



# MEA-868-SM-50

868 MHz ISM Screw Mount  
Part #: 189-00064-01

## Description

The MEA-868-SM-50 is a high gain & efficiency antenna to be used for 868MHz ISM wireless applications. This external mount rugged antenna is ideal for high performance outdoor or indoor applications. It is designed for IOT, Telematics and systems. The high efficiency and gain along with the omni-directional properties provide this antenna a consistent and stable long range connectivity with high throughput data to devices for 868MHz needs. The antenna housing consist of black UV resistant rugged plastics and a heavy-duty metal base for optimal installations. The cable & connector are customizable. This is an ideal antenna for LoRa, Sigfox and NB-IOT applications.



## Electrical Specifications

Parameter	Specification
Frequency Range	863-870 MHz
Band	868 MHz
Return Loss	-21.3 dB
VSWR	1.2:1
Efficiency	42.1%
Peak Gain	2.0 dBi
Average Gain	-3.8 dB
Impedance	50 Ω
Polarisation	Linear
Radiation Pattern	Omni-Directional
Max. Input Power	25 W

## Features

- 868MHz ISM
- LoRa/ Sigfox/ NB-IOT
- Screw Mount
- Low Profile
- Customized Cable and Connector
- Dimensions 77.3 × 15 mm
- IP67, IP69

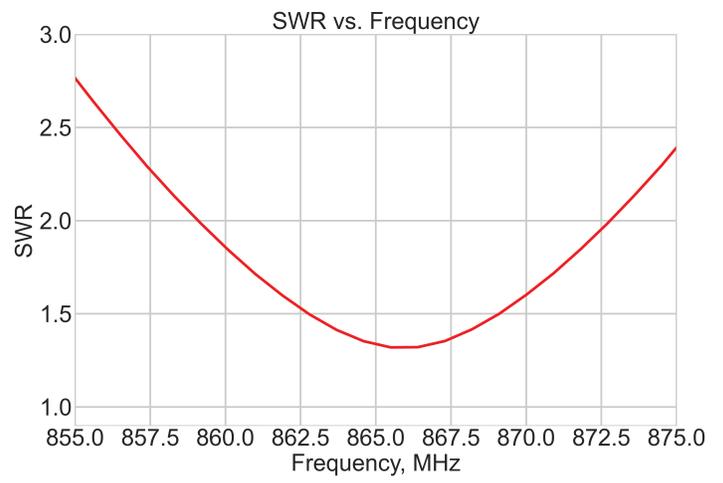
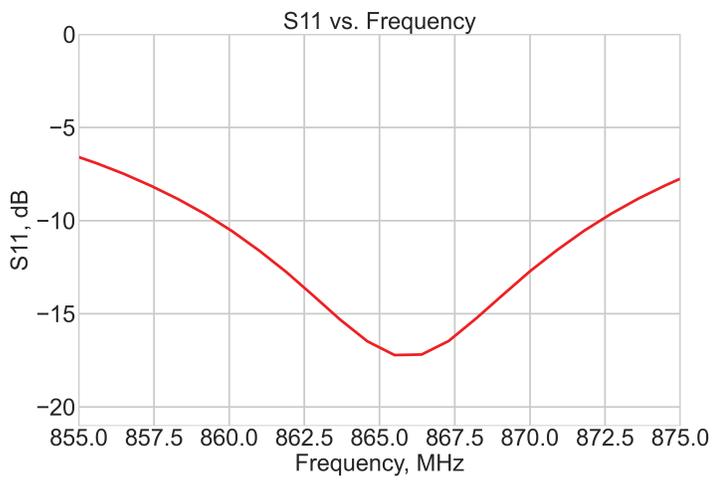
## Applications

- Remote mesh networks
- Smart meters
- IOT
- Public Safety

## Mechanical Specification

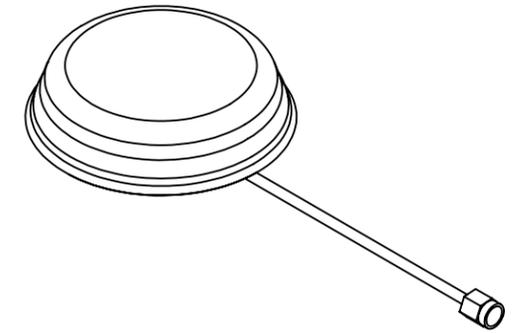
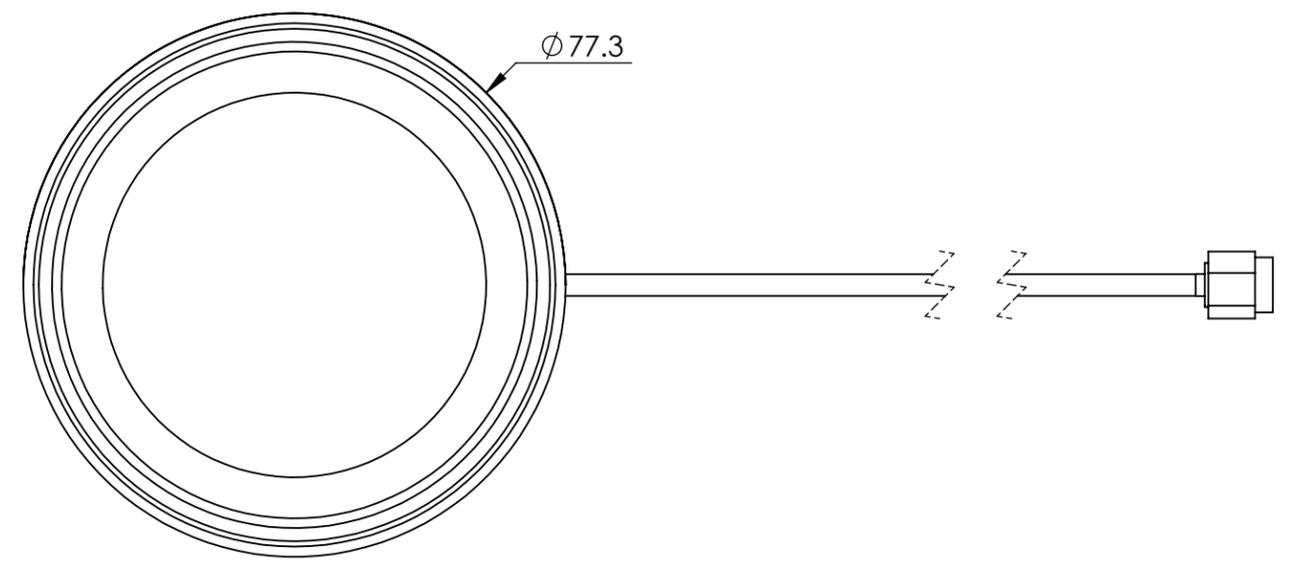
Parameter	Specification
Antenna Dimensions	Ø 77.3 x 15 mm
Operating Temperature	-40°C to 85°C
Connector Type	Most RF Connectors (SMA-Male Standard)
Mounting Type	Screw Mount
Random	ASA
Radome color	Black
Substance Compliance	RoHS
Certificates	IP67, IP69

\*Mounted on Ground Plane of 30 x 30 cm



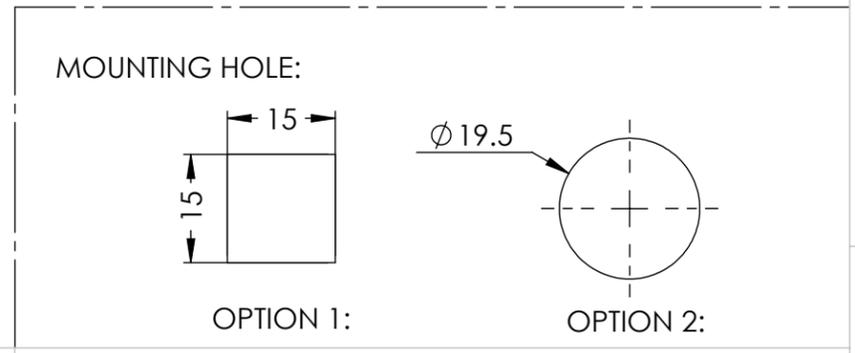
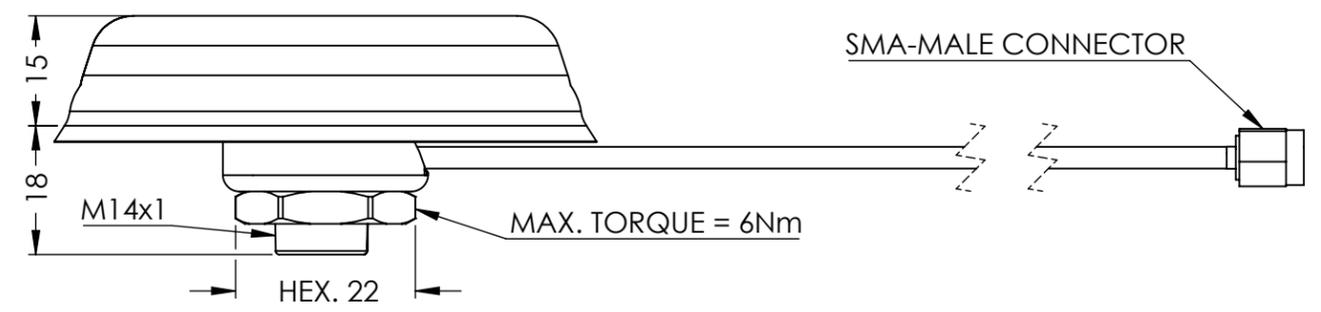
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DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-12-15	SZ



NOTES:

- FREQUENCY: 863-870 MHz
- DIMENSIONS ARE AFTER MOUNTING
- CUSTOMIZABLE CABLE AND CONNECTOR TYPE
- MOUNTING TYPE: SCREW MOUNT
- MATERIALS:
  - RADOME: ASA
  - RADOME COLOR: BLACK
  - ANTENNA BASE: ZAMAK
  - GASKET: TPE
- OPERATING TEMPERATURE: -40°C ~ +85°C
- STORAGE TEMPERATURE: -40°C ~ +85°C
- CERTIFICATIONS: IP67, IP69K



ITEM 189-00064 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2021-12-15	SZ

189-00064 CONFIGURATION TABLE			
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE
-01	RG174	300 cm	SMA-MALE

UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN MM  
 TOLERANCES:  
 FRACTIONAL: ±  
 ANGULAR: MACH ± .5° BEND ±  
 ONE PLACE DECIMAL ± 1.0  
 TWO PLACE DECIMAL ± .50

	NAME	DATE
DRAWN	SZ	2021-12-15
CHECKED	ZX	2021-12-15
ENG APPR.	NPC	2021-12-15
MFG APPR.		
	Q.A.	

INTERPRET GEOMETRIC TOLERANCING PER:  

 THIRD ANGLE PROJECTION  
 DO NOT SCALE DRAWING

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

MAXTENA, INC

TITLE:  
 189-00064  
 MEA-868-SM-50

SIZE <b>B</b>	DWG. NO. <b>117-00476-01</b>	REV <b>A</b>
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CAGE CODE: 5KQH7      SCALE: NONE      SHEET 1 OF 1