TW3710P

TALLYSMAN®
A CALIAN COMPANY

TW3710P Upper Band Multi-Constellation Fixed Mount Passive Antenna

Frequency Coverage: L1/G1/B1/E1

Overview

The TW3710P employs Tallysman's patented Accutenna® technology covering the BeiDou B1, Galileo E1, GPS-L1, GLONASS-G1 and SBAS (WAAS, QZSS, EGNOS & MSAS) frequency band (1559 to 1606 MHz). It provides truly circular response over its entire bandwidth thereby producing superior multipath signal rejection. It is especially suitable for high accuracy applications.

TW3710P antennas features a dual-feed wideband patch element. This configuration provides excellent axial ratio that is constant across the full frequency band along with a superb phase linear response and tight phase centre variation providing performance normally associated with much higher priced antennas.

The antennas are housed in a through-hole mount, weatherproof enclosure for permanent installations. L Bracket or Pipe Mount adapters (part numbers 23-0040-0, 23-0065-0 respectively) are available for non-rooftop installation. A 100 mm ground plane is recommended for non-roof-top installations.

Applications

- High-accuracy & mission-critical global positioning
- Precision agriculture, mining, and construction
- Law enforcement and public safety
- Avionics
- Fleet management and asset tracking

Features

- Covers all upper GNSS Bands
- Great axial ratio: 1.5 dB typ.

Benefits

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

About Tallysman: With global headquarters and manufacturing in Ottawa, Canada, Tallysman is a leading manufacturer of high-precision antennas and components for Global Navigation Satellite System (GNSS) applications. Tallysman'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.tallysman.com**

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Antenna

Technology Dual-feed RHCP ceramic patch

		Gain dBic typ. at Zenith	Axial Ratio dB at Zenith
GNSS			
GPS / QZSS	L1	4.75	≤ 1
	L2	-	-
	L5	-	-
GLONASS	G1	4.75	≤ 1
	G2	-	-
	G3	-	-
Galileo	E1	4.75	≤ 1
	E5A	-	-
	E5B	-	-
	E6	-	-
BeiDou	B1	4.75	≤ 1
	B2	-	-
	B2a	-	-
	B3	-	-
IRNSS / NavIC	L5	-	-
QZSS	L6	-	-
L-Band Services (1525 MHz - 1559 MHZ)		-	-
Satellite Communications			
Iridium		-	-
Globalstar		-	-
Other			
Axial Ratio at 10°	-	Efficiency	-
PC Variation	-	PCO	

Mechanicals

Size	66.5 mm (dia.) x 21 mm (h.)
Weight	150 g
Radome	Radome: EXL9330 , Base: Zamak White Metal
Mount	Though-hole
Available Connectors	Please refer to ordering guide

Environmental

Operating Temperature	-70 °C to + 85 °C
Storage Temperature	-70 °C to + 95 °C
Vibration	MIL-STD-810D Method 514.4 and 514.5
Shock	Vertical axis: 50 G, other axes: 30 G
Salt Fog	MIL-STD-810F Section 509.4
IP Rating	IP69K
Compliance	IPC-A-610, FCC, RED / CE Mark, RoHS, REACH

Warranty:

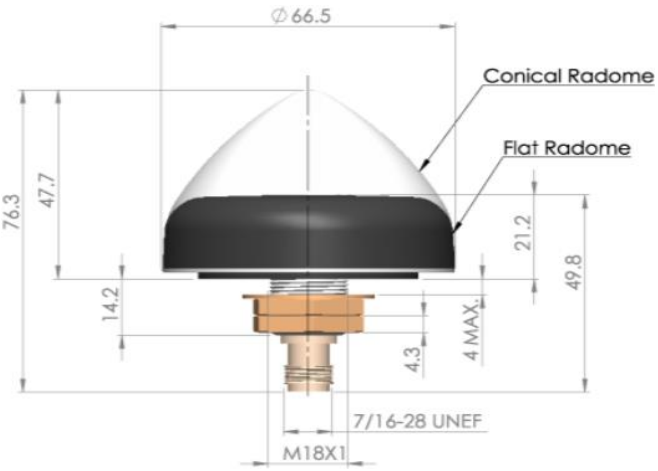
Parts and Labour	3-year standard warranty

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

Frequency Bandwith		Out of Band Rejection
Lower Band	-	-
L-Band - Correction Services	-	-
Upper Band	1559-1606 MHz	-

Architecture	-
Gain	-
Noise Figure	-
VSWR	-
Supply Voltage Range	-
Supply Current	-
ESD Circuit Protection	-
P 1dB Output	-
Group Delay	-

Mechanical Diagram



Ordering Information

Part Number **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 our **Ordering Guide** to review available radomes and connectors at:
https://www.tallysman.com/resource/tallysman-ordering-guide/

www.tallysman.com

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