

**PENTAX**

# Positioning Systems **G2100 Series**

Precision Satellite Surveying  
with Wireless Communications

G2100T | G2100N

GPS | GLONASS | BEIDOU | SBAS  
GALILEO (G2100T ONLY)



Presenting new GNSS receivers for even better performance! Our top deal model G2100N with all the essentials you need and the more advanced G2100T.

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

# GNSS SPECIFICATIONS

Model		G2100T	G2100N
<b>Channel Configuration</b>		220-channels (dual frequency) for GPS, GLONASS, Galileo, Beidou and SBAS	120-channels (dual frequency) for GPS, GLONASS, Beidou and SBAS
<b>Receiver Board</b>		Trimble BD970	NovAtel 628
<b>Single Tracked</b>	GPS	L1 C/A, L2E, L2C, L5	L1, L2, L2C
	GLONASS	L1 C/A, L1P, L2 C/A (M only), L2P	L1, L2
	BEIDOU		B1 / B2
	Galileo	L1BOC, E5A, E5B, E5AltBOC	—
	QZSS	L1 C/A, L1 SAIF, L2C, L5	—
	SBAS		L1 C/A, L5
<b>Position Accuracy</b>		Horizontal / Vertical	
	SBAS	0.5 m / 0.85 m	0.6 m
	DGPS	0.25 m + 1 ppm / 0.5 m + 1 ppm	0.4 m
<b>RTK Performance</b>	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%	
<b>Static Performance</b>	Horizontal Accuracy	2.5 mm + 1 ppm	
	Vertical Accuracy	5 mm + 1 ppm	
<b>Ports</b>		Lemo 5-pin, external radio and power supply Lemo 7-pin, serial port and USB	
<b>Internal Radio Modem</b>	Frequency	410 ~ 470 MHz	
	Output Power	1 W	
<b>GSM/GPRS Modem</b>		UMTS / HSPA+ / GSM / GPRS / EDGE (supporting NTRIP)	
<b>Power</b>	Internal Battery	3350 mAh / 7.4V x2	
	Current Drain	0.4A / 12V 1.25A / 12V max.	
	Battery Running Time	Approx. 10 hr: Rover, 8 hr: Base	
<b>Weight</b>		1.4 kg with 2 batteries	
<b>Dimensions</b>		198.5 mm x 197.5 mm x H 99 mm	
<b>Environmental Specifications</b>	Operating Temperature	-20 °C to +65 °C	
	Storage Temperature	-20 °C to +65 °C	
	Shock/Drop	2 m	
<b>Velocity Accuracy</b>	Standalone	0.007 m/sec, 0.020 m/sec	0.03 m/s RMS
<b>Data Output</b>		up to 50 Hz	max. 5 Hz
		1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz, 50 Hz	1 Hz, 5 Hz
		RTCM Ver 2.1, 2.2, 2.3, 3.0, 3.1, 3.2 CMR, CMR+, sCMRx	
<b>Time to First Fix</b>	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
<b>WiFi</b>		—	
<b>Tilt Sensor</b>		—	
<b>Bluetooth</b>		Class 2	
<b>Memory</b>		Internal 4 GB	
<b>Waterproofing</b>		IP55	
<b>Certification</b>		CE	
<b>Standard Accessories</b>		2 x Li-Ion rechargeable battery pack Battery charger UHF radio antenna 5/8 inch screw adapter Lemo 7-pin communication cable	

**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.