

# Tango 20A

#### Vandal Resistant Through Hole GPS/GLONASS Antenna



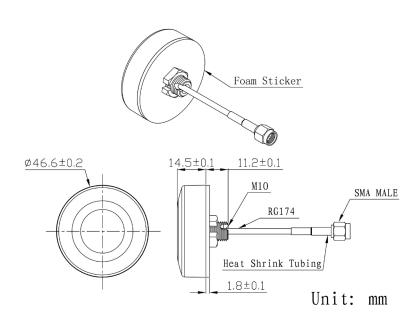
#### **Key Features**

- Compact size: ø46.6 x 14.5
- · Flexible connector and cable options
- Vandal resistant
- GPS & GLONASS applicable
- Rubber seal gasket
- · RoHS compliant

#### **General Description**

The Tango 20A is the GPS & GLONASS version of the Tango 20 antenna, and therefore has a screw mount thread and an adhesive base that provides firm fixation. Furthermore, the Tango 20A comes with a rubber seal gasket for greater weatherproof protection. Because of this, the Tango 20A is well suited to the outdoors and being exposed to the elements. Common mounting surfaces are outside on a vehicle roof, or even inside environments such as attaching to the top of vending machine. The screw mount means the Tango 20A can be fixed permanently to its surface, without fear of it being unknowingly removed. Therefore the Tango 20 is a toughened, outdoor designed, GPS/GLONASS antenna that will resist both the forces of nature and the forces of unwanted persons.

The Tango 20A measures at Ø46.6 x 14.5mm (diameter x height), so it is a compact, puck shape antenna that will allow it to fit discretely onto its surface. The Tango 20A can come with a variety of cable lengths and connectors, customised to request. The most common are found in the ordering details over page.



Rev 1.2



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### **Antenna Specifications**

| Frequency range: | 1592 ±3 MHz    |
|------------------|----------------|
| V.S.W.R:         | (1.5           |
| Polarization:    | RHCP           |
| Gain:            | 5dBic (Zenith) |
| Impedance:       | 50ohm          |
| Band Width       | ±25MHz         |
| Axial Ratio      | 3dB (max)      |

# **Mechanical Specifications**

| Dimensions:      | ø25 x 25 x 4mm          |
|------------------|-------------------------|
| Cable:           | RG174                   |
| Connector:       | SMA/MCX/FAKRA or others |
| Material:        | ABS                     |
| Mounting method: | Screw                   |

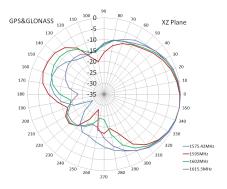
### **Environmental Specifications**

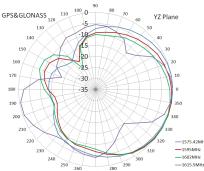
| Operating temperature:    | -40 to +85°C                            |
|---------------------------|---|
| Relative humidity:        | Up to 95%                               |
| Ingress protection:       | IP67                                    |
| Vibration:                | 10 to 55Hz with 1.5mm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

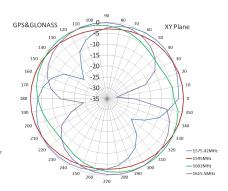
# **LNA Specifications**

| Gain:                  | 28±2dB                        |
|------------------------|-------------------------------|
| Noise Figure:          | <1.5                          |
| Filter Insertion Loss: | (3dB                          |
| Ex-band Attenuation    | 12dB@CF + 50MHz/16dB@CF-50MHz |
| Supply Voltage:        | 2.2-5V DC                     |
| Current Consumption    | 5-15mA                        |
| VSWR                   | ⟨2.0                          |

#### **Radiation Pattern**







### **Ordering Details:**

| Part number            | Description   |
|------------------------|---|
| TANGO20/3M/SMAM/S/S/26 | GPS/GLONASS Puck Antenna with Screw Mount 3m RG174 Cable and SMA Male Connector   |
| TANGO20/2M/SMAM/S/S/26 | GPS/GLONASS Puck Antenna with Screw Mount 2m RG174 Cable and SMA Male Connector   |
| TANGO20/3M/FMEF/S/S/26 | GPS/GLONASS Puck Antenna with Screw Mount 3m RG174 Cable and FME Female Connector |
| TANGO20/2M/FMEF/S/S/26 | GPS/GLONASS Puck Antenna with Screw Mount 2m RG174 Cable and FME Female Connector |

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