## When precision matters...



# A Tallysman Accutenna®

## TW3967P Embedded Triple Band GNSS Antenna + L-band Correction Services

The TW3967P is an *Accutenna*<sup>®</sup> technology antenna providing triple band GPS L1/L2/L5, GLONASS G1/G2/G3, BeiDou B1/B2, Galileo E1/E5 plus L-band correction services coverage and is especially designed for precision triple frequency positioning. The TW3967P provides superior multi-path signal rejection, a linear phase response, and tight Phase Centre Variation (PCV). This antenna is ideal for precision agriculture, autonomous vehicle tracking and guidance, and other applications where precision matters.

The TW3967P features a precision tuned, twin circular dual feed, stacked patch element. The signals from the two orthogonal feeds are combined in a hybrid combiner.

The TW3967P offers excellent axial ratio and a tightly grouped phase center variation.

The TW3967P covers from 1164MHz to 1254MHz and 1525MHz to 1606MHz.



## Applications

- Precision GPS position
- Triple Frequency RTK receivers
- Mission Critical GPS Timing
- Military & Security
- Network Timing and Synchronization

### Features

- Axial ratio: <2dB typ.
- Tight Phase Center Variation
- ESD circuit protection: 15 KV

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## **Benefits**

- Ideal for triple band RTK surveying systems
- Great multipath rejection
- Increased system accuracy
- REACH and RoHS compliant



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**Specifications** (Measured a Vcc = 3V, and Temperature=25°C)

Antenna			
E5a/L5 Gain (100mm ground plane)		-1.5dBic typ. at Zenith	
B2/E5b/G3 Gain (100mm ground plane)		2.5 dBic typ. at Zenith	
L2 Gain (100mm ground plane)		4.0 dBic typ. at Zenith	
G2 Gain (100mm ground plane)		2.5 dBic typ. at Zenith	
E1 Gain (100mm ground plane)		4.0 dBic typ. at Zenith	
L1 Gain (100mm ground plane)		4.0 dBic typ. at Zenith	
G1 Gain (100mm ground plane)		2.5 dBic typ. at Zenith	
Axial Ratio @ zenith			
L5/E5ab	<1.5 dB typ. 2.0 dB max.	B2	<1.5 dB typ. 2.0 dB max.
L2	<1.0 dB typ. 1.5 dB max.	G2	<1.5 dB typ. 2.0 dB max.
L-Band	<1.0 dB typ. 1.5 dB max.		
L1/E1	<1.0 dB typ. 1.5 dB max.	G1	<1.5 dB typ. 2.0 dB max.

### Electrical

EMI Immunity VSWR ESD Circuit protection 50V/Meter, excepting L1+/-100MHz and L2 +/- 100MHz <1.5:1 15 KV air discharge.

### **Mechanicals & Environmental**

Mechanical Size, Ground Plane Operating Temperature Range Weight Environmental Shock Vibration 60mm x 14.9mm (see drawing on other page), 100mm ground plane recommended -40°C to +85°C 70 g (excludes cable) RoHS and REACH compliant Vertical axis: 50 G, other axes: 30 G 3 axis, sweep = 15 min, 10 to 200 Hz sweep: 3 G

### **Ordering Information**

TW3967P – Triple Band GNSS antenna with L-Band Correction Where xx = connector type and zzzz = cable length in mm (where applicable) 33-3967P-xx-zzzz

Please refer to the Ordering Guide (<u>http://www.tallysman.com/index.php/gnss/ordering-guide/</u>) for the current and complete list of available radomes and connectors.



An ISO 9001:2015 Certified Company

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