



GNSS Accuracies⁽¹⁾

SBAS differential positioning accuracy: 0.5 m RMS

High-precision static

Horizontal: 2.5 mm + 0.1 ppm RMS

Vertical: 3.5 mm + 0.4 ppm RMS

Baseline Length: ≤ 300 km

Post-Processed Kinematic (PPK)

Horizontal: 8 mm + 1 ppm RMS

Vertical: 15 mm + 1 ppm RMS

RTK

Horizontal: 8 mm + 1 ppm RMS

Vertical: 15 mm + 1 ppm RMS

Initialization time < 5 s

Initialization reliability > 99.9%

Network RTK

Horizontal: 8 mm + 0.5 ppm RMS

Vertical: 15 mm + 0.5 ppm RMS

Initialization time < 10 s

Initialization reliability > 99.9%

Hardware

Dimensions (H×W)	14 cm × 12.4 cm (5.5 in x 4.9 in)
Weight	1.22 kg (2.69 lbs) with batteries
Environment	
Operating	-40 °C to +75 °C (-40°F to 167°F)
Storage	-55 °C to +85°C (-67°F to 185°F)
Humidity	100% condensation
Dust and Waterproof	IP68, protected from temporary immersion to depth of 1 m (unit floats)
Shock and vibration	3 m (9.8 ft) pole drop onto concrete, MIL-STD-810G
LCD	128x64dpi sunlight readable with function/accept buttons

Certification and Calibrations

FCC Part 15 (Class B Device), FCC Part 22, 24, 90; CE Mark; C-Tick; Bluetooth EPL, NGS Antenna Calibration, IGS Antenna Calibration, MIL-STD-810G.

Communications and Data Recording⁽²⁾

Serial	2 x 7pin LEMO port (external power, USB data download, USB update, RS-232)
Cellular	Internally integrated 3.75G modem (optional 4G modem)
	HSPA+ 21 Mbps (download), 5.76 Mbps (upload)
	WCDMA 850/900/1700/1900/2100
	EDGE/GPRS/GSM 850/900/1800/1900
	Internally integrated multimode system compatible with Android, Windows Mobile, iOS and Windows desktop operating systems
Bluetooth®	
WiFi	802.11 b/g/n, access point mode

UHF	
Radios ⁽²⁾	Protected TNC Female
Standard	Internal Rx/Tx: 450 - 470 Mhz; Transmit power: 0.1 W to 2 W; Protocol CHC, Trimble, Pacific Crest; Range: 5 km optimal conditions
FCC Certified	Internal Rx/Tx: 403- 473 MHz; Transmit power: 0.1 W to 1 W, Protocols Trimble, Satel, Pacific Crest; Range: 5 km optimal conditions
FCC Certified	Internal Rx/Tx: 865-867Mhz, India license free; Transmit power: 0.1W to 1W; Protocol Satel; Range: 5 km optimal conditions
Protocols	CMR: CMR+, sCMRx input and output
	RTCM: 2.1, 2.2, 2.3, 3.0, 3.1, 3.2 input and output
	NMEA 0183 output
	HCN and RINEX static formats
	NTRIP Client, NTRIP Caster
Data Storage	32 GB high-speed memory
	Positioning rates: up to 20Hz

Electrical

Power consumption	<3.2 W
Li-ion battery capacity	2 × 3400 mAh, 7.4 V
Operating time	RTK UHF Base: 6 h RTK Rover: 12 h
	Static: 12 h
External power	12 to 36 V DC

(1) Accuracy and reliability specifications may be affected by multipath, satellite geometry and atmospheric conditions. Performances assume minimum of 5 satellites, follow up of recommended general GPS practices. (2) UHF is an option and UHF type approvals are country specific. Specifications are subject to change without notice.