

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Tango 20A

### Vandal Resistant Through Hole GPS/GLONASS Antenna



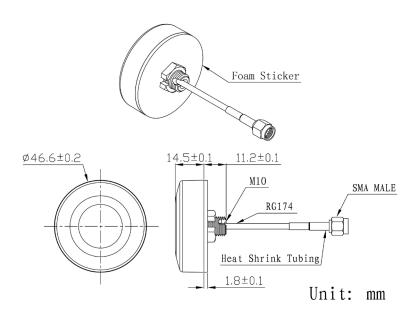
#### **Key Features**

- 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.





# Tango 20A

### Vandal Resistant Through Hole GPS/GLONASS Antenna

### **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**

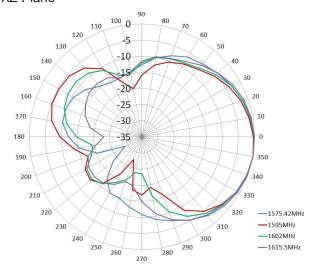
Operating temperature:	-40 to +85°C
Relative humidity:	Up to 95%
Ingress protection:	IP67
Vibration:	10 to 55Hz with 1.5mm amplitude 2 hours
Environmentally friendly:	RoHS compliant

### **LNA Specifications**

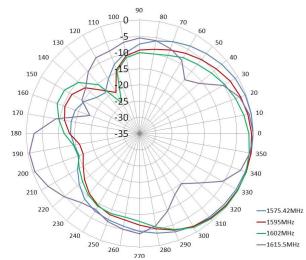
Gain:	28±2dB
Noise Figure:	<1.5
Filter Insertion Loss:	<3dB
Ex-band Attenuation	12dB@CF + 50MHz/16dB@CF- 50MHz
Supply Voltage:	2.2-5V DC
Current Consumption	5-15mA
VSWR	<2.0

#### **Radiation Pattern**

XZ Plane



#### YZ Plane

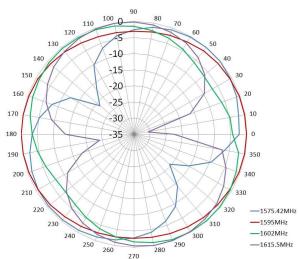




# Tango 20A

## Vandal Resistant Through Hole GPS/GLONASS Antenna

#### XY Plane



### **Ordering Details**

Part Number	Description
TANGO20A/3M/SMAM/S/S/26	GPS/GLONASS Puck Antenna with Screw Mount, 3m RG174 Cable, SMA Male Connector
TANGO20A/2M/SMAM/S/S/26	GPS/GLONASS Puck Antenna with Screw Mount, 2m RG174 Cable, SMA Male Connector
TANGO20A/3M/FMEF/S/S/26	GPS/GLONASS Puck Antenna with Screw Mount, 3m RG174 Cable, FME Female Connector
TANGO20A/2M/FMEF/S/S/26	GPS/GLONASS Puck Antenna with Screw Mount 2m RG174 Cable, FME Female Connector

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