

QUECTEL

Wireless Module Expert

L20

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 L20 module provides the high performance GPS engine module which is embedded the SIRFstarIV™ chip solution with SIRFaware™ technology. With 48 PRN channels, L20 acquires and tracks satellites in the shortest time even at indoor signal level. With a compact profile of 16.0mm x 12.2mm x 2.4mm, it perfectly suits for vehicle tracking, personal tracking, asset tracking, connected PND, security device and other industrial applications.

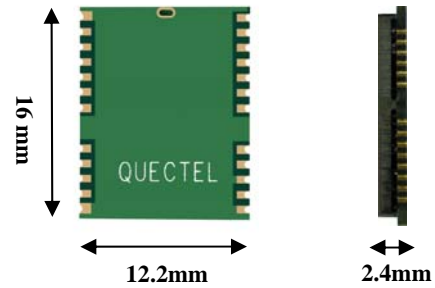
L20 supports aided-GPS function without the necessity of data download from server since it captures ephemeris data from satellites locally and predicts ephemeris out to 3 days.

Advantages

- -163dBm tracking sensitivity
- Highest autonomous mode acquisition sensitivity, -148dBm
- Power saving modes
- Self-Assisted CGEE function
- 48 PRN channels
- Low tracking power consumption, 41mA (passive antenna)
- Removes in-band jammers up to 80 dB-Hz
- Tracks up to 8 CW jammers

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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	-148dBm
	Hot Start	-160dBm
Environmental	Tracking	-163dBm
	Navigation	-160dBm
	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		16.0mm×12.2mm×2.4mm
Weight		Approx. 1.0g

Serial Interfaces

One UART	Adjustable:1200~115200 bps Default: 4800bps
I/O Voltage	2.0V ~ 3.6V
Protocols	NMEA OSP

Electrical Data

Power supply	2.0 to 3.6V
Power Acquisition	57mA (passive antenna)
Power Tracking	41mA (passive antenna)
Power Saving	TP, APM, PTF
Antenna Type	Passive and active
Antenna power	External or internal VCC_RF

Contact Us

Address	Room 501, Building 9, No.99 TianZhou Road, Shanghai, China
Email	info@quectel.com
Tel	+86 21 51082965

