

QUECTEL

Wireless makes smarter

L20

Compact GPS Module with Super Sensitivity



Super sensitivity
-163dBm tracking



Low Power
Consumption



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



High Accuracy



Anti-Jamming



SMD Type



RoHS Compliant



AGPS solution



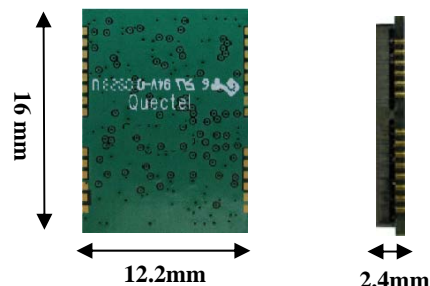
The L20 can provide the high performance GPS engine module which is embedded the SIRFstarIV™ chip solution with SIRFaware™ technology. With 48 PRN channels, the L20 module acquires and tracks satellites in the shortest time even at indoor signal level. With a super compact profile of 16.0mm x 12.2mm x 2.4mm, This make it perfectly suited for automotive, and industrial applications product with strict size and cost requirements.

Advantages

- -163dBm tracking sensitivity
- Highest autonomous mode acquisition sensitivity, -148dBm
- 48 PRN channels
- Low tracking power consumption, 32mA (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
	Hot start	<1s
	CGEE (Optional)	< 4.7s
Sensitivity	Autonomous Acquisition	-148dBm
	Hot start	-160dBm
	Tracking	-163dBm
	Navigation	160dBm
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		16.0mm×12.2mm×2.4mm
Weight		Approx. 1.8g

Serial Interfaces

One UART	Adjustable:1200~ 115200 bps Default: 4800bps
One IIC	I2C up to 400 Kbps
I/O Voltage	2.7V ~ 3.6V
Protocols	NMEA OSP

Electrical Data

Power supply	2.7 to 3.6V
Power Acquisition	37mA (passive antenna)
Power Tracking	32mA (passive antenna)
Lower Power	<2mA
Antenna Type	Passive
Antenna power	External or internal VCC_RF

Contact Us

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