

TW3372



High Gain GPS-L1/GLONASS-G1 Antenna

Frequency Coverage: GPS L1 | GLONASS G1

The TW3372 is a high Gain (40 dB) GNSS antenna covering the GPS-L1, GLONASS-G1 and SBAS (WAAS, EGNOS & MSAS) frequency band (1574 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 TW3372 has a three stage low-noise amplifier with a mid-section SAW.

A tight pre-filter is available with the TW3372 to protect against saturation by high-level sub-harmonics and L-Band signals making it particularly suitable for timing applications.

The TW3372 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
- Pre-filter
- 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

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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 | - | - |
| | B3 | - | - |
| IRNSS / NavIC | L5 | - | - |
| QZSS | L6 | - | - |
| L-Band Services (1539 MHz - 1559 MHz) | | - | - |
| Satellite Communications | | | |
| Iridium | | - | - |
| Globalstar | | - | - |
| Other | | | |
| Axial Ratio at 10° | - | Efficiency | - |
| PCV $\Phi > 15^\circ$ | - | 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

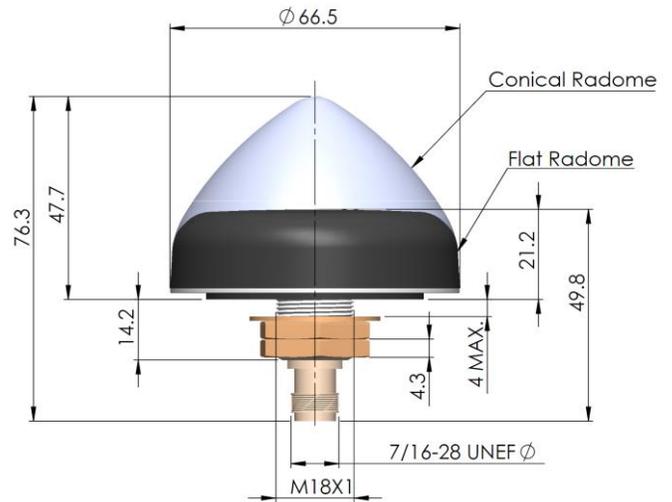
| | |
|------------------|--------------------------|
| Parts and Labour | 3-year standard warranty |
|------------------|--------------------------|

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

| Frequency Bandwidth | Out of Band Rejection |
|--|-----------------------|
| Lower Band | - |
| L-Band Corr. | - |
| Upper Band | 1575-1606 MHz |
| > 50 dB @ < 1500 MHz > 50 dB @ < 1550 MHz > 70 dB @ > 1640 MHz | |

| | |
|------------------------|--|
| Architecture | Pre-filtered |
| Gain | 40 dB min. |
| Noise Figure | 2.5 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 **33-3372-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/>