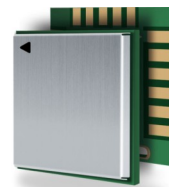


**QUECTEL**  
*Wireless Module Expert*

## L30

*Compact GPS Module  
with Super Sensitivity*



Super sensitivity  
-163dBm tracking



CGEE Solution



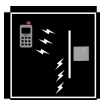
Low Power  
Consumption



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



High Accuracy



Anti-Jamming



SMD Type



RoHS Compliant

The L30 module provides the high GPS performance with an embedded SIRFstarIV™ chip solution. With 48 PRN channels, L30 can acquire and track satellites in the shortest time at a 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.

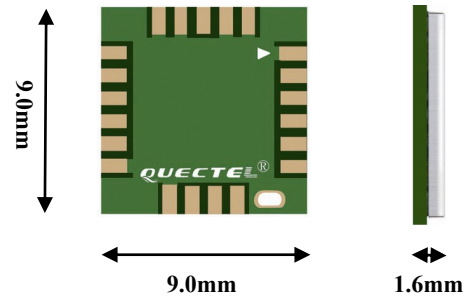
L30 supports aided-GPS function without the necessity of data download from server since it captures ephemeris data from satellites locally and predicts ephemeris within the next 3 days.

### 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, 36mA @ -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

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

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

### Serial Interfaces

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

### Electrical Data

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

### Contact Us

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