

PENTAX

Positioning Systems

G6 Series

Precision Satellite Surveying
with Wireless Communications

G6Ti | G6Ni

GPS | GLONASS | BEIDOU | SBAS | GALILEO



- + Compact and durable metal housing
- + Better dust and weather resistance (IP67)
- + Equipped with TILT sensor that works as an electric bubble
- + WiFi for direct communication with web browser for e.g. downloading data, firmware upgrades and communication between receiver and controller

TI Asahi Co.,Ltd
Aiming at the future together!

GNSS SPECIFICATIONS

Model		G6Ti	G6Ni
Channel Configuration		220 channels (dual frequency) for GPS, GLONASS, Galileo, Beidou and SBAS	555 channels (dual frequency) for GPS, GLONASS, Beidou and SBAS
Receiver Board		Trimble BD930	NovAtel 719
Signal Tracking	GPS	L1 C/A, L2E, L2C, L5	L1 C/A, L1C, L2C, L2P, L5
	GLONASS	L1 C/A, L2C/A, L3CDMA	L1 C/A, L2C, L2P, L3, L5
	BEIDOU	B1 / B2	B1, B2, B3
	Galileo	E1, E5A, E5B, E5AltBOC	E1, E5 AltBOC, E5a, E5b, E6
	QZSS	L1 C/A, L1 SAIF, L2C, L5	L1 C/A, L1C, L2C, L5, L6
	SBAS	L1 C/A, L5	L1, L5
	NavIC (IRNSS)*		L5
	L-Band		up to 3 Channels
Position Accuracy		Horizontal / Vertical	
	SBAS (WAAS, GAGAN etc.)	0.5 m / 0.85 m	
	DGPS	0.25 m + 1 ppm / 0.5 m + 1 ppm	
RTK Performance	Horizontal Accuracy	0.008 m + 1 ppm	0.010 m + 1 ppm
	Vertical Accuracy	0.015 m + 1 ppm	0.020 m + 1 ppm
	Average Time to Work	Typ. < 10 sec.	
	Availability/Initialization Reliability	> 99.9%	
Static Performance	Horizontal Accuracy	2.5 mm + 0.5 ppm	
	Vertical Accuracy	5 mm + 0.5 ppm	
PPP (Precision Point Positioning)		Horizontal 40mm with TerraStarC (optional)	
Ports		Lemo 5-pin, external radio and power supply Lemo 7-pin, serial port and USB	
Internal Radio Modem	Frequency	TRM101	
	Output Power	0.5 W / 1 W	
GSM/GPRS Modem		Gemalto PHS8-P UMTS / HSPA+ / GSM / GPRS / EDGE (supporting NTRIP)	
Power	Internal Battery	3,350 mAh / 7.4V x2	
	Current Drain	0.35A / 12V 1.25A / 12V max.	
	Battery Running Time	Approx. 12 hr: Rover, 10 hr: Base with 2 Batteries	
Weight		1.1 kg with 2 batteries	
Dimensions		Ø 130 mm x H 100 mm	
Environmental Specifications	Operating Temperature	-30 °C to +65 °C	
	Storage Temperature	-30 °C to +65 °C	
	Shock/Drop	2 m	
Velocity Accuracy	Standalone	0.007 m/sec, 0.020 m/sec	0.03 m/s RMS
Data Output	Raw Data	up to 20 Hz	up to 5 Hz (20 Hz optional)
	NMEA Data	1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz	Default 5 Hz
		RTCM Ver 2.1, 2.2, 2.3, 3.0, 3.1, 3.2 CMR, CMR+, sCMRx	
Time to First Fix	Cold Start	< 45 sec	< 50 sec
	Warm Start	After power-on < 30 sec	After power-on < 35 sec
		Re-acquisition < 2 sec	Re-acquisition < 1 sec
WiFi		IEEE 802.11b/g	
Tilt Sensor		Electric Bubble Range 30°/ < 30mm	
Bluetooth		Class 2	
Memory		Internal 4 GB and MicroSD 4 GB	
RoHS		Complied	
Waterproofing		IP67	
Certification		CE	
Standard Accessories		2 x Li-Ion rechargeable battery pack Battery charger + AC Adapter UHF radio antenna (longer one) 5/8 inch screw adapter Lemo 7-pin communication cable CD (contains manual and data conversion software)	

* Hardware ready

PENTAX Positioning System is dedicated to providing customers with first class positioning system products and freedom of choice. We have carefully designed high-quality products to meet the needs of today's surveyors based on the experience of many years involved in instrument design and construction. Our engineers have been involved in Survey products since the beginning of the Satellite Surveying Era. We are committed to ease of use, a low cost of ownership and flexibility to accommodate different working environments. Our close partners are carefully chosen and are committed to these values as we are.

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The CE marking assures that this product complies with the requirements of the EC directive for safety.



Member symbol of the Japan Surveying Instruments Manufacturers' Association representing the high quality surveying products.