# TW3370





# High Gain GPS-L1/GLONASS-G1 Antenna

Frequency Coverage: GPS L1 | GLONASS G1

The TW3370 is a high Gain (40 dB) GNSS antenna covering the GPS-L1, GLONASS-G1 and SBAS (WAAS, EGNOS & MSAS) frequency band (1575 to 1606 MHz).

It features a patch element with 40% wider bandwidth than previously available in this format.

Unlike its competitors, both GPS-L1 and GLONASS-G1 signals are included in the 1 dB received power bandwidth.

The TW3370 has a three stage low-noise amplifier with a mid-section SAW.

The TW3370 has a 19 mm (3/4 Inch) though hole, permanent-mount white-metal base, with an industrial-grade, IP69K compliant conical radome with a North reference mark.

Two options for pole mounting are available an L-bracket (P/N# 23-0040-0) or a pipe mount (P/N# 23-0065-0).



## **Applications**

- Timing applications
- Fixed installations
- Cost Sensitive Mission Critical Positioning
- Law enforcement and public safety

#### **Features**

- 40 dB LNA Gain
- 1 dB LNA Noise Figure
- Wide voltage input range (2.5 to 16 VDC)
- IP69K Compliant conical radome with North reference mark
- Low Current (20 mA typ.)

#### **Benefits**

- Bandwidth fully Includes GPS-L1 & GLONASS
- Excellent multipath rejection
- Increased system accuracy
- Excellent signal-to-noise ratio
- Great out-of-band signal rejection
- · Ideal for harsh environments
- · CE RED, RoHS, and REACH compliant

About Calian: With global headquarters and manufacturing in Ottawa, Canada, Calian is a leading manufacturer of high-precision antennas and components for Global Navigation Satellite System (GNSS) applications. Calian's mission is to support the needs of a new generation of positioning systems by delivering unprecedented antenna precision at competitive prices. Learn more at www.calian.com

# High Gain GPS-L1/GLONASS-G1 Antenna

Frequency Coverage: GPS L1 | GLONASS G1

#### Antenna - Measured with a 100 mm ground plane

Technology Single-feed RHCP ceramic patch

		Gain	Axial Ratio
		dBic typ. at Zenith	dB at Zenith
GNSS			
GPS / QZSS	L1	4.5	≤8
	L2	-	-
	L5	-	-
GLONASS	G1	4.5	≤8
	G2	-	-
	G3	-	-
Galileo	E1	-	-
	E5A	-	-
	E5B	-	-
	E6	-	-
BeiDou	B1	-	-
	B2b	-	-
	B2a	-	-
	В3	-	-
IRNSS / NavIC	L5	-	-
QZSS	L6	-	-
L-Band Services (1539 MHz - 1559 MHz)		-	-
Satellite Communications			
Iridium		-	-
Globalstar		-	-
Other			
Axial Ratio at 10°		Efficiency	-
PCV Φ > 15°		PCO	

## Mechanicals

Size 66.5 mm (dia.) x 21 mm (h.)

Weight 150 g

Radome LEXAN™ EXL9330, Base: Zamac Metal

Mount Through-hole (100 mm ground plane provided)

Available Connectors Please refer to ordering guide

#### Environmental

Operating Temperature -40 °C to +85 °C Storage Temperature -55 °C to +95 °C

Vibration MIL-STD-810-E - Test Method 514.5
Shock MIL-STD-810-G - Test Method 516.6
Salt Fog MIL-STD-810-F - Test Method 509.5
Other Tests Hail, Humidity, Dust, Rain, Sand, Solar

IP Rating IP69K

Compliance IPC-A-610, FCC, CE RED, RoHS, REACH

Warranty

Parts and Labour 3-year standard warranty

Low Noise Amplifier (LNA) - Measured at 3V and 25°C

Frequency Bandwith		Out of Band Rejection	
Lower Band	-		
L-Band Corr.	-	> 35 dB @ < 1500 MHz > 25 dB @ < 1550 MHz > 35 dB @ > 1640 MHz	
Upper Band	1575-1606 MHz		

Architecture Non pre-filtered Gain 41 dB min.

Noise Figure 1 dB typ.

VSWR < 1.5:1 typ., 1.8:1 max.

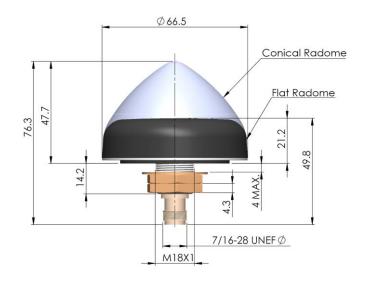
Supply Voltage Range 2.5 to 16 VDC nominal, up to 50mV p-p ripple

Supply Current 20 mA typ.

ESD Circuit Protection 15 kV air discharge

P 1dB Output -Group Delay -

#### Mechanical Diagram - Units in 'mm' or 'inches' where specified



### **Ordering Information**

#### Part Number

33-3370-xx-yy-zzzz

Where xx = connector type, yy = shape and colour of radome and zzzz = cable length in mm (where applicable)

Please refer to our **Ordering Guide** to review available radomes and connectors at: https://www.tallysman.com/resource/tallysman-ordering-guide/

