



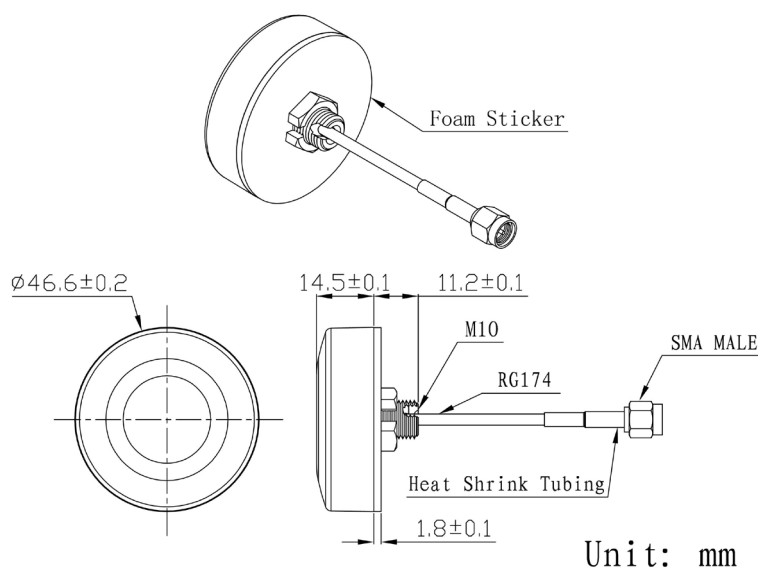
### Key Features

- Compact size:  $\varnothing 46.6 \times 14.5$
- 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  $\varnothing 46.6 \times 14.5$ mm (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

### 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)

### 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

### Mechanical Specifications

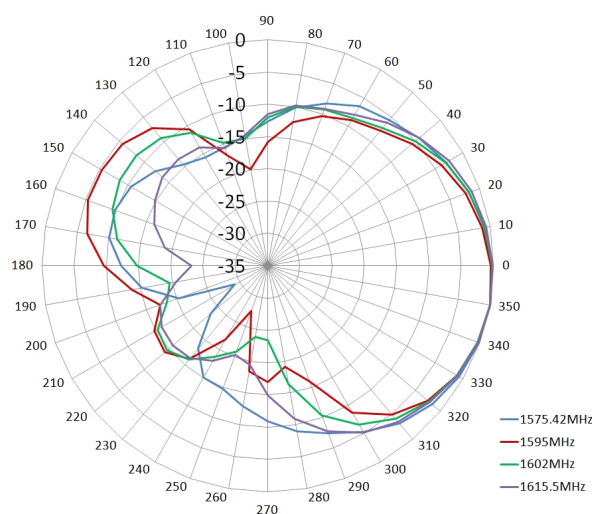
Dimensions:	∅25 x 25 x 4mm
Cable:	RG174
Connector:	SMA/MCX/FAKRA or others
Material:	ABS
Mounting method:	Screw

### LNA Specifications

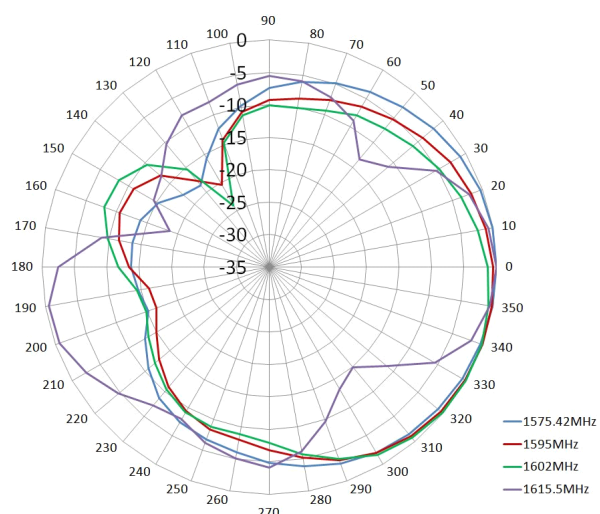
Gain:	28±2dB
Noise Figure:	<1.5
Filter Insertion Loss:	<3dB
Ex-band Attenuation	12dB@CF + 50MHz/16dB@CF-50MHz
Supply Voltage:	2.2-5V DC
Current Consumption	5-15mA
VSWR	<2.0

### Radiation Pattern

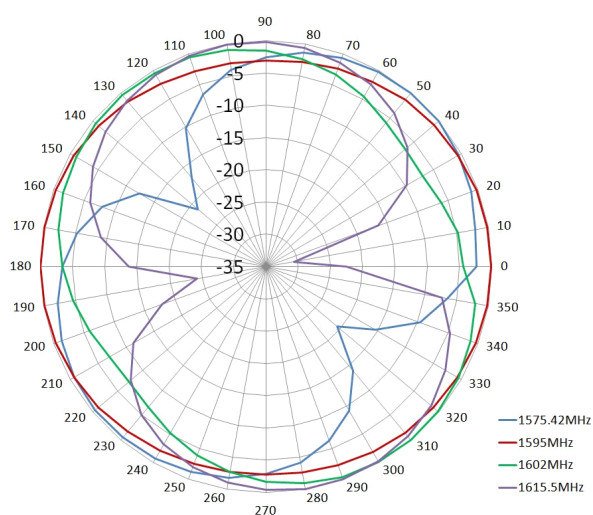
XZ Plane



YZ Plane



XY Plane



## Ordering Details

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