



A Tallysman Accutenna® TW3710P Passive Multi-Constellation Fixed Mount Antenna

The TW3710P is a passive antenna built on Tallysman's unique *Accutenna* technology covering the BeiDou B1, Galileo E1, GPS L1, GLONASS G1 and SBAS (WAAS, QZSS, EGNOS & MSAS) frequency band (1557 to 1606 MHz).

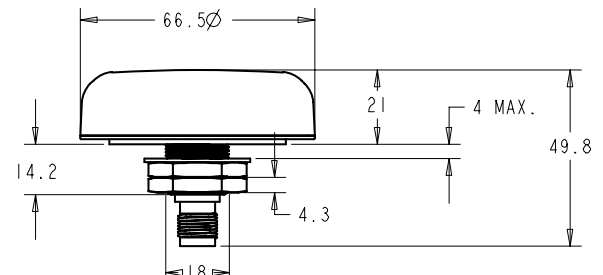
The TW3710P features a precision tuned, dual feed, circular patch element. The signals from the two orthogonal feeds are combined in phase quadrature in a hybrid combiner to provide a mathematically correct transfer function for a RHCP signal.

The TW3710P offers excellent axial ratio and a tightly grouped phase center variation.

The TW3710P is housed in a through-hole mount, weather-proof enclosure for permanent installations. L Bracket or Pipe Mount (part numbers 23-0040-0, 23-0065-0 respectively) are available for non-rooftop installation.



TW3710P Dimensions (mm)



Applications

- Hazardous Environments
- High Accuracy & Mission Critical Global Positioning
- Precision Agriculture, Mining & Construction
- Military & Security
- Avionics
- Law Enforcement & Public Safety
- Fleet Management & Asset Tracking

Features

- Axial ratio: <2.5dB typ.
- Tight Phase Center Variation
- ESD circuit protection: 15 KV

Benefits

- Excellent circular polarisation
- Excellent multipath rejection
- Increased system accuracy
- Ideal for harsh environments
- IP67, REACH, and RoHS compliant



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Specifications (Measured at Temperature=25°C)

Antenna

Patch Architecture	Dual, Quadrature Feeds
2 dB Bandwidth	49 MHz
Antenna Gain at Zenith (100mm ground plane)	4.5 dBic Min
Axial Ratio, over full bandwidth	≤ 1.5dB typ., 3dB max
Polarization	RHCP

Electrical

Bandwidth	1557 MHz-1606MHz
VSWR	<1.5:1
EMI Immunity	50V/Meter

Mechanicals & Environmental

Mechanical Size, Ground Plane	66mm x 21mm (see drawing on other page), 100mm ground plane recommended
Operating Temperature Range	-40°C to +85°C
Enclosure	Radome: EXL9330, Base: Zamak White Metal
Weight	150 g
Attachment Method	Permanent 3/4" (19mm) through hole mount
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-810F Section 509.4
Warranty	One year, parts and labor

Ordering Information

TW3710P – Passive Multi-Constellation antenna

33-3710P-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/wp-content/uploads/Current-Ordering-Guide.pdf>) for the current and complete list of available radomes and connectors.

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