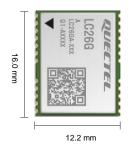
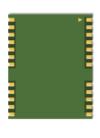


Quectel LC26G (AB)

Compact GNSS Module







LC26G (AB) is a multi-constellation GNSS receiver module capable of tracking GPS, GLONASS, Galileo, BDS and QZSS concurrently. LC26G (AB) is designed to be compatible with Quectel L26 and L26-LB modules, allowing for smooth migration between them.

The integrated LNA provides high sensitivity, high positioning accuracy, fast tracking and signal acquisition, and ensures improved performance even in challenging environments. In contrast to single constellation GPS only receivers, LC26G (AB) multi constellation GNSS receiver can access a vast number of visible satellites and thus reduce TTFF and improve positioning accuracy even in dense urban canyons.

The combination of EASY (Embedded Assist System) and ALP (Adaptive Low Power) lends LC26G (AB) high performance, low power consumption and full compliance with industrial standards. EASY technology allows the module to automatically calculate and predict orbits by using the ephemeris data (up to 3 days) stored in internal RAM, resulting in a quick position fix with low power consumption, even at lower signal levels. ALP technology allows LC26G (AB) to adaptively adjust the on/off time based on environmental conditions and motion information to strike a balance between positioning accuracy and power consumption.

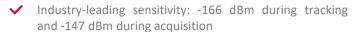
Its enhanced performances make LC26G (AB) ideal for industrial PDA, consumer and industry applications. Extremely low power consumption makes it a great solution for power-sensitive applications, such as portables.



Key Features









- Embedded multi-tone active interference canceller for anti-jamming
- **UART** and I2C Interfaces



EASY Technology



Consumption



Ultracompact Size



Tracking Sensitivity: -166 dBm



Range: -40 to +85 °C



Anti-jamming



RoHS Compliant



Multi-constellation System

Quectel LC26G (AB)

Dimensions 12.2 mm × 16.0 mm × 2.4 mm	GNSS Module	LC26G (AB)	
Weight Apprax. 0.85 g Temperature Range O°C to +85° C Storage Temperature 40°C to +90° C GRSS Features GPS.LT. (/A: 1375. 42 MHz GLONASS LT: 1598.0252-1605.375 MHz Gillioe Et 1375. 42 MHz Supported Bands GSB LT: 1575. 42 MHz Default Constellations GPS. ± GLONASS + Galleo + BDS + QZSS Number of Tracking Channels 47 Number of Concurrent GNSS 4 + QZSS SBAS WAAS, EGNOS, MSAS and GAGAN Horizontal Position Accuracy © Autonomous: 1.5 m Velocity Accuracy © Without Aid: 0.1 m/s Accuracy of 1PPS Signal © 35 ns TIFF (with EASY) © Without Aid: 0.1 m/s² Accuracy of 1PPS Signal © Cold Start: 15 TIFF (with EASY) © Warm Start: 2.5 Hot Start: 1.5 Cold Start: 3.8 TIFF (with DEO) © Cold Start: 3.8 TIFF (with DEO) © Cold Start: 3.8 Moral Start: 2.5 s Hot Start: 1.5 Hot Start: 1.5 Hot Start: 3.8 Moral Start: 2.5 s dbm Maximum Altitude: 10000 m Maximum Altitude: 100			
Content Con			
Operating Temperature -40 °C to +85 °C Storage Temperature -40 °C to +80 °C GNSS Features Features GSVSS Features GENEAU CANASCIL: 1595.42 MHz GONASCIL: 1598.0625–1605.375 MHz GONASCIL: 1598.0625–1605.375 MHz BDS 811: 1551.048 MHz BDS 811:		White or one P	
Storage Temperature		40 °C to ±95 °C	
GPS 1 C / A: 1575 42 MHz			
Supported Bands GICMASS LI 1:598.0625-169.375 MHz GIGNDASS LI 1:598.0625-169.375 MHz GIGNDASS LI 1:598.0625-169.375 MHz BDS BLI 1:5157.42 MHz BDS BLI 1:5157.42 MHz BDS BLI 1:5157.42 MHz BDS BLI 1:5157.42 MHz DEfault Constellations GP5 + GLONASS + Gailliev + BDS + QZSS Number of Tracking channels 47 Number of Concurrent GNSS 4 P QZS SSAS WAAS, EGNOS, MSAS and GAGAN Horizontal Position Accuracy ② Without Aid: 0.1 m/s² Acceleration Accuracy ③ Without Aid: 0.1 m/s² Acceleration Accuracy ③ Without Aid: 0.1 m/s² Acceleration Accuracy ③ Vision xix 1.5 s TTFF (with EASY) ③ Cold Start: 1.5 s TTFF (with EASY) ③ Cold Start: 2.5 s Varm Start: 2.5 Varm Start: 2.5 s		-40 C t0 +50 C	
Supported Bands	GNSS Features	GDS 1.1 C/A: 1575 A2 MHz	
Number of Tracking Channels 47 Number of Concurrent GNSS 4 + CZSS SBAS WAAS, EGNOS, MSAS and GAGAN Horizontal Position Accuracy WAAS, EGNOS, MSAS and GAGAN Horizontal Position Accuracy Without Aid: 0.1 m/s Acceleration Accuracy Without Aid: 0.1 m/s Acceleration Accuracy Without Aid: 0.1 m/s Accuracy of 1PPS Signal S 5 ns Cold Start: 15 s Warm Start: 2 s Hot Start: 1 s Cold start: 5 s Cold start: 5 s Cold start: 2 s Hot Start: 1 s TTFF (with EASY) Cold start: 2 s Hot Start: 1 s Acquisition: -147 dBm Tracking: -166 dBm Reaquisition: -199 dBm Aximum Altitude: 10000 m Maximum Altitude: 10000 m Maximum Altitude: 10000 m Maximum Acceleration: 4g Certifications Technology Europe: CE Others RoHS Interfaces UART Dyba 400 kbps Adjustable: 9600–921600 bps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Antenna Type Active or Passive Antenna Power Supply External Controlled (through VDD_RF) Electrical Characteristics Supply Voltage Range 2, 55-3,6 V, tp. 3.3 V U/O Voltage Current Consumption 36 mA @ Acquisitions 36 mA @ Acquisitions 36 mA @ Tracking 37 Mem & Tracking 37 Mem & Tracking 37 Mem & Tracking 38 Mem & Tracking 38 max M	Supported Bands	GLONASS L1: 1598.0625–1605.375 MHz Galileo E1: 1575.42 MHz BDS B1I: 1561.098 MHz BDS B1C*: 1575.42 MHz	
Number of Concurrent GNSS 4 + QZSS SBAS WAAS, EGNOS, MSAS and GAGAN Horizontal Position Accuracy [©] Autonomous: 1.5 m Velocity Accuracy [©] Without Aid: 0.1 m/s Accuracy of 1PPS Signal [©] 35 ns TTFF (with EASY) [©] Cold Start: 15 s TTFF (with EPO) [©] Cold Start: 5 s TTFF (with EASY) [©] Cold Start: 28 s Warm Start: 2 s Warm Start: 28 s Warm Start: 28 s Warm Start: 28 s Warm Start: 147 dBm Acquisition: -147 dBm Sensitivity (@ Default Constellations) Acquisition: -147 dBm Maximum Altitude: 10000 m Maximum Altitude: 10000 m Maximum Velocity: 490 m/s Maximum Altitude: 10000 m Uarrences Up to 400 kbps Regulatory Europe: CE Uarrences	Default Constellations	GPS + GLONASS + Galileo + BDS + QZSS	
SBAS WAAS, EGNOS, MSAS and GAGAN Horizontal Position Accuracy ^③ Autonomous: 1.5 m Velocity Accuracy ^③ Without Aid: 0.1 m/s Acceleration Accuracy ^③ Without Aid: 0.1 m/s² Accuracy of 1PPS Signal ^③ 35 ns Cold Start: 15 s Cold Start: 25 s Hot Start: 1 s Cold Start: 28 s TTFF (with EASY) ^③ Warm Start: 25 s Cold Start: 28 s Warm Start: 25 s Hot Start: 1 s Acquisition: -147 dBm Sensitivity (@ Default Constellations) Acquisition: -159 dBm Reacquisition: -159 dBm Maximum Altitude: 10000 m Maximum Velocity: 490 m/s Maximum Velocity: 490 m/s Maximum Acceleration: 4g Maximum Velocity: 490 m/s Certifications Regulatory Europe: CE Others RoHS Interfaces Up to 400 kbps UART Adjustable: 9600–921600 bps Default: 115200 bps Default: 115200 bps Default: 115200 bps Default: 115200 bps Sternal Antenna Interface Active or Passive Antenna Power Supply External or Internal (through VDD_RF)	Number of Tracking Channels	47	
Horizontal Position Accuracy	Number of Concurrent GNSS	4 + QZSS	
Velocity Accuracy ② Without Aid: 0.1 m/s Acceleration Accuracy ③ Without Aid: 0.1 m/s² Accuracy of 1PPS Signal ② 35 ns Cold Start: 15 s Cold Start: 25 mto Start: 1 s TTFF (with EASY) ③ Cold Start: 25 s TTFF (with EASY) ② Cold Start: 28 s Warm Start: 25 s Warm Start: 27 s Hot Start: 1 s Acquisition: -147 dBm Sensitivity (@ Default Constellations) Tracking: -166 dBm Reacquisition: -159 dBm Maximum Altitude: 10000 m Maximum Velocity: 490 m/s Maximum Velocity: 490 m/s Dydate Velocity: 490 m/s Maximum Velocity: 490 m/s	SBAS	WAAS, EGNOS, MSAS and GAGAN	
Acceleration Accuracy ② Without Aid: 0.1 m/s² Accuracy of 1PPS Signal ③ 35 ns Cold Start: 15 s Warm Start: 2 s Hot Start: 1 s Cold start: 28 s Warm Start: 28 s Warm Start: 25 s Hot Start: 15 s Cold Start: 28 s Warm Start: 25 s Hot Start: 15 s Acquisition: -147 dBm Sensitivity ② Default Constellations) Pacaquisition: -159 dBm Amximum Altitude: 10000 m Maximum Altitude: 20000 m Maximum Acceleration: 4g Certifications Regulatory Certifications Regulatory Uhers Adjustable: 9600–921600 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol Antenna Interface Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Normal Operation: 36 mA @ Acquisition John Acquisition J	Horizontal Position Accuracy ¹	Autonomous: 1.5 m	
Accuracy of 1PPS Signal ② 35 ns Cold Start: 15 s Warm Start: 2 s Hot Start: 1 s TTFF (with EASY) ③ Cold start: 5 s Cold Start: 5 s Cold Start: 5 s Cold Start: 5 s Cold Start: 5 s Cold Start: 28 s Warm Start: 25 s Hot Start: 1.5 Acquisition: -147 dBm Fracking: -166 dBm Reacquisition: -149	Velocity Accuracy ②	Without Aid: 0.1 m/s	
Accuracy of 1PPS Signal ② 35 ns Cold Start: 15 s Warm Start: 2 s Hot Start: 1 s TTFF (with EASY)③ Cold start: 5 s Cold start: 28 s Warm Start: 25 s Hot Start: 1 s Acquisition: -147 dBm Fracking: -166 dBm Reacquisition: -159 dBm Reacquisition: -159 dBm Reacquisition: -159 dBm Reacquisition: -190 dBm R	Acceleration Accuracy ②	Without Aid: 0.1 m/s ²	
Cold Start: 15 s Warm Start: 2 s Hot Start: 15 TTFF (with EASY) © Cold start: 28 s Cold start: 28 s TTFF (without EASY) © Cold Start: 28 s TTFF (without EASY) © Cold Start: 28 s Hot Start: 1 s Sensitivity (@ Default Constellations) Tracking: 166 dBm Reacquisition: -159 dBm Maximum Altitude: 10000 m Maximum Altitude: 10000 m Maximum Acceleration: 4g Certifications Regulatory Europe: CE Others RoHS Interfaces IZC Up to 400 kbps Adjustable: 9600–921600 bps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NiEA 0183 V4.10 External Antenna Interface Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range I/O Voltage VCC Current Consumption (@8.3 NJ Refault Constellations) © 36 mA @ Acquisition 36 mA @ Tracking	-		
Cold Start: 28 s Warm Start: 25 s Hot Start: 1 s Acquisition: -147 dBm Tracking: -166 dBm Reacquisition: -159 dBm Maximum Altitude: 10000 m Maximum Acceleration: 4g Certifications Regulatory Certifications Regulatory Europe: CE Others ROHS Interfaces I2C Up to 400 kbps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Antenna Type Active or Passive Antenna Type Active or Passive Supply Voltage Range VCC Normal Operation: 36 m A@ Acquisition 36 m A@ Acquisition 18 m Aguistion Acquisition 18 m Aguistion Acquisition 19 m Start: 28 s Warm Start: 28 s Maximum Acceleration: 49 Maximu		Warm Start: 2 s	
TTFF (without EASY)	TTFF (with EPO) ³	Cold start: 5 s	
Sensitivity (@ Default Constellations) Reacquisition: -159 dBm Reacquisition: -159 dBm Maximum Altitude: 10000 m Maximum Velocity: 490 m/s Maximum Acceleration: 4g Certifications Regulatory Europe: CE Others ROHS Interfaces I2C Up to 400 kbps Adjustable: 9600-921600 bps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Antenna Type Active or Passive Antenna Power Supply Electrical Characteristics Supply Voltage Range I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Acquisition 36 mA @ Tracking VIII Value	TTFF (without EASY) $^{ ext{?}}$	Warm Start: 25 s	
Dynamic Performance ② Maximum Velocity: 490 m/s Maximum Acceleration: 4g Certifications Europe: CE Regulatory Europe: CE Others RoHS Interfaces Adjustable: 9600–921600 bps UART Adjustable: 9600–921600 bps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Active or Passive Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 2.55-3.6 V, typ. 3.3 V I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 16 mA @ Tracking (@3 3 V, Default Constellations) ②	Sensitivity (@ Default Constellations)	Tracking: -166 dBm	
Regulatory Chers RoHS RoHS Interfaces I2C Up to 400 kbps Adjustable: 9600–921600 bps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 1/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Acquisition 36 mA @ Tracking	Dynamic Performance ^②	Maximum Velocity: 490 m/s	
Others RoHS Interfaces Interfaces I2C Up to 400 kbps Adjustable: 9600–921600 bps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Active or Passive Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 2.55–3.6 V, typ. 3.3 V I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	Certifications		
Interfaces I2C Up to 400 kbps Adjustable: 9600–921600 bps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	Regulatory	Europe: CE	
UART Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 2.55–3.6 V, typ. 3.3 V I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	Others	RoHS	
Adjustable: 9600–921600 bps Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 1.05 VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	Interfaces		
UART Default: 115200 bps Update Rate: 1 Hz (Default), up to 10 Hz Protocol NMEA 0183 V4.10 External Antenna Interface Antenna Type Active or Passive External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	I2C	Up to 400 kbps	
Protocol External Antenna Interface Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 1/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	UART	Default: 115200 bps	
Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 2.55–3.6 V, typ. 3.3 V I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	Protocol		
Antenna Type Active or Passive Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 2.55–3.6 V, typ. 3.3 V I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	External Antenna Interface		
Antenna Power Supply External or Internal (through VDD_RF) Electrical Characteristics Supply Voltage Range 2.55–3.6 V, typ. 3.3 V I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	Antenna Type	Active or Passive	
Electrical Characteristics Supply Voltage Range 2.55–3.6 V, typ. 3.3 V I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking	**		
Supply Voltage Range 2.55–3.6 V, typ. 3.3 V I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking		- 1	
I/O Voltage VCC Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking May 2 V Default Constellations (2)		2.55–3.6 V. tvp. 3.3 V	
Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking			
Power Saving Mode: 15 μA @ Backup Mode	Current Consumption	Normal Operation: 36 mA @ Acquisition 36 mA @ Tracking Power Saving Mode:	

NOTE:

- 1. $\stackrel{\textcircled{\scriptsize 1}}{_}$:CEP, 50 %, 24 hours static, -130 dBm, more than 6 SVs.
- 2. ②: Room temperature, all satellites at -130 dBm.
- 3. ③: Open-sky, active high-precision GNSS antenna.
- 4. *: Under development.

