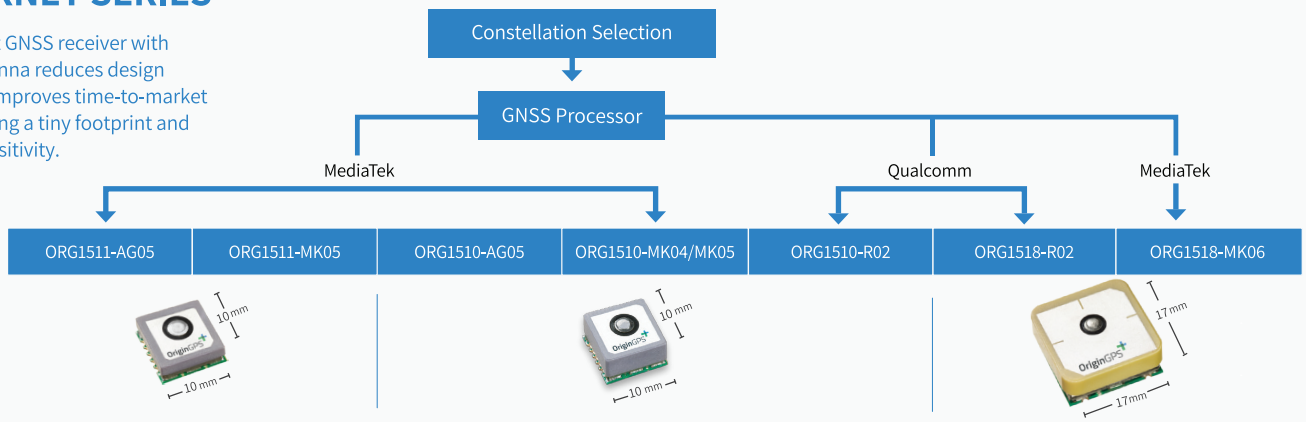
MODULE FEATURES

OriginGPS mini+mighty

HORNET SERIES

Worlds smallest GNSS receiver with integrated antenna reduces design resources and improves time-to-market while maintaining a tiny footprint and unmatched sensitivity.

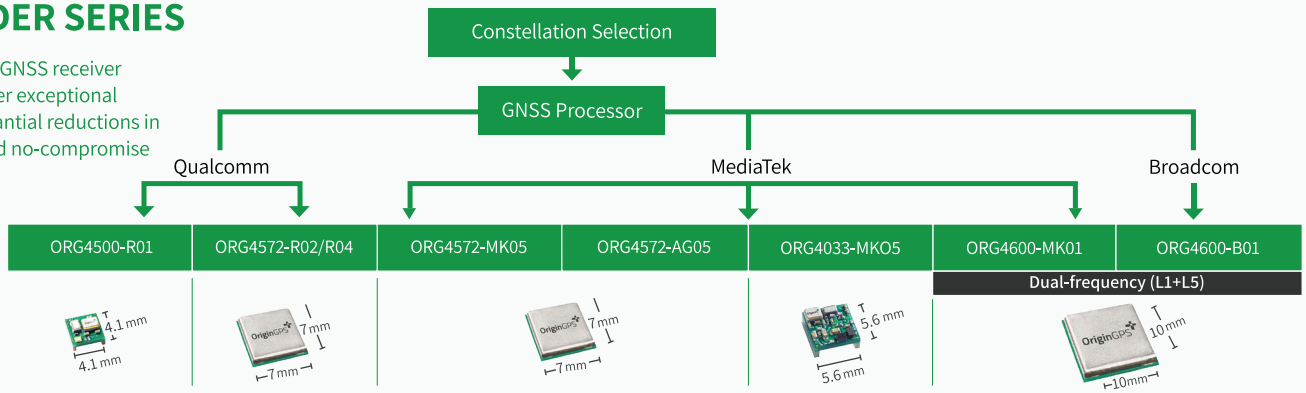


	ORG1511-AG05	ORG1511-MK05	ORG1510-AG05	ORG1510-MK04/MK05	ORG1510-R02	ORG1518-R02	ORG1518-MK06
Dimensions LxWxH (mm)	10X10X3.9	10X10X4.1	10x10x5.9	10x10x6.1	10x10x5.9	17x17x6.4	17x17x6.4
Weight (gr)	1.43	1.43	2.4	2.4	2.37	8	8
DC supply (VDC)	1.8	3.3	1.8	3.3	1.8	3.3	3.3
Interfaces	UART/I2C	UART/I2C	UART/I2C	UART/I2C	UART/SPI/I2C	UART/SPI/I2C	UART/I2C or UART/SPI
Accuracy (m)	<1.9	<1.9	<1.6	<1.5	<1.5	<1.5	<1.3
I/O voltage level	1.8	3.3	1.8	3.3	1.8	1.8	3.3
Update rate (Hz)	1-10	1-10	1-10	1-10	1-10	1-10	1-10
Internal memory	Flash	Flash	Flash	Flash	Flash	Flash	Flash
Constellation*	GPS+GAL+GLO+BDS +SBAS	GPS+GAL+GLO/BDS	GPS+GAL+GLO+BDS +SBAS	GPS+GAL+GLO/BDS	GPS+GAL+GLO/BDS	GPS+GAL+GLO/BDS	GPS+GAL+GLO/BDS
GNSS SOC	AG3352B	MT3333	AG3352B	MT3333	SiRFstar V B02	SiRFstar V B02	MT3333

*All OriginGPS GNSS modules support QZSS

SPIDER SERIES

Worlds smallest GNSS receiver provides designer exceptional flexibility, substantial reductions in product size, and no-compromise performance.



	ORG4500-R01	ORG4572-R02/R04	ORG4572-MK05	ORG4572-AG05	ORG4033-MK05	ORG4600-MK01	ORG4600-B01
Dimensions LxWxH (mm)	4.1x4.1x2.1	7x7x1.6	7x7x1.8	7x7x1.6	5.6x5.6x2.6	10x10x1.95	10x10x1.95
Weight (gr)	0.1	0.2	0.2	0.2	0.13	0.38	0.38
DC supply (VDC)	1.8	1.8 / 3.3	3.3	1.8	3.3	3.3	2-5.5
Interfaces	UART/I2C	UART/I2C	UART/I2C or UART/SPI	UART/I2C or UART/SPI	UART/I2C or UART/SPI	UART/I2C	UART/I2C
Accuracy (m)	< 1.5	< 1.5	< 1.6	< 1.7	< 2.5	< 0.8	0.1
I/O voltage level	1.8	1.8	3.3	1.8	3.3	1.8/2.8	1.8
Update rate (Hz)	1-5	1-10	1-10	1-10	1-10	1-10	1
Internal memory	ROM	Flash	Flash	Flash	Flash	Flash	Flash
Constellation*	GPS+GLO	GPS+GAL+GLO/BDS	GPS+GAL+GLO/BDS	GPS+GAL+GLO+BDS +SBAS	GPS+GAL+GLO/BDS	GPS+GAL+GLO+BDS +SBAS+IRNSS	GPS+GLO/GAL/ IRNSS
GNSS SOC	SiRFstar V B01	SiRFstar V B02	AG3352B	AG3352B	MT3333	AG3335M	BCM47758

*All OriginGPS GNSS modules support QZSS

GPS / GNSS MODULES

OriginGPS
mini+mighty

Outstanding performance from first fix
The GPS/GNSS modules achieve improved time to first fix (TTFF) and highly accurate real-time positioning of approximately 1.5m, enhanced signal-to-noise ratio (SNR), and a position fix of 1sec (hot start).

The world's smallest form factor
The miniature GPS/GNSS modules integrate an LNA, SAW filter, TCXO, RTC crystal, and a power management unit, in addition to the GNSS SOC.

Ultra-sensitivity is key
OriginGPS proprietary Noise-Free Zone™ technology enhances sensitivity and noise immunity, both essential under challenging signal conditions such as those in urban canyons.

Integrated and simple to integrate
Designed for a simple integration process, the modules offer a complete system-in-package (SIP) with an industry-leading small surface-mount technology (SMT) footprint.

Low power consumption saves resources
Requiring a very short acquisition time for TTFF, OriginGPS modules consume substantially less battery power. In addition, all modules include a range of low power modes.

Multi-constellation
OriginGPS modules simultaneously support multi-constellations, enabling continuous tracking of all satellites in view.

Why choose an OriginGPS GPS/GNSS module?

Small form factor	Utilizing the smallest PCB space possible enables end product miniaturization and plenty of space to design.
Minimizes RF design challenges	Modules RF front-end, LNA, SAW filter, TCXO and RTC are all integrated, while Hornet modules also include an integrated antenna.
Superior RF performance	Noise Free Zone (NFZ) technology eliminates ground currents, lowering noise floor, which results in superior C /N_0 - the leading performance indicator in GPS/GNSS receivers.
Fast TTM	A true plug-and-play solution with commands and data communicated over UART/I2C/SPI in standard NMEA format.
Design review included	Our technical team will review your schematic and board layout files. We are RF experts, so you don't have to be.