

# 860–930 MHz Omnidirectional Gooseneck Fiberglass Antenna (Ø18 × 400 mm)

## FEATURES & BENEFITS



- Strong environmental adaptability: It performs well in harsh conditions like wind, sun exposure, rain, and salt spray corrosion, making it suitable for long-term outdoor use.
- Stable mechanical performance: The fiberglass radome ensures a robust antenna structure that can withstand certain degrees of mechanical stress
- Excellent electrical properties: The fiberglass material is highly transparent to RF signals, which helps maintain stable electrical performance
- The gooseneck design offers unparalleled installation flexibility. It can be easily bent and adjusted to fit various device enclosures and spatial constraints, ensuring optimal signal orientation
- Multiple RF connectors available (SMA, N-M, TNC)



## APPLICATIONS

Various IoT applications, including,

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

## ORDER INFORMATION

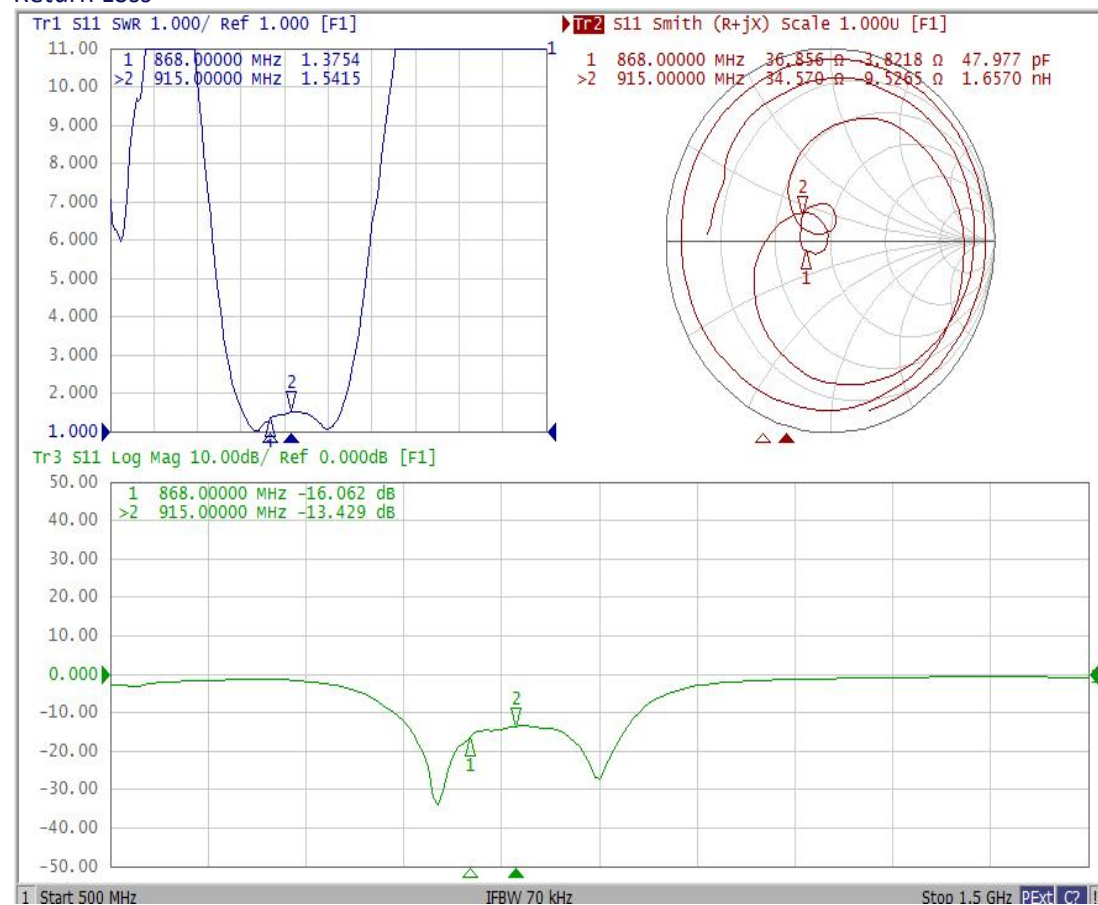
|              |                                                          |
|--------------|----------------------------------------------------------|
| Product Name | 860–930 MHz Omnidirectional Gooseneck Fiberglass Antenna |
| Part Number  | M04-0105600R0A                                           |
| Dimensions   | Ø18 x 400mm                                              |
| Weight       | 140 g                                                    |
| Color        | Black                                                    |
| Mounting     | Gooseneck flexible mount                                 |
| Material     | Fiberglass radome                                        |
| Connector    | RP-SMA MALE (Customizable SMA /N/ TNC)                   |

## REFERENCE GUIDE

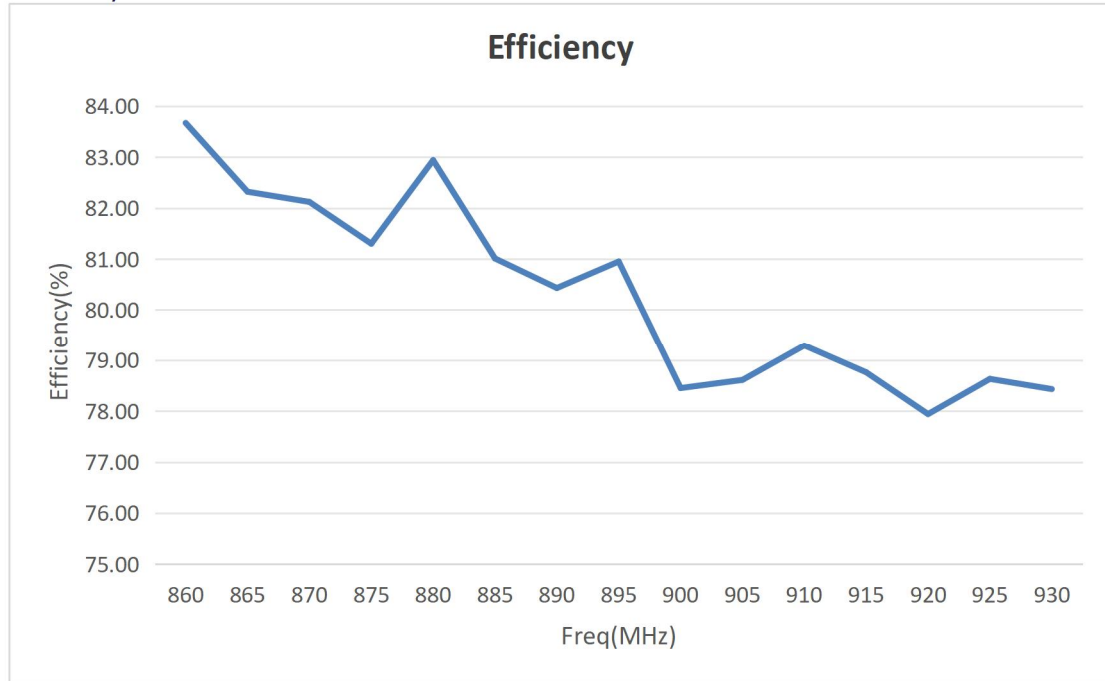
|                               |                                |
|-------------------------------|--------------------------------|
| Technical Features (MHz)      | 860-930                        |
| Max VSWR                      | $\leq 2.0$                     |
| Max Efficiency                | 83.67%                         |
| Peak Gain                     | 2.41dBi                        |
| Radiation Pattern             | Omnidirectional                |
| Polarization                  | Linear                         |
| Input Impedance               | 50 $\Omega$                    |
| 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 (L x W x H)        | $\varnothing 18 \times 400$ mm |

## ELECTRICAL PERFORMANCE

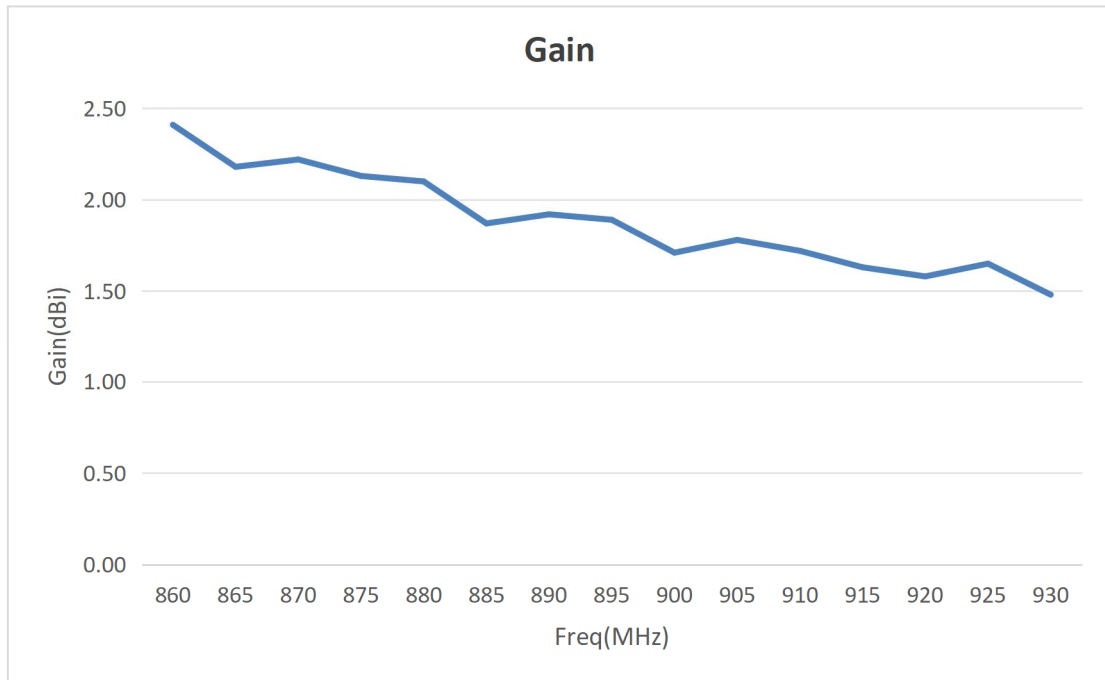
### Return Loss



Efficiency (%)

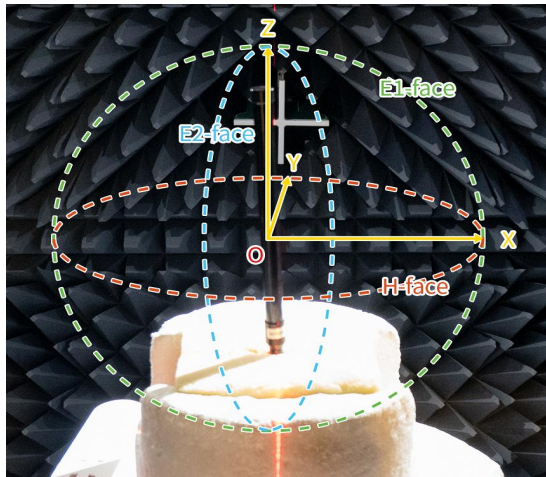


Peak Gain (dBi)

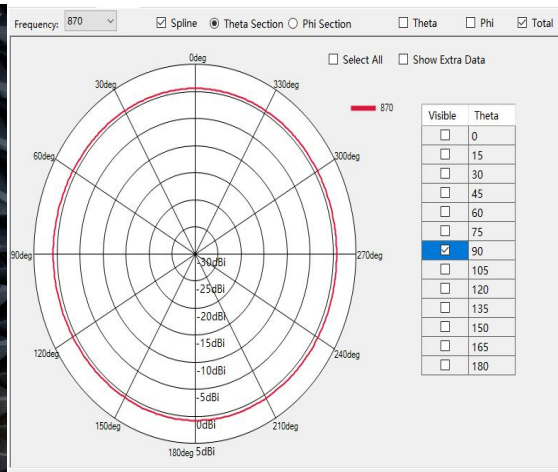


| Freq(MHz) | Gain(dBi) | Efficiency (%) | Freq(MHz) | Gain(dBi) | Efficiency (%) | Freq(MHz) | Gain(dBi) | Efficiency (%) |
|-----------|-----------|----------------|-----------|-----------|----------------|-----------|-----------|----------------|
| 860       | 2.41      | 83.67          | 885       | 1.87      | 81.01          | 910       | 1.72      | 79.29          |
| 865       | 2.18      | 82.32          | 890       | 1.92      | 80.43          | 915       | 1.63      | 78.76          |
| 870       | 2.22      | 82.12          | 895       | 1.89      | 80.95          | 920       | 1.58      | 77.94          |
| 875       | 2.13      | 81.30          | 900       | 1.71      | 78.45          | 925       | 1.65      | 78.63          |
| 880       | 2.10      | 82.94          | 905       | 1.78      | 78.61          | 930       | 1.48      | 78.43          |

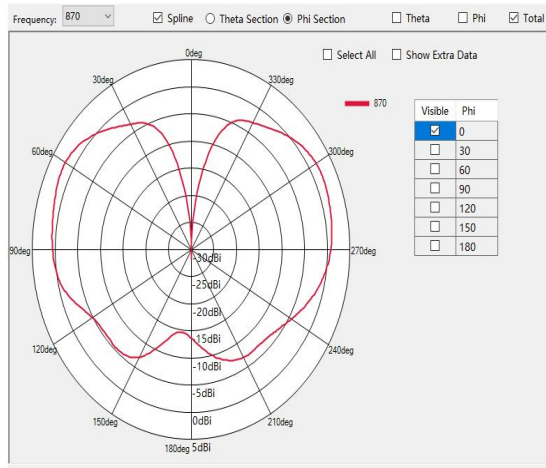
## RADIATION PATTERNS



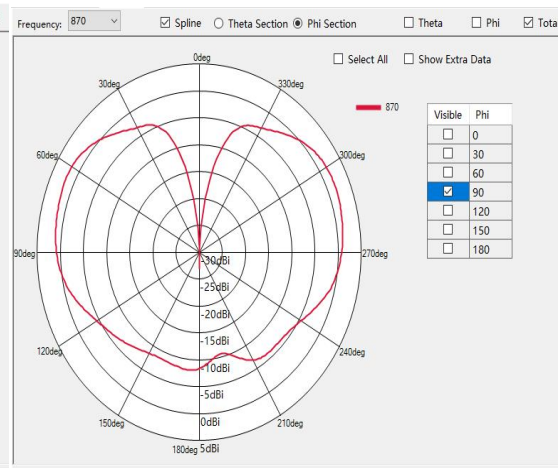
The Antenna in MyAntenna's Anechoic Chamber



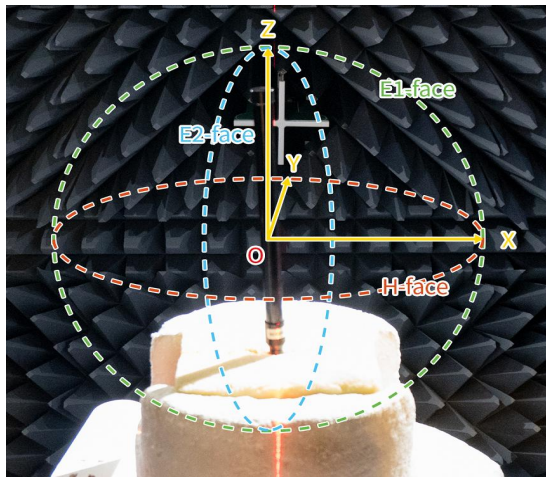
$\Theta = 90^\circ$  Plane XY at 870MHz



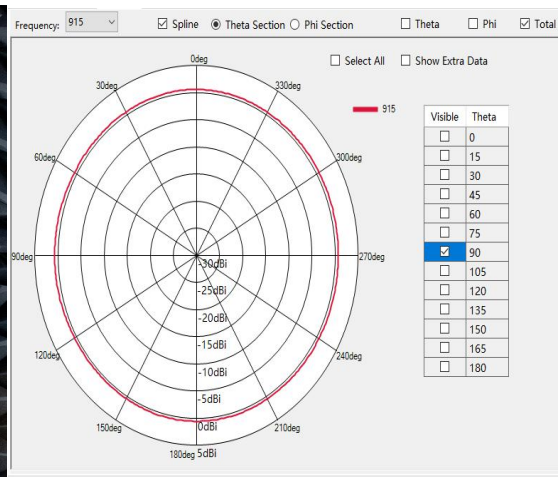
$\Phi = 0^\circ$  Plane XZ at 870MHz



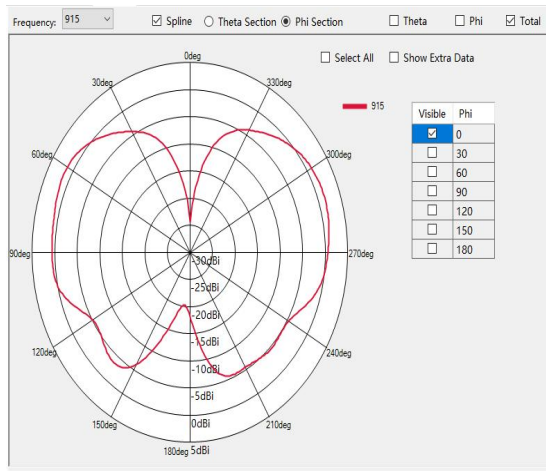
$\Phi = 90^\circ$  Plane YZ at 870MHz



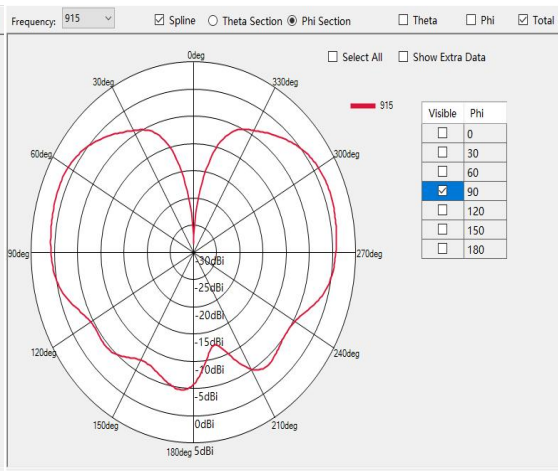
The Antenna in MyAntenna's Anechoic Chamber



$\theta = 90^\circ$  Plane XY at 915MHz



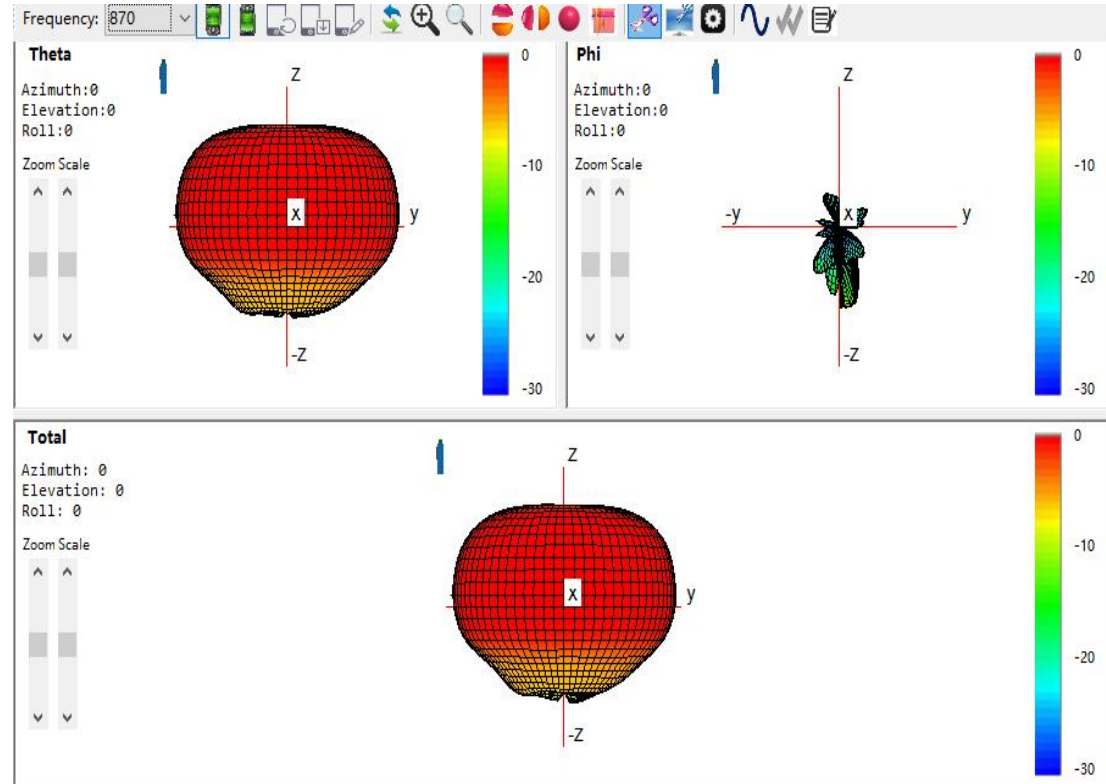
$\Phi = 0^\circ$  Plane XZ at 915MHz



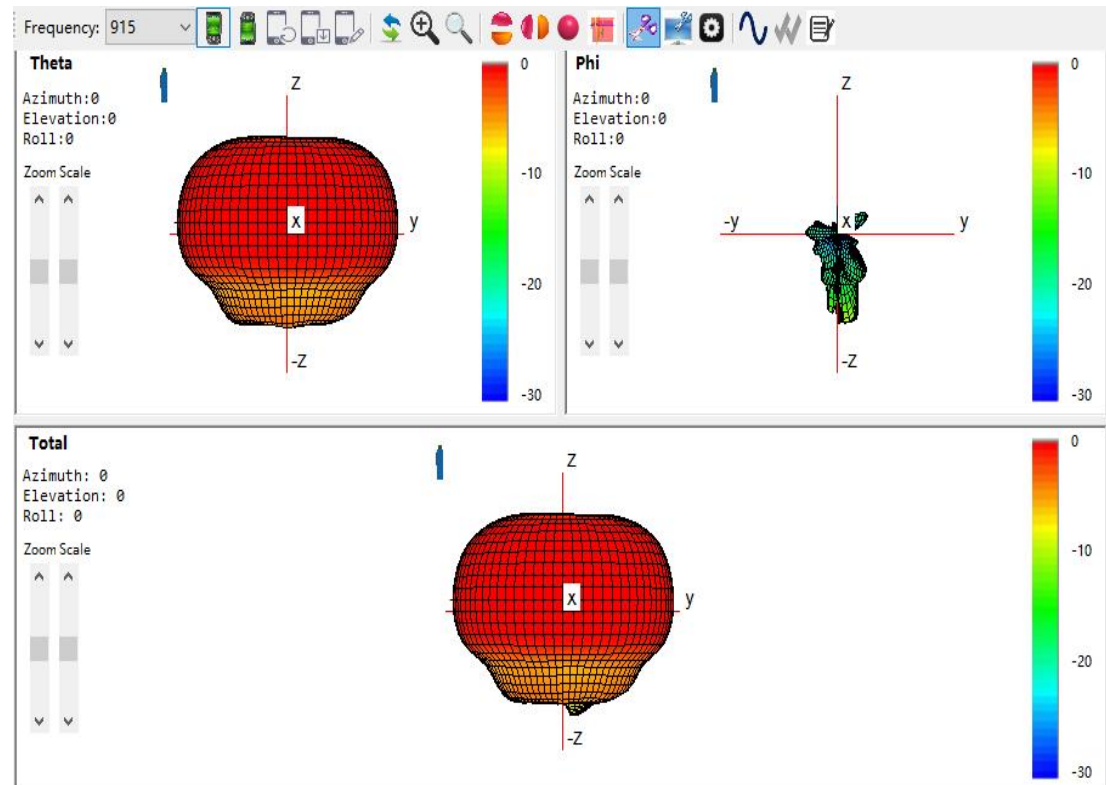
$\Phi = 90^\circ$  Plane YZ at 915MHz



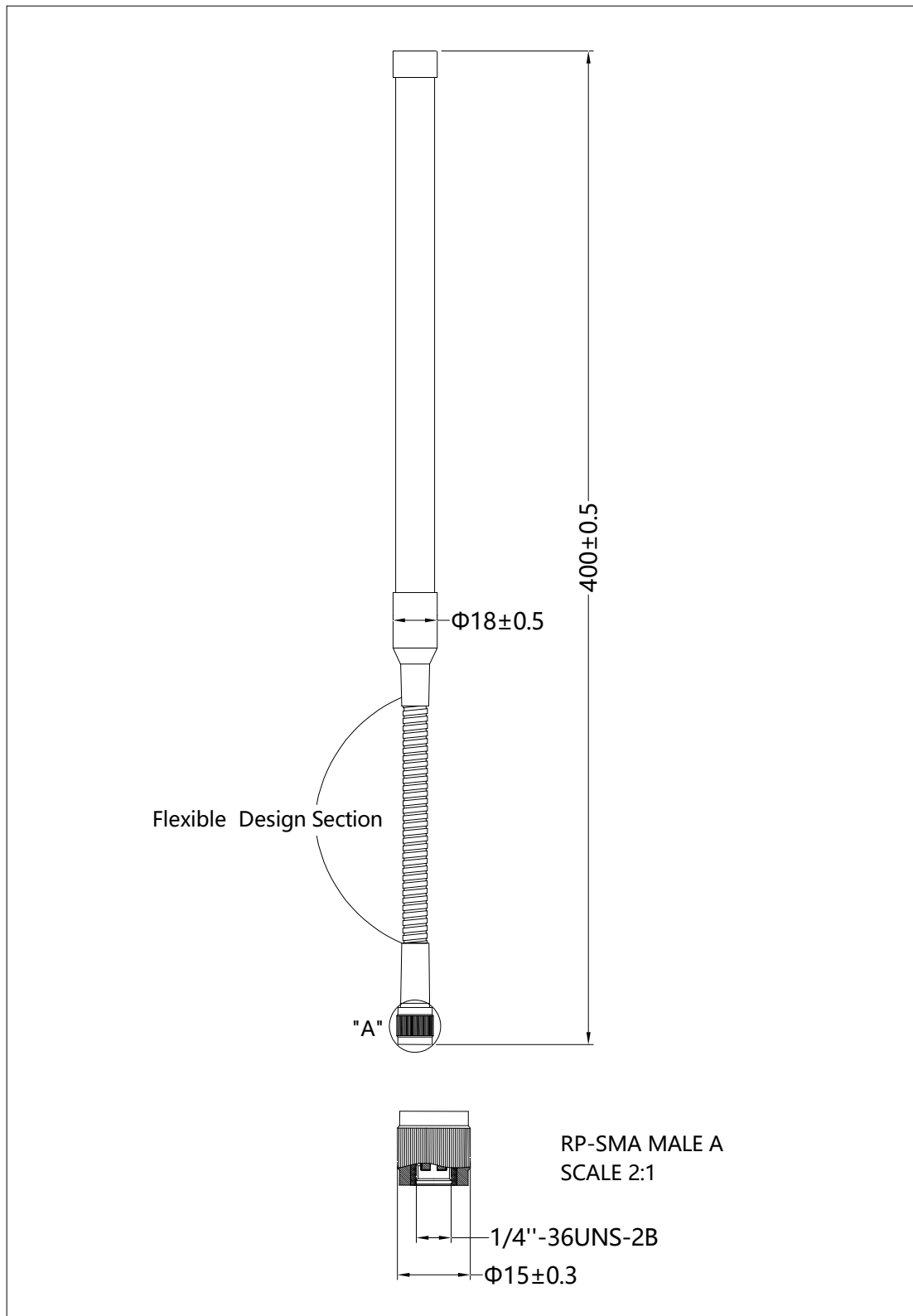
### 3D Radiation Pattern at 870MHz



### 3D Radiation Pattern at 915MHz



## HOUSING CONFIGURATIONS



Aboosty™ is owned by Shenzhen MyAntenna RF Technology Co., Ltd. (often abbreviated as MyAntenna).