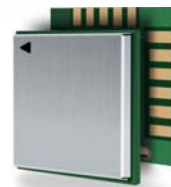


QUECTEL

Wireless Module Expert

L30

Compact GPS Module
with Super Sensitivity



Super sensitivity
-163dBm tracking



CGEE Solution



Low Power
Consumption



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



High Accuracy



Anti-Jamming



SMD Type



RoHS Compliant

The L30 module provides the high performance GPS engine module which is embedded the SIRFstarIV™ chip solution. With 48 PRN channels, L30 acquires and tracks satellites in the shortest time at very low signal level. With an extremely compact profile of 9.0mm x 9.0mm x 1.6mm, it perfectly suits portable devices, vehicle tracking, personal tracking, asset tracking, connected PND, security devices and other industrial applications.

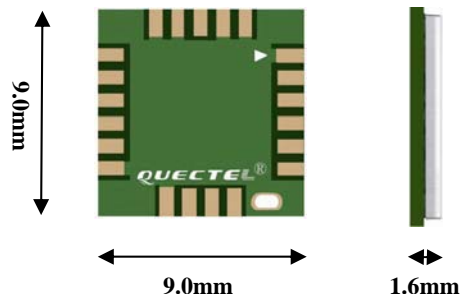
L30 supports aided-GPS function without the necessity of data download from server since it captures ephemeris data from satellites locally and predicts ephemeris within the next 3 days.

Advantages

- Extremely compact size, 9.0mm x 9.0mm x 1.6mm
- -163dBm tracking sensitivity
- Highest autonomous mode acquisition sensitivity, -148dBm
- Power saving modes
- Self-Assisted CGEE function
- 48 PRN channels
- Low tracking power consumption, 40mA @ -130dBm
- Removes in-band jammers up to 80 dB-Hz
- Tracks up to 8 CW jammers

L30

Compact GPS Module with Super Sensitivity



General Specifications

L1 Band Receiver (1575.42MHz)	Channel Number	48 channels
	C/A code	
	SBAS	WAAS, EGNOS
Horizontal Position Accuracy	Autonomous	<2.5 m CEP
	SBAS	<2.0 m CEP
Velocity Accuracy	Without aid	<0.01 m/s
Acceleration Accuracy	Without aid	0.1 m/s ²
Timing Accuracy		<100 ns
Reacquisition Time		<1 s
TTF (Time To First Fix)	Cold Start	<35s
	Warm Start	<35s
	Warm Start with CGEE	10s typ.
	Hot start	<1s
Sensitivity	Autonomous Acquisition	-145dBm
	Hot Start	-159dBm
	Tracking	-160dBm
	Navigation	-159dBm
Sensitivity with external LNA	Autonomous Acquisition	-148dBm
	Hot Start	-160dBm
	Tracking	-163dBm
Environmental	Operating temperature	-40°C to 85°C
	Storage temperature	-45°C to 125°C

Dynamic Performance	Maximum altitude	<18288 m
	Maximum velocity	514m/s
	Maximum acceleration	4 G
Dimensions		9.0mm×9.0mm×1.6mm
Weight		Approx. 0.6g

Serial Interfaces

One Multiplexed Interface	UART: Adjustable 1200~115200 bps Default: 4800bps
	IIC (master/slave): Up to 400 Kbps
	SPI (slave):Default
I/O Voltage	1.71V ~ 1.89V
Protocols	NMEA
	OSP

Electrical Data

Power supply	1.71V ~ 1.89V
Power	40mA @-130dBm
Acquisition	
Power Tracking	36mA @-130dBm
Hibernate	17uA
Power Saving	ATP, PTF, Hibernate
Antenna Type	Passive and active
Antenna power	External

Contact Us

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