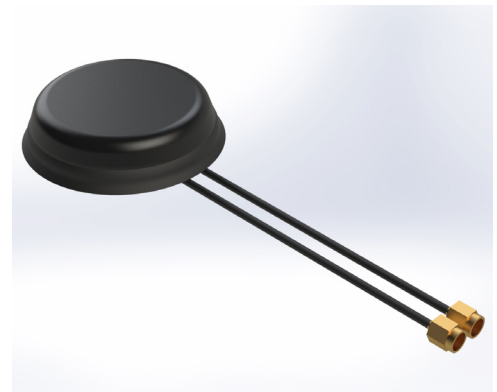




# MEA-868-IGG

868 MHz ISM/GPS/GLONASS SCREW MOUNT

Part #: 100-00251-01



## Description

The MEA-868-IGG is a 2-in-1 antenna that combines high performance 868 MHz ISM, GPS, GLONASS and Galileo standard. The antenna's excellent radiation pattern, exceptional out-of-band rejection, and low noise figure ensures optimal performance of GNSS systems. It features a 2 m cable with an integrated SMA, SMB, or MCX connector (customer choice). This low profile screw mount is ideal for public safety, utilities tracking, and IOT applications. This antenna offers a ultra-low profile design with easy mounting and customizable cables and connector options.

The antenna is designed with rugged ASA black housing and is ideal for the most demanding environmental challenges. The MEA-868-IGG is IP67 rated.

## Electrical Specifications

Cable 1 - 868 MHz ISM Antenna

Parameter	Specification
Standards	ZigBee, ISM, SIGFOX, LoRa
Frequency (MHz)	863-870
Return Loss (dB)	~ -14.7
VSWR	~ 1.5:1
Efficiency (%)	~ 51.7
Peak Gain (dBi)	~ 3.2
Average Gain (dB)	~ -2.9
Impedance (Ω)	50
Polarization	Linear
Radiation Pattern	Omni-Directional
Max Input Power (W)	25
Connector Type	SMA-Male (other connectors available)
Cable Length	200 cm (custom length available)
Cable Type	D302 (other cable type available)

## Features

- 2 in1 antenna : 868 MHz ISM and GPS/GLONASS frequency standard
- Easy mounting: Screw Mount
- Anti-Rotation Mechanism
- Low Profile
- High Gain
- Customizable Cable and Connector
- IP67
- IP69
- IK09

## Applications

- IoT applications
- Smart meters
- Tracking/mapping devices
- Asset tracking
- Telematics
- Container & logistics
- Public safety
- Industrial applications

Cable 2 - GPS/GLONASS Antenna

Parameter	Specification	
Standard	GPS/QZSS/Galileo	GLONASS
Frequency (MHz)	1575.42	1598-1606
Patch Size (mm)	25 x 25 x 4	
Return Loss (dB)	<= -15.0	
VSWR (dB)	<= 1.4:1	
Impedance ( $\Omega$ )	50	
Polarization	RHCP	
Radiation Pattern	Hemispherical	
Saw Filter	Pre-filter	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.5 typ	
Voltage (V)	1.5 - 3.6	
Current (mA)	9 typ	
Power Consumption (mW)	24.3 typ	
ESD Protection (kV)	2kV	
Connector Type	SMA-Male (other connectors available)	
Cable Length	200 cm (custom length available)	
Cable Type	LL100 (other cable type available)	

**Antenna Measurement Conditions:**

Mounted on 30 x 30 x 0.25 cm metal plate  
 200 cm of cable D302  
 Measured in certified CTIA 3D anechoic chamber

**Mechanical and Environmental Specifications**

Parameter	Specification
Mounting Type	Screw Mount
Dimensions (mm)	$\varnothing$ 77.3 x 15
Weight (g)	130
Max. Tighten Torque (Nm)	6 Nm
Radome	ASA
Radome Color	Black
Antenna Base	Zamak
Operating Temperature (C)	-40 to +85°
Storage Temperature (C)	-40 to +85°
Certificates	IP67, IP69
Substance Compliance	RoHS

# Radiation Performance

## MEA-868-IGG

