

Specification

G990II GNSS Receiver

Product model		G990II specification	
GNSS	Channels	336 Channels(Trimble board BD990)	800 Channels
	Satellite Signals	GPS: L1 C/A, L2E, L2C, L5 BDS: B1, B2, B3 GLONASS: L1 C/A, L2 C/A, L3 Galileo: E1, E5A, E5B, E5AltBOC, E6 QZSS: L1 C/A, L1 SAIF,L1C, L2C, L5, LEX SBAS: L1 C/A, L5 MSS L-Band: Trimble RTX IRNSS L5	GPS: L1C/A,L1C,L1P,L2C,L2P,L5; GLONASS:G1P1,G1OC,G2OC,G2P2,G3OC BDS: B1I, B2I, B3I, B1C, B2a, B2b, ACEBOC; Galileo: E1BC, E5a, E5b, ALTBOC, E6 QZSS: L1C/A, L1C, L2C, L5, LEX; SBAS: L1, L5; IRNSS: L5; L-Band
	Update Rate	50Hz	
Accuracy	Static	H: $\pm(2.5+0.5\times10^{-6}D)$ mm ; V: $\pm(5+0.5\times10^{-6}D)$ mm	
	RTK	H: $\pm(8+1\times10^{-6}D)$ mm; V: $\pm(15+1\times10^{-6}D)$ mm	
	IMU Tilt Survey	2cm (@60°Tilt degree)	
	IMU update rate	400 Hz	
	Electric Bubble	Enable	
Power supply	Battery capacity	Built-in non-replaceable battery, 7.2V/13600mAh, 97.92Wh	
	Life Timer	12 hours at room temperature	
	External power source	DC 9-28V	
System	OS	Linux 4.1.18	
	Memory	512MB LPDDR3,32G EMMC	
	Bluetooth	Bluetooth 2.1+EDR /4.0 Dual, (Class 2)	
	WIFI	802.11 b/g/n	
	Network	LTE FDD: B1/B3/B8/LTE TDD: B38/B39/B40/B41/TDSCDMA: B34/B39 WCDMA: B1/B8/CDMA 1x/EVDO: BC0/GSM: 900/1800	
	WebUI	To manage the status and settings, upgrade firmware, data download	
Datalink	UHF Radio	TRM600, TX&RX, Frequency: 410-470MHz, 7w radio, work range 12KM	
	Protocol	SATEL/ TrimTalk/TRIMMARK3/PCC-GMSK/GEOTALK/TT450S/South/ HiTarget and etc.	
	Output format	RTCM2.1, 2.3, 3.0, 3.2, 3.3, CMR, CMR+, RTCA	
	Type-C Port	Direct charging, data transmission. Support PD first charge	
	5Pin Port	Used to connect external power and external radio	
	SIM Card slot	Install Nano SIM Card, Side, Flip	
Physical	Size	154mm Length×154mm Width×76mm Height	
	Screen	360 x 250 capacitive touch screen, multi-touch	
Environment	Work Temperature	-45℃ ~ +75℃	
	Storage Temperature	-55℃ ~ +85℃	
	Down Fall	Resistance to 2m fall with pole (hardwood ground), 1.2m free fall.	
	Waterproof & dustproof	IP68	
	Humidity	anti-condensation 100%	

G990II

GNSS Receiver



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High power internal TX/RX radio

Build in Trm600 high power station, 7W peak power, 12km work range. Protocol are fully compatible



Super capacity smart battery

The largest 13600mAh high performance battery, automatically adjust the power supply, effectively extend the battery life.



Capsule design 2.0

Magnesium alloy material, independent warehouse structure. Line, radio, board, motherboard, and battery are separated to prevent electromagnetic crosstalk and ensure optimal signal quality.

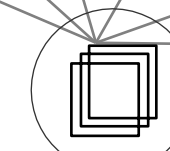


Smart touch screen

Industrial-grade high-brightness touch screen, the field environment is clearly visible. Cancel the physical keys, and easily achieve full information display and full function settings by simply sliding up, down, left and right.



Web UI



Data backup 3 times

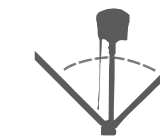


All Protocol Compatibility



Combined antenna

The new combination antenna integrates GNSS, WiFi, Bluetooth, and 4G. The wireless signal is better, the signal-to-noise ratio of GNSS satellites is increased by 2dB on average, and the RTK performance in complex environments is superior.



Tilt Survey 3.0

IMU+ Fusion Positioning Technology click point is measure point. No calibration required any more, 400Hz Real-Time correction. Tilt 60°, 2cm Tilt accuracy



Intelligent base station

Real-time reminder of base station offset, real-time display of base station position and power, base station can be controlled in real time without human attendance.



Type-C Port

Type-C interface, support positive and negative plug, compatible with PD fast charge protocol, standard 45W PD fast charger, fast charging, improve efficiency, and two-in-one charging & data transmission, the cable is more versatile.

