



TR7 GNSS RECEIVER

GNSS

Signal Tracking	GPS: L1, L2, L5 GLONASS: L1, L2 BDS: B1, B2, B3 Galileo: E1, E5A, E5B QZSS: L1, L2, L5 SBAS: L1 IRNSS:L5
-----------------	--

No. of Channels	800+
-----------------	------

MEASUREMENT PERFORMANCE

Initializing Time	Less than 10 Seconds
Real-time Kinematic	Hz 8mm + 1ppm / V 15mm + 1ppm RMS
Static and Fast Static	Hz 2.5mm + 0.5ppm / V 5mm + 0.5ppm RMS
DGPS	Hz 0.25m + 1ppm / V 0.5m + 1ppm RMS
Initialization Reliability	99.9%
Static Data Format	GNS and Rinex

Hi-Fix¹

Horizontal	RTK + 10 mm/minute RMS
Vertical	RTK + 20 mm/minute RMS
Tilt Survey	Electronic Bubble / tilt survey 2.0
Tilt Survey Performance	5cm accuracy in the inclination of 30°

COMMUNICATIONS

Communication Ports	USB, TNC antenna port and Nano SIM card slot 4G LTE Bluetooth 4.0, Wi-Fi and NFC DC External power input LED indicator panels
---------------------	--

Internal UHF Transceiver	Frequency: 403-473MHz Channel: 116 (16 configurable) Transmitting power:1W/2W/4W Protocols: HI-TARGET, TRIMTALK450S, TRIMMARK III, TRANSEOT, SATEL-3AS, etc.. Working range: 5-6km typical, 6-7km optimal
--------------------------	---

SYSTEM

Start-up Time	3 Seconds
Data Storage	16GB internal storage
Sensor	Electronic bubble and tilt survey

DATA MANAGEMENT

Positioning Output Frequency	1Hz - 20Hz
Message Type	CMR, RTCM2.X, RTCM3.0, RTCM3.2
Network Mode	VRS, supports NTRIP protocol
Output Format	ASCII: NMEA-0183, binary data
Application Function	OTG, NFC, WebUI, USB firmware upgrade, network repeater station Intelligent voice, self-test function, smart battery, battery quick change Message delivery and remote upgrade

GENERAL

Environmental	IP67 environmental protection Humidity 100% condensing Shock resistant body to 2m (6.5ft) pole drop Temperature -40° to 75°C Operating -55° to 85°C Storage
---------------	--

Physical Properties	OLED Screen: 1.54in Resolution: 128 x 64 Size: 137mm x 131mm Weight: 1.35kg including battery Power: 6 - 28V DC Input Battery: 6800 mAh Li-Ion Battery Operation Time: 10 hours (Network/Cellular - RTK Rover)
---------------------	--

¹Accuracies are dependent on GNSS satellite availability. Hi-Fix positioning ends after 5 minutes of radio downtime. Hi-Fix is not available in all regions, check with your local sales representative for more information.