

### Key Features

- 2dBi gain
- Quad band GSM and 3G compatible
- IP67 rated
- Rugged and durable
- Through hole mount
- Rubber seal gasket



### General Description

The TANGO17 is a tough, virtually destruction proof, IP67 rated quadband GSM and 3G antenna. The antenna has a gain of 2dBi and a V.S.W.R of <2.0. Fitted with a through hole mount threaded nut, ensures a secure fit to its surface.

This antenna is designed for applications where it is going to be exposed to 'passers-by' or the public so a vandal/theft proof solution is a necessity. With its 19.7mm M20 thread, the antenna can be securely fastened to its surface. The rubber seal is tough enough to withstand industrial washes on mobile applications such as trucks or buses.

Measuring at just 34.8 x 68 ø mm (height x diameter) offers a relatively low profile solution. This, with its discreet design helps it remain unnoticed.

#### Moisture Proof

The device should satisfy the electrical characteristics specified in the table 'Key Specifications - Dielectric Antenna' after exposed to the temperature 40±2°C and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

#### Vibration Resist

The device should satisfy the electrical characteristics specified in the table 'Key Specifications - Dielectric Antenna' after applied to the vibration of 10 to 55MHz with amplitude of 1.5mm for 2 hours each in X, Y, and Z directions.

#### Drop Shock

The device should satisfy the electrical characteristics specified in the table 'Key Specifications - Dielectric Antenna' after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

#### High Temperature Endurance

The device should satisfy the electrical characteristics specified in the table 'Key Specifications - Dielectric Antenna' after exposed to the temperature 80±5°C for 24±2 hours and 1~2 hours recovery time under normal temperature.

#### Low Temperature Endurance

The device should satisfy the electrical characteristics specified in the table 'Key Specifications - Dielectric Antenna' after exposed to the temperature -40±5°C for 24±2 hours and 2 hours recovery time under normal temperature.

#### Temperature Cycle Test

The device should satisfy the electrical characteristics specified in the table 'Key Specifications - Dielectric Antenna' after exposed to the low temperature -25°C and high temperature +85°C for 30±2 minutes each by 5 cycles and 1~2 hours recovery time under normal temperature.

Rev 1.2

### Key Specifications - Electrical

|                  |                                |
|------------------|--------------------------------|
| Frequency range: | 824 ~ 960MHz<br>1710 ~ 2170MHz |
| V.S.W.R:         | <2.0                           |
| Polarization:    | Linear                         |
| Gain:            | 2.0dBi (Zenith)                |
| Impedance:       | 50ohm                          |

### Gain

#### GSM

|          |          |
|----------|----------|
| 850MHz:  | 3.41dBi  |
| 900MHz:  | -0.08dBi |
| 1800MHz: | -2.46dBi |
| 1900MHz: | -5.45dBi |

#### 3G

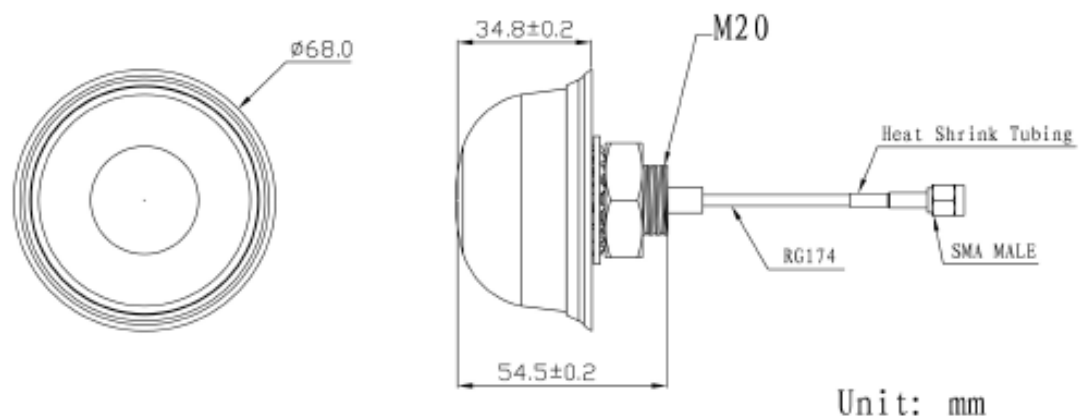
|          |          |
|----------|----------|
| 2100MHz: | -1.87dBi |
|----------|----------|

### Key Specifications - Mechanical

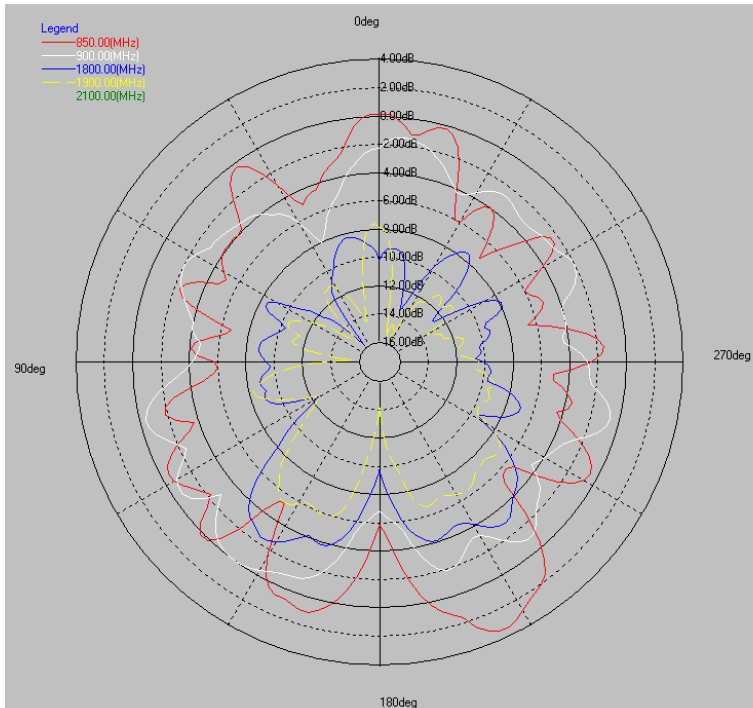
|                  |                 |
|------------------|-----------------|
| Cable:           | RG174 or others |
| Connector:       | SMA or others   |
| Material:        | ABS             |
| Mounting method: | Screw           |

### Key Specifications - Environmental

|                           |  |
|---------------------------|--|
| Operating temperature:    | -40 to +85°C                               |
| Relative humidity:        | Up to 95%                                  |
| Ingress protection:       | IP67 (exclude cable outlet)                |
| Vibration:                | 10 to 55Hz with 1.5mm amplitude<br>2 hours |
| Environmentally friendly: | RoHS compliant                             |



## Gain vs. Frequency Graph



**UL Tested (Basingstoke, UK)**  
Part: TANGO17