



A Tallysman *Accutenna*®

TW7900P Passive Triple Band GNSS Antenna + L-band Correction Services

The TW7900P is precision tuned triple band, *Accutenna*® technology antenna for re-radiating GPS L1/L2/L5, GLONASS G1/G2/G3, BeiDou B1/B2, Galileo E1/E5a+b plus L-band corrections signals. The TW7900P provides superior axial ratio, a linear phase response, and tight Phase Centre Variation (PCV). This antenna is ideal for re-radiating systems.

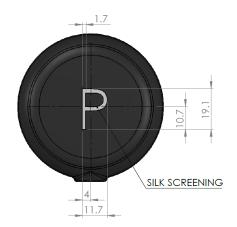
Architecturally, the TW7900P features a dual feed circular stacked patch element. The input signal is split into two orthogonal feeds used to excite the dual-pin patch antenna elements.

The TW7900P provides re-radiation for signals in the bands 1164MHz to 1254MHz and 1525MHz to 1606MHz. It is housed in a magnetic mount, weather-proof enclosure.

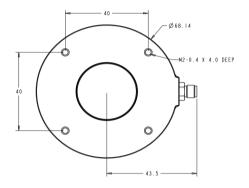
The "P" printed on the radome identifies this antenna as being a passive antenna allowing it to be differentiated from our line of active antennas that have the same radome shape.

Applications

- Indoor GNSS Re-radiator Systems for:
 - o Product Design Labs
 - Production facilities
 - o Tunnels
 - Vehicle Garages
 - Aircraft Hangars
- Triple Frequency systems







Features

- Axial ratio: <2dB typ.
- Tight Phase Center Variation

Benefits

- Ideal for re-radiators
- Increased system accuracy
- IP67, REACH, and RoHS compliant



When **precision** matters...

TW7900P Passive Triple Band GNSS Antenna + L-band Correction Services **Specifications** (Temperature=25°C)

Antenna

Patch Architecture Circular, Dual Feed, Dual Stacked Patch

E5a/L5 Gain (100mm ground plane)
-1.5dBic Min at Zenith
E5b/G3 Gain (100mm ground plane)
3.0 dBic Min at Zenith
L2 Gain (100mm ground plane)
4.0 dBic Min at Zenith
G2 Gain (100mm ground plane)
2.5 dBic Min at Zenith
E1 Gain (100mm ground plane)
4.0 dBic Min at Zenith
L1 Gain (100mm ground plane)
4.0 dBic Min at Zenith
G1 Gain (100mm ground plane)
3.0 dBic Min at Zenith

Typical Axial Ratio @ zenith

 L5/E5ab
 <2dB</td>
 L2/B2
 <1.5dB</td>

 G2
 <2dB</td>
 L-Band
 <1dB</td>

 L1/E1
 <1dB</td>
 G1
 <1.5dB</td>

Electrical

Bandwidth L2/L5: 1164MHz-1254MHz, L-band/L1: 1525 MHz-1606MHz

VSWR <1.5:1
Supply Voltage Range not applicable

EMI Immunity 50V/Meter, excepting L1+/-100MHz and L2 +/- 100MHz

Mechanicals & Environmental

Mechanical Size, Ground Plane 69mm (dia) x 22mm (H)

Operating Temperature Range -40°C to +85°C

Enclosure Radome: EXL9330, Base: Zamak White Metal

Weight 180 g

Attachment Method Magnetic Mount. Four-threaded holes (#6x32, 4mm deep in the base allow for screw mounting.

Environmental IP67, RoHS and REACH compliant Shock Vertical axis: 50 G, other axes: 30 G

Vibration 3 axis, sweep = 15 min, 10 to 200 Hz sweep: 3 G

Salt fog / spray MIL STD 810D

Ordering Information

TW7900P – Triple Band GNSS antenna with L-Band Correction 33-7900P-xx-yyyy

Where xx = connector type and yyyy = cable length in mm (where applicable)

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

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