# **WATERPROOF 5G 4G**

## **ANTENNA FOR IOT SMART METERS**

617-960 MHz | 1400-6000 MHz



PN: M02-0100130R0A Dimensions: Ø32 x 68 mm





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notice.

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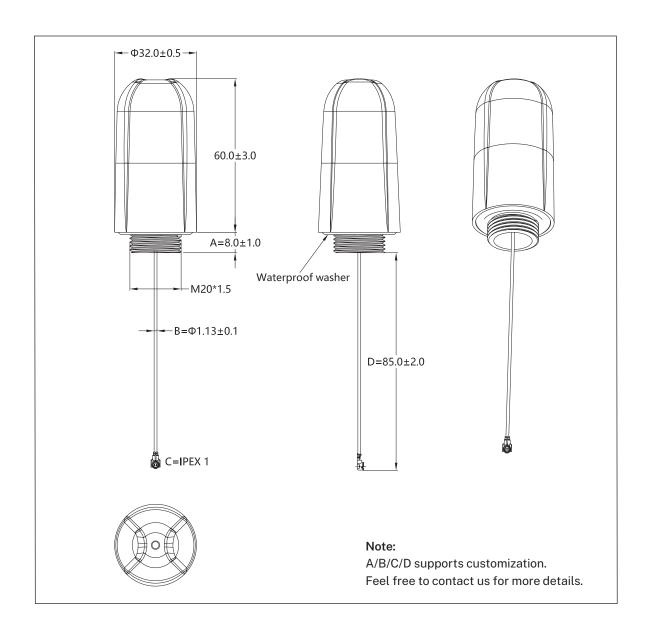
## **FEATURES & BENEFITS**

- External omni 5G/4G/3G antenna
- Lightweight, low profile and rugged design
- Easy installation with built-in bolt interface, can be directly screwed onto devices without additional screws.
- UV-resistant, Impact-resistant, dustproof and waterproof
- RF cables and connectors customization supported

### **APPLICATIONS**

Various IoT applications, including,

- Smart valves
- Pressure/Level/Flow transmitters
- Temperature transmitters
- Water meters ect.





## **ORDER INFORMATION**

| Product Name | Waterproof 5G 4G Antenna for IoT Smart Meters                          |  |
|--------------|--|--|
| Part Number  | M02-0100130R0A   |  |
| Dimensions   | Ø32 x 68 mm  |  |
| Weight       | 30 g   |  |
| Color        | Black  |  |
| Mounting     | Screw mount  |  |
| Cable        | Default IPEX 1 RF 1.13 coaxial cable ( Ø 1.13 x 85 mm) , customizable. |  |

## **REFERENCE GUIDE**

| Technical Features            | 617-960 MHz          | 1400-6000 MHz |
|-------------------------------|----------------------|---------------|
| Max VSWR                      | 4.91:1               | 2.43:1        |
| Max Efficiency                | 83.27%               |               |
| Peak Gain                     | Up to 5.05 dBi (Typ) |               |
| Max Input Power               | 10 Watts CW          |               |
| Radiation Pattern             | Omnidirectional      |               |
| Polarization                  | Linear               |               |
| Input Impedance               | 50 Ω                 |               |
| Operating Temperature         | -40°C to +85°C       |               |
| Storage Temperature           | -40°C to +85°C       |               |
| Relative Humidity             | 10 to 70%            |               |
| Material Substance Compliance | RoHS Compliant       |               |
| Dimensions<br>(L x W x H)     | Ø32 x 68 mm          |               |

All data were measured on a water meter as shown on cover with an 85-mm-long RF 1.13 cable. Application data might vary.



## **ELECTRICAL PERFORMANCE**

#### O Note

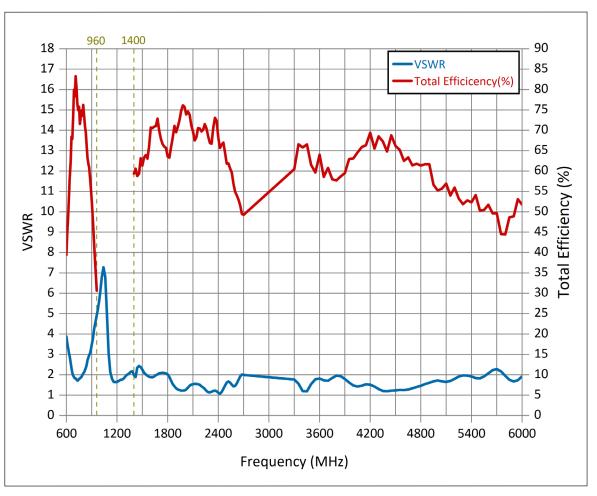
All data displayed in "ELECTRICAL PERFORMANCE" were measured on the water meter as shown below with an 85-mm-long RF 1.13 cable.



A sample of use cases: Antenna mounted on a water meter



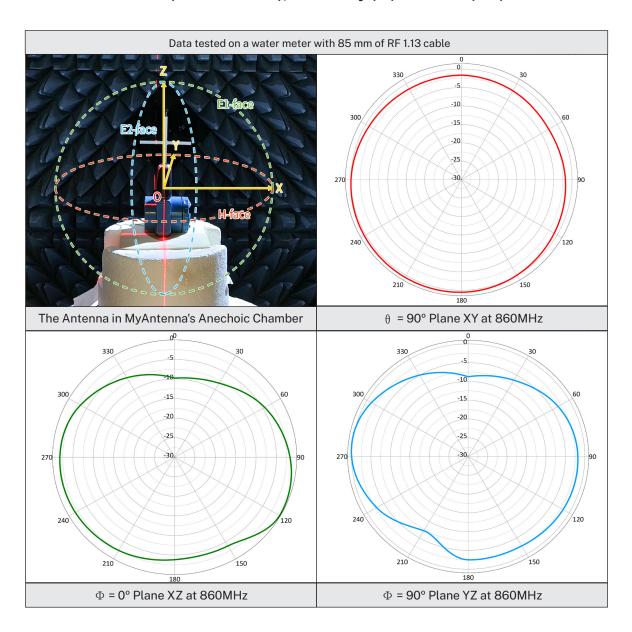
## **VSWR and Total Efficiency (%)**



(Note: Data were tested on a water meter with 85 mm of RF 1.13 cable.)



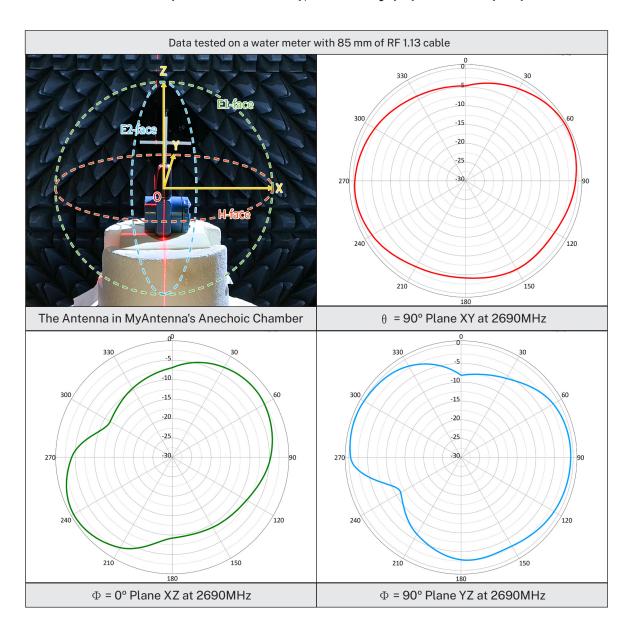
## Radiation Patterns (617-960 MHz), Efficiency (%) and Gain (dBi)



|            | Peak Gain                                   | 1.24 dBi         |
|------------|---|------------------|
| Gain       | Average Gain across the band                | 0.34 dBi         |
|            | Gain Range across the band (min, max)       | -2.0 to 1.24 dBi |
|            | Peak Efficiency                             | 83.27%           |
| Efficiency | Average Efficiency across the band          | 62.33%           |
|            | Efficiency Range across the band (min, max) | 30.64 to 83.27%  |



## Radiation Patterns (1400-6000 MHz), Efficiency (%) and Gain (dBi)



|            | Peak Gain                                   | 0.39 dBi         |
|------------|---|------------------|
| Gain       | Average Gain across the band                | 2.44 dBi         |
|            | Gain Range across the band (min, max)       | 0.39 to 5.05 dBi |
|            | Peak Efficiency                             | 76.13%           |
| Efficiency | Average Efficiency across the band          | 62.79%           |
|            | Efficiency Range across the band (min, max) | 76.13 to 44.43%  |



## WELCOME ALL ANTENNA OEM/ODM PROJECTS

#### **About ABOOSTY**



10+ years in antenna R&D, production, and OEM/ODM



House of Aboosty: 450,000 units annual output capacity



Factory directly competitive price



Industry-leading quality levels



team-work & support



Quick price and lead time estimation

#### Why Choose ABOOSTY



Innovative and patented design solutions



Full terminal devices anechoic chamber test



Co-location with its custom



Competitive price



inspection



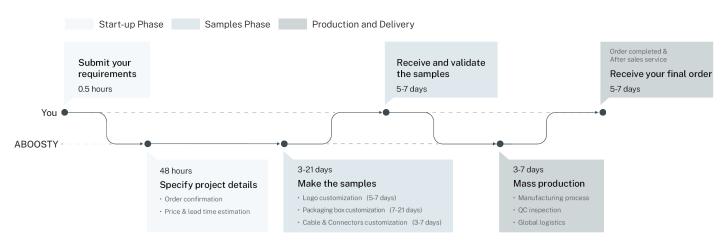
Prompt reply within 24h

#### What We Provide

| OEM/ODM Services                         |   |  |  |
|--|---|--|--|
| Light Customization                      | Deep Customization  |  |  |
| Logo     Packaging     Cables&Connectors | <ul> <li>In-depth tailoring for specific applications</li> <li>Functional enhancements</li> <li>Environmental adaptations</li> <li>Vertical certifications</li> <li></li> </ul> |  |  |

#### **Custom Process**

#### **Light Customization Process**





#### **Deep Customization Process**

