



When precision matters...™

TW3370/TW3372 40dB Wideband GPS/GLONASS Antenna

The TW3370/TW3372 is a high Gain (40dB) GNSS antenna covering the GPS L1, GLONASS L1 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 signals are included in the 1dB received power bandwidth.

The TW3370/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.

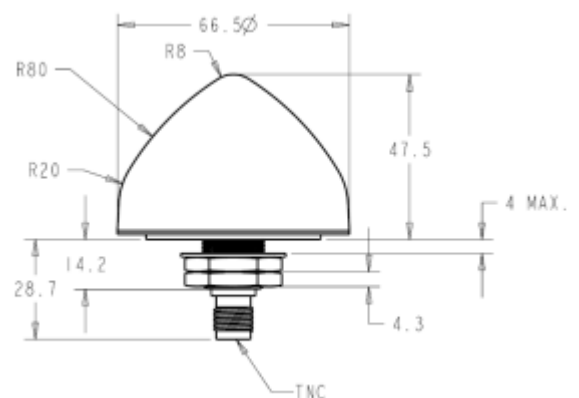
The TW3370/TW3372 has a 19mm (3/4 Inch) though hole, permanent mount white-metal base, with an industrial-grade, IP67 compliant conical radome. Two options for pole mounting are available an L-bracket (P/N#23-0040-0) or a pipe mount (P/N#23-0065-0).

Applications

- Timing applications
- Fixed installations
- Cost Sensitive Mission Critical Positioning
- Military & Security



TW3370 / TW3372
Shown with Conical Radome. Low Profile
Radome also available



Features

- 40dB LNA Gain
- 1 dB LNA Noise Figure (TW3370)
- Available Pre-filter (TW3372)
- Wide voltage input range: 2.5 to 16 VDC
- IP67 Compliant conical radome
- Low Power: 9mA typ. at 2.3Vcc min.

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
- RoHS and CE compliant



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TW3370/TW3372 40dB Wideband GPS/GLONASS Antenna Specification

Antenna

Architecture	Wideband Single Feed Patch
1 dB Bandwidth	31 MHz
10dB Return Loss Bandwidth	45MHz
Antenna Gain (with 100mm ground plane)	4.5 dBic
Axial Ratio	<4dB @ 1590MHz, 8 dB typical at band-edges

Electrical

Architecture	TW3370	LNA stage 1 -> SAW filter-> LNA stage 2
	TW3372	SAW Pre-filter ->LNA stage 1 -> SAW filter-> LNA stage 2
Filtered LNA Frequency Bandwidth		1575 to 1606 MHz
Polarization		RHCP
Gain		41 dB min., TW3370 40dB min., TW3372
Gain flatness		+/- 2 dB, 1575 to 1606 MHz
Out-of-Band Rejection	<1500 MHz	>32 dB (TW3370) >50dB (TW3372)
	<1550 MHz	>25 dB >50dB
	>1640 MHz	>35 dB >70dB
VSWR (at LNA output)		<1.5:1
Noise Figure		1dB typ. TW3370, 2.5 dB typ. TW3372
Supply Voltage Range (over coaxial cable)		+2.5 to 16 VDC nominal (12VDC recommended maximum)
Supply Current		20 mA max. at 85°C
ESD Circuit Protection		15 KV air discharge

Mechanicals & Environmental

Mechanical Size	66.5 mm dia. x 21 mm H
Operating Temperature Range	-40 to +85 °C
Enclosure	Radome: ASA Plastic, Base: Zamak White Metal
Weight	150 g
Environmental	IP67, CE, and RoHS compliant
Shock	Vertical axis: 50 G, other axes: 30 G
Vibration	3 axis, sweep = 15 min, 10 to 200 Hz sweep: 3 G

Ordering Information

Legacy Product Numbers:

TW3370 – GPS/Glonass Antenna 32-3370-xx-yy

TW3372 – GPS/Glonass Antenna 32-3372-xx-yy

Connector: xx = 00 TNC xx = 01 N Type (Premium applies) Colour: yy = 00 Dark grey yy = 01 White

* As a result of a growing product portfolio, Tallysman has rationalized its part number system. No changes have been made to the mechanical or electrical properties of these products. Where administratively possible, please use the following Part Numbers.

TW3340 – GPS/GLONASS antenna 33-3340-xx-yy-zzzz TW3342 33-3342-xx-yy-zzzz

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

Please refer to the Ordering Guide (<http://www.tallysman.com/orderingguide.php>) for the current and complete list of available radomes and connectors.

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