



Tango 19

Combined 2G (GPRS)/3G/4G & GPS Puck Antenna



Key Features

- Quad band GSM and GPS active antenna
- Built in LNA with 28dB gain
- Compact puck design

General Description

The Tango 19 is a combination antenna, with two antennas built into a single package.

One is an active GPS antenna with a Low Noise Amplifier (LNA) to boost performance and provide a strong satellite signal strength. The stronger signal allows satellites to be acquired more quickly speeding up application use.

The other antenna is a passive 1-2dBi gain Quad Band 2G antenna, allowing for worldwide use.

Additional Considerations

- Dual mount provides a firm fix to its surface
- Quad band 2G compatible for worldwide use
- Best Signal Coverage in Bands:
 - 2G Band 9 (E-GSM-900)
 - 3G Band 8 (E-GSM-900)
 - 3G Band 1 (IMT-2100)
 - 4G Band 20 (800)





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Electrical Specifications

GSM Antenna

Impedance:	50 Ohm
Typical gain:	2dBi ± @ 850MHz
	2dBi ± @ 900MHz
	1dBi ± @ 1800MHz
	1dBi ± @ 1900MHz
VSWR:	2.0:1
Frequency Coverage:	850/900/1800/1900MHz

GPS Dielectric Antenna

Impedance:	50 Ohm
Peak gain:	> 3dBi
	(based on 7 x 7cm groundplane)
Gain coverage:	> -4dBi at -90° < 0 < +90°
	(over 75% volume)
VSWR:	1.5:1
Centre frequency:	1575.42 ± 3MHz
Bandwidth:	± 5MHz
Polarization:	RHCP

GPS Antenna

LNA gain (without cable):	28dBi Typical
Noise Figure:	1.5dB
VSWR:	<2.0
DC Voltage:	2.7 ~ 5.0V
DC Current:	11mA max
Filter out band attenuation (f0 = 1575.42MHz):	7dB min f0 ± 20MHz
	20dB min f0 ± 50MHz
	30dB min f0 ± 100MHz

Mechanical Specifications

Dimensions:	L46 Ø x H14.5mm
GPS Cable:	RG174
GSM Cable:	RG174
GPS Connector:	SMA Male
GSM Connector:	SMA Male
Mounting Method:	Screw /Adhesive

Environmental Specifications

Operating Temperature:	-40 - +85°C
Storage Temperature:	-45 - +100°C
Relative Humidity:	85 ~ 100%RH

Ordering Details

Part Number	Description
TANGO19/3M/SMAM/SMAM/S/S/20	Combined 2G (GPRS)/3G/4G & GPS Puck Antenna 3m Cable
TANGO19/5M/SMAM/SMAM/S/S/20	Combined 2G (GPRS)/3G/4G & GPS Puck Antenna 5m Cable