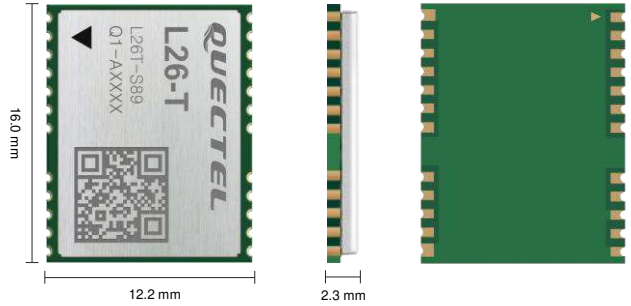




Quectel L26-T

Ultra-compact Multi-constellation GNSS Module



L26-T is an ultra-compact, single-band multi-constellation module featuring high precision timing and standard precision positioning. It is designed and manufactured according to the IATF 16949: 2016 standard.

Designed for navigation applications, the L26-T can receive and track GPS, Galileo, GLONASS, BeiDou, and QZSS signals, output multi-GNSS raw data, and use SBAS to enhance accuracy and reliability. The built-in LNA ensures better performance even in harsh environments such as dense urban canyons.

For high accuracy timing applications, the module can synchronize with the Coordinated Universal Time (UTC) in nanoseconds. This outstanding timing performance is crucial to a variety of applications demanding high-accuracy time and frequency stability.

L26-T also utilizes AGNSS data, with which its Time to First Fix (TTFF) is significantly reduced. The AGNSS feature enables high sensitivity acquisition even on the module's first start-up, when precise location, time, and frequency are still unknown.

For battery-powered applications, the module offers a power saving mode to reduce power consumption.

The superb performance of L26-T makes it an ideal solution for base stations as well as automotive and industrial applications.



Key Features

- ✓ Ultra-compact size: 12.2 mm × 16.0 mm × 2.3 mm
- ✓ Multi-GNSS engine for GPS, GLONASS, BeiDou, Galileo and QZSS
- ✓ Integrated LNA for better sensitivity
- ✓ Timing function
- ✓ Multi-GNSS raw data output
- ✓ Integrated AGNSS function
- ✓ Reception of SBAS broadcast signals



Multi-GNSS System



Low Power Consumption



Ultra-compact Size



Tracking Sensitivity:
-162 dBm



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



RoHS Compliant

GNSS Module		L26-T
Region	Global	
Dimensions (mm)	12.2 × 16.0 × 2.3	
Weight (g)	Approx. 0.9	
Temperature Range		
Operating Temperature	-40 °C to +85 °C	
Storage Temperature	-40 °C to +90 °C	
GNSS Features		
Supported Bands	GPS L1 C/A: 1575.42 MHz Galileo E1: 1575.42 MHz GLONASS L1: 1602.5625 MHz BeiDou B1I: 1561.098 MHz QZSS L1: 1575.42 MHz	
Default GNSS Constellation	GPS + GLONASS + Galileo	
Channel	Tracking: 48 Fast Acquisition: 2	
SBAS	WAAS, EGNOS, MSAS, GAGAN	
Horizontal Position Accuracy ^①	Autonomous: 1.5 m CEP	
Velocity Accuracy ^①	Without Aid: 0.1 m/s	
Acceleration Accuracy ^①	Without Aid: 0.1 m/s ²	
Timing Accuracy ^①	1PPS: < 6.8 ns @ 1σ	
TTFF @ -130 dBm with AGNSS ^②	Cold Start: 13 s	
TTFF @ -130 dBm without AGNSS ^①	Cold Start: 32 s	
	Warm Start: 25 s	
	Hot Start: 2 s	
Sensitivity	Acquisition: -147 dBm Tracking: -162 dBm Reacquisition: -154 dBm	
Dynamic Performance ^①	Maximum Altitude: 18000 m Maximum Velocity: 515 m/s Maximum Acceleration: 4g	
Certifications		
Regulatory	Europe: CE	
Others	RoHS	
Interfaces		
UART Interface	Adjustable: 9600–921600 bps Default: 9600 bps Update Rate: 1 Hz (Default); Max. 10 Hz	
Protocol	NMEA 0183	
External Antenna Interfaces		
Antenna Type	Active or Passive	
Antenna Power Supply	Internal or External	
Electrical Characteristics		
Supply Voltage Range	3.0–3.6 V; Typ. 3.3 V	
I/O Voltage	Typ. 3.3 V	
Current Consumption (Default GNSS Constellation @ 3.3 V)	Normal Operation: 71 mA @ Acquisition Mode 67 mA @ Tracking Mode Power Saving Mode: 9 μA @ Standby Mode 7 μA @ Backup Mode	

Notes:

- ^①: Room temperature, all satellites at -130 dBm.
- ^②: Open-sky, active high precision GNSS antenna.