

Global Navigation Satellite System GNSS



GNSS2 Series

GNSS2 Series is a Global Navigation system capable to provides precise positioning service data through multiple satellite constellations. The GNSS is providing geolocation data, heading, speed, time or elevation data.

Enhanced through the use of external high gain antennas to perform best data in any scenario, ready for fixed or mobile applications, and incorporating the latest anti-jamming technology and offers unbeatable robustness and reliability.

Key features:

- High accuracy reading
- High performance 544 satellite tracking
- Advanced anti-jamming / anti-spoofing
- Ionospheric disturbance protection
- Ultra precise positioning and heading
- Ethernet access and settings
- Fast cold start time of <45s.
- Low power consumption
- Wide working temperature range
- Desentangle nearby structure signal
- MIL-STD-810
- HELIOS C2 compatible



Specifications:

GNSS2			
Signal/bands	GPS: L1 C/A, L2C, L2 P(Y), L5		
	GLONASS: L1 C/A, L2C/A, L3, L2P		
	BeiDou: B1I, B1C, B2a, B2I, B3I		
	Galileo: E1, E5a, E5b		
	QZSS: L1 C/A, L2C, L5		
	NavIC: L5		
	SBAS: EGNOS, WAAS, GAGAN, MSAS, SDCM		
	SBF, NMEA 0183, v3.01, v4.0, RTCM v2.x, v3.x (MSM included), CMR v2.0, CMR (CMR+ input)		
Formats	SBF, NMEA 0183, v3.01, v4.0, RTCM v2.x, v3.x (MSM included), CMR v2.0, CMR (CMR+ input)		
Connection	Ethernet port (TCP/IP, UDP, LAN 10/100 Mbps)		
RTK performance	Horizontal accuracy 0.6 cm. + 0.5 ppm.		
	Vertical accuracy 1cm + 1ppm		
	Initialisation 7 s		
GNSS attitude accuracy	Antenna separation	Heading	Pitch/Roll
	1m.	0.15°	0.25°
	5m.	0.03°	0.05°

Position accuracy		Horizontal	Vertical
	Standalone	1.2m.	1.9m.
	SBAS	0.6m.	0.8m.
	DGNSS	0.4m.	0.7m.
Velocity accuracy	0.03m/s		
Maximum update rate	10Hz.		
Latency	<10ms.		
Time precision	xPPS out 5ns.		Event accuracy <20ns.
Time to first fix	Cold start <45s.	Warm start <20s.	Re-aquisition Avg. 1s.
Tracking performance	Tracking 20dB.-Hz.		Acquisition 33dB.-Hz.
Operating temperature	-40°C./85°C.		
Humidity	5-95% (non-condensing)		
Vibration	MIL-STD-810G		
Antenna	2 high-precision antennas supporting triple-band and multi-constellation tracking		
Gain	32dB. typical		
Noise figure	2.5dB. typical		
Temperature	-40°/105°C		
IP rating	IP67		
Vibration	MIL-STD-810E Method 514.5		
Shock and Drop	MIL-STD-810G Method 516.6		

* AI/Deep learning/Object classification and advanced features with HELIOS C2
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