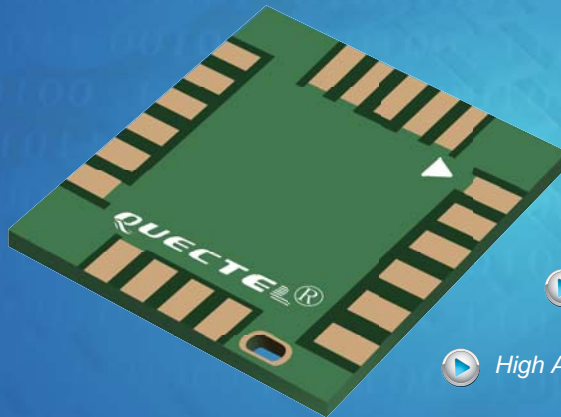


L30

Compact GPS Module with Super Sensitivity

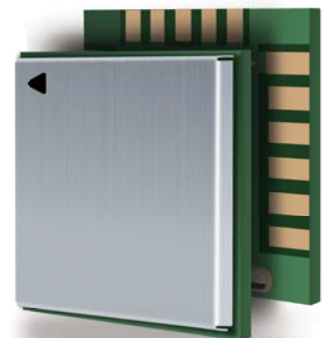


- ▶ Super Sensitivity
-163dBm Tracking
- ▶ CGEE Solution
- ▶ Low Power Consumption
- ▶ Extended Temperature Range -40 °C to +85 °C
- ▶ High Accuracy
- ▶ Anti-Jamming
- ▶ SMD Type
- ▶ RoHS Compliant

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.

- Extremely compact size, 9.0mm x 9.0mm x1.6mm
- -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

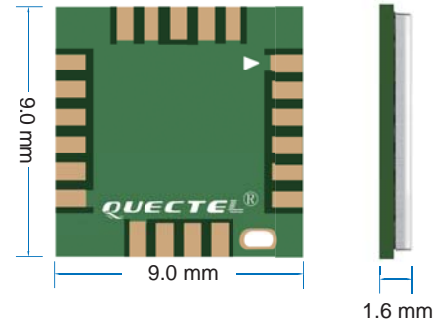


L30

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		< 1s
TTFF (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
	Navigation	-160dBm
Environmental	Operating Temperature	-40°C ~ +85°C
	Storage Temperature	-45°C ~ +125°C
Dynamic Performance	Maximum Altitude	<18288 m
	Maximum Velocity	514m/s
	Maximum Acceleration	4 G
Dimensions		9.0mmx9.0mmx1.6mm
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 Acquisition	40mA @-130dBm
Power Tracking	36mA @-130dBm
Hibernate	17uA
Power Saving	ATP, PTF, Hibernate
Antenna Type	Passive and active
Antenna Power	External

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