

# Quectel L26

## Compact GNSS Module with Super Sensitivity



EASY™ Technology

Ultra Low Power  
Consumption

Anti-Jamming

Super Tracking  
Sensitivity -167dBmExtended Temperature  
Range -40°C to +85°C

GLONASS+GPS+QZSS



RoHS Compliant



### Key benefits

- ☞ Multi-GNSS engine for GPS, GLONASS, and QZSS
- ☞ EASY™, advanced AGPS technology without the need of external memory
- ☞ Support short circuit protection and antenna detection
- ☞ Built-in LNA for better sensitivity
- ☞ Ultra low power consumption in tracking mode, 21mA
- ☞ Always Locate™, an intelligent algorithm for power saving
- ☞ LOCUS, innate logger solution with no need of host and external flash
- ☞ High sensitivity, -167dBm@Tracking, -148dBm@Acquisition
- ☞ 99 acquisition/33 tracking channels, up to 210PRN channels
- ☞ Support DGPS, SBAS(WAAS/EGNOS/MSAS/GAGAN)
- ☞ Anti-Jamming, Multi-tone Active Interference Canceller

L26 is a single receiver module integrated with GLONASS and GPS system. It provides simultaneous GPS and Compass GLONASS open service L1 reception capability. With 33 tracking channels, 99 acquisition channels and 210 PRN channels, L26 can acquire and track any mix of GPS and GLONASS signals.

Compared with using GPS only, enabling both GPS and GLONASS generally doubles the number of visible satellites, reduces the time to first fix and increases positioning accuracy, especially when driving in rough urban environments.

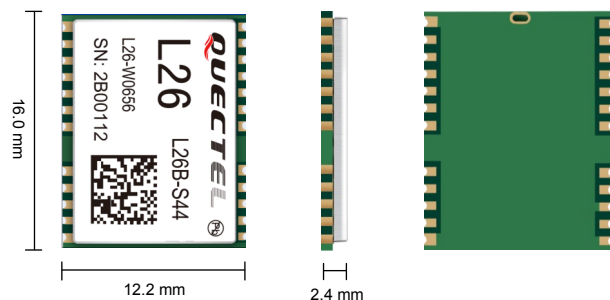
Combining advanced AGPS called EASY™ (Embedded Assist System) with proven AlwaysLocate™ technology, L26 achieves the highest performance and fully meets the industrial standard. Additional feature of embedded logger function called LOCUS allows L26 to log position information to internal flash memory at default intervals of 15 seconds and provide typically more than 16 hours log capacity without adding cost.

L26 supports built-in short circuit protection for active antenna and an active antenna supervisor for short and open circuit detection.

Its super performance makes L26 ideal for automotive, industrial PDA, consumer and industry applications. Extremely low power consumption of L26 also makes it easier to be applied to power sensitive devices, especially portable applications.

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### General Specifications

<b>L1 Band Receiver (1575.42MHz)</b>	Channel	33 (Tracking) / 99 (Acquisition) Up to 210(PRN)
	C/A Code	
	SBAS	WAAS, EGNOS MSAS,GAGAN
<b>Horizontal Position Accuracy</b>	Autonomous	<2.5 m CEP
<b>Velocity Accuracy</b>	Without Aid	<0.1m/s
<b>Acceleration Accuracy</b>	Without Aid	0.1m/s <sup>2</sup>
<b>Timing Accuracy</b>	1PPS Out	10ns
<b>Reacquisition Time</b>		<1s
<b>TTFF@-130dBm with EASY™</b>	Cold Start	<15s
	Warm Start	<5s
	Hot Start	<1s
<b>TTFF@-130dBm without EASY™</b>	Cold Start	<35s
	Warm Start	<30s
	Hot Start	<1s
<b>Sensitivity</b>	Acquisition	-148dBm
	Tracking	-167dBm
	Reacquisition	-160dBm
<b>Environmental</b>	Operating Temperature	-40°C to 85°C
	Storage Temperature	-45°C to 125°C
<b>Dynamic Performance</b>	Maximum Altitude	Max.18000m
	Maximum Velocity	Max.515m/s
	Maximum Acceleration	4G
<b>Dimensions</b>	16.0 × 12.2 × 2.4mm	
<b>Weight</b>	Approx. 1.0g	

### Power Management

<b>Power Supply</b>	2.8V ~ 4.3V
<b>Power Acquisition</b>	29mA(GPS+GLONASS) 26mA(GPS)
<b>Power Tracking</b>	21mA(GPS+GLONASS) 18mA(GPS)
<b>Power Saving</b>	Typ.2.7mA@AlwaysLocate™(Note1) 7uA@Backup Mode 350uA@Standby Mode Periodic Mode
<b>Antenna Type</b>	Active or Passive
<b>Antenna Power</b>	External or Internal VCC_RF

Note1: Measured in GPS+GLONASS system under outdoor static mode.

### Serial Interfaces

<b>Serial Interfaces</b>	UART: Adjustable 4800~115200 bps Default: 9600bps
<b>Update rate</b>	1Hz (default), up to10Hz
<b>I/O Voltage</b>	2.7V ~ 2.9V
<b>Protocols</b>	NMEA 0183 PMTK

