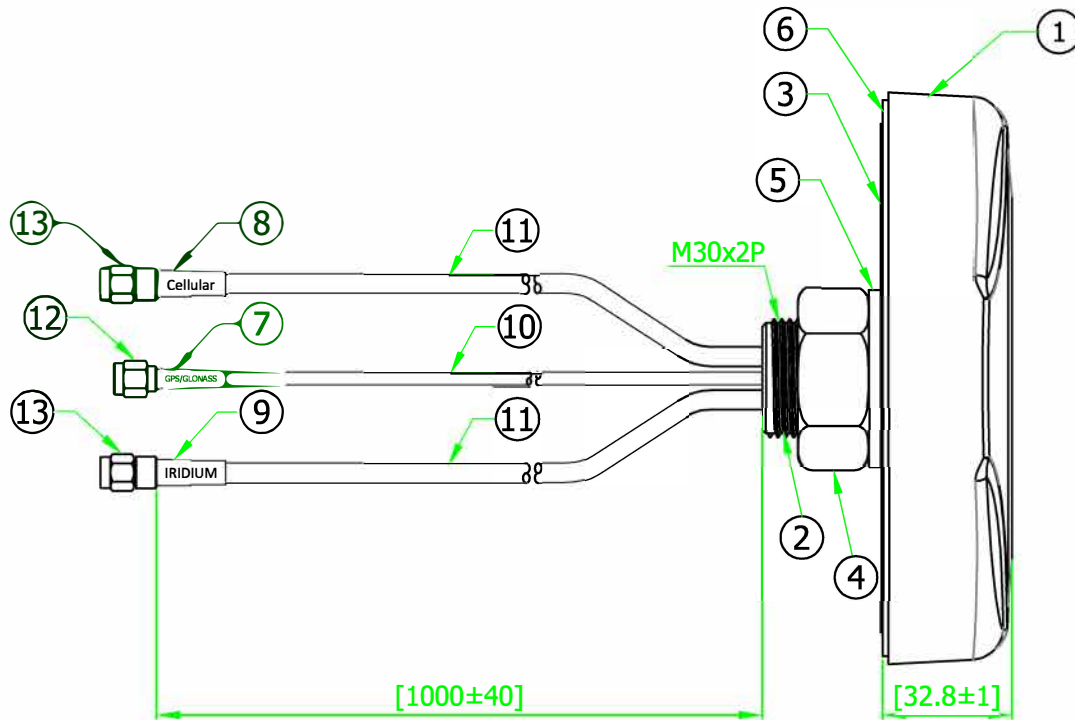


## GPS/GLONASS Patterns



## Cellular Patterns





GPS/GLONASS Active Antenna:  
 Frequency: 1575.42/1602 MHz.  
 Cellular Antenna:  
 Frequency: 824~960/1710~2170 MHz.  
 IRIDIUM Antenna:  
 Frequency: 1621 MHz.  
 Waterproof level: IPX7

Note: Critical To Function Dimension Are Mark With [X...]

13	Connector	SMA(M) for CFD-200	2	Gold Plated
12	Connector	SMA(M) for RG-174	1	Gold Plated
11	Cable	CFD-200	2	Black
10	Cable	RG-174	1	Black
9	H.S Tube(CFD-200)	Heat Shrink Tube(IRIDIUM)	1	Blue on white
8	H.S Tube(CFD-200)	Heat Shrink Tube(Cellular)	1	Red on white
7	H.S Tube(RG-174)	Heat Shrink Tube(GPS/GLONASS)	1	Blue on white
6	Waterproof Rubber	Silicone Rubber	1	Black
5	Washer	φ45*3.0t mm	1	Ni Plated
4	Hexagon NUT	M30*2P,T=18mm	1	Ni Plated
3	Black Foam Adhesive	3M 9448HK+CR4305 T=2	1	White Liner
2	Antenna Base	Aluminum Alloy	1	Ni Plated
1	Antenna Housing	PC+ABS	1	Black
NO	DESCRIPTION		Q'TY	REMARK

CUSTOMER'S SINGATURE

XX.	±5.0	APPROVED
X.	±2.0	
.X	±1.0	CHECKED
.XX	±0.5	
.XXX	±0.1	DRAWING

CUSTOMER:		
PART NO :		
PARTNAME :		
P/NO :		
REV	UNIT	FILE :
A	mm	SHEET : 1/1

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 WIRELESS INNOVATIONS COMPANY