ORG4600-B01

Dual Frequency (L1 + L5)

GNSS module in compact 10x10 mm footprint

Ideal for IoT and OBD applications requiring sub-10cm positional accuracy in all conditions.

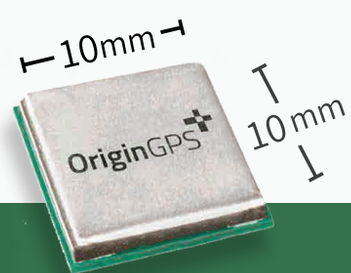
The ORG4600-B01 is a dual frequency GNSS module developed with Broadcom's L1+L5 chip for ultra-accurate GNSS positioning. The solution enables customers to build solutions with 10cm accuracy in real-world operating conditions without implementing external components and is the industry's smallest dual-frequency module. One RF port allows for the use of a low-cost, dual-band antenna, while an alternate build option allows for separate L1/L5 RF outputs when dual antennas are desired.

The module is fully-integrated (dual LNA, SAW filter, TCXO), and ideally suited for solutions requiring a dual frequency combination and ultra-accurate positioning, such as autonomous vehicles and equipment, and telematics, IoT and OBD applications.

SPECIFICATIONS

Dimensions (LxWxH) mm	Weight (gr)	DC supply (V)	Interface	Accuracy (m)	I/O Voltage (V)	Update rate (Hz)	Internal memory	GNSS SOC
10x10x1.95	0.4	2-5.5	UART/I2C	0.1	1.8	1	Flash	BCM47758

FEATURES



- RAW output for RTKLIB
- corrections
- L1 static drift elimination
- Integrated geo-fencing
- Superior multipath rejection
- Positional accuracy at low velocity
- Superior tracking in urban canyon environment
- Supported constellations
  - L1 (1559 – 1606 MHz); GPS, GLONASS, Galileo, BeiDou
  - L5 (1166 – 1187 MHz); GPS, Galileo, QZSS, IRNSS

ORG4600-MK01

Dual Frequency (L1 + L5)

Cost-effective GNSS module in compact 10x10 mm footprint

Supports applications requiring <1m positional accuracy in all conditions.

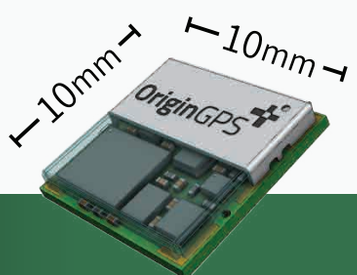
The ORG4600-MK01 is a cost-effective dual frequency GNSS module developed with the MediaTek L1+L5 chip for ultra-accurate GNSS positioning. The chip is based on 12nm technology enabling 20% higher clock speeds, 15% greater transistor density, and delivering a very low power SRAM cell. L1+L5 bands support makes the module an ideal solution for deployments requiring sub-1m accuracy in multipath environments, without implementing external components. It is the second industry's smallest module of its kind developed by OriginGPS.

The module is fully integrated (dual LNA, SAW filter, TCXO, RTC, LDO), and includes update rates enabling close to real-time information, such as position and velocity. Low power modes include ALP which further extends battery life. The module is ideally suited for cost-effective, location-intensive IoT applications like real-time asset tracking and ultra-accurate geolocation applications.

SPECIFICATIONS

Dimensions (LxWxH) mm	Weight (gr)	DC supply (V)	Interface	Accuracy (m)	I/O Voltage (V)	Update rate (Hz)	Internal memory	GNSS SOC
10x10x1.95	0.38	2-5.5	UART/I2C	0.8	1.8	1-10	Flash	AG3335M

FEATURES



- Support RTCM protocol
- Time service app - PPS / NMEA
- Active interference cancellation (12 signals)
- AGNSS, orbit prediction and logger
- Indoor and outdoor multi-path compensation
- Configurable accuracy in different operational modes
- Superior tracking in urban canyon environment
- Supported constellations
  - L1 (1559 – 1606 MHz); GPS, GLONASS, Galileo, BeiDou, SBAS, QZSS
  - L5 (1166 – 1187 MHz); GPS, Galileo,BeiDou, QZSS, IRNSS