







**1. Signal Tracking**

Channel: 1590  
 GPS: L1C/A, L1C, L2P, L2C, L5  
 BDS: B1I, B2I, B3I, B1C, B2a, B2b  
 GLONASS: G1, G2, G3  
 Galileo: E1, E5a, E5b, E6c, E5 AltBOC  
 QZSS: L1C/A, L2C, L5, L1C  
 IRNSS: L5  
 SBAS: L1C/A

**2. Performance Specification**

Signal Re-acquisition: ≤1s  
 Cold Start: ≤45s  
 Hot Start: ≤15s  
 Initialization reliability: ≥99.9%  
 RTK Initialization Time: <10s (Baseline ≤10km)  
 Data Update Rate: 1Hz, 2Hz, 5Hz, 10Hz, 20Hz

Mode	Accuracy
Static and Fast Static	Horizontal 2.5 mm + 0.5 ppm RMS Vertical 5 mm + 0.5 ppm RMS
Long Observations Static	Horizontal 3.0 mm + 0.1 ppm RMS Vertical 3.5 mm + 0.4 ppm RMS
Single Baseline RTK	Horizontal 8mm + 1ppm RMS Vertical 15mm + 1ppm RMS
DGPS	<0.4m RMS
SBAS	Horizontal 0.5m RMS Vertical 0.8m RMS
Standalone	1.5m 3D RMS
Laser Tilt Measurement	≤5.5cm (5m range, ≤60°Tilt in laser mode)

**3. Data Format**

Correction data I/O: RTCM2.X, 3.X, CMR(GPSonly), CMR+(GPSonly)  
 Position data output: - ASCII: NMEA-0183 GSV, RMC, HDT, GGA,  
 GSA, ZDA, VTG, GST; PTNL, PJK; PTNL,  
 AVR; PTNL, GGK

**4. Electrical and Battery**

Voltage: 7-28VDC  
 Power Consumption: 1.7W<sub>4</sub>  
 Li-ion battery capacity: 2 x 3400 mAh  
 Memory: 8GB  
 Working Time: ≥20h

**5. Environmental Specification**

Working Temperature: -40°C ~ +65°C  
 Storage Temperature: -40°C ~ +85°C  
 Humidity: 100% non-condensing  
 Waterproof & Dustproof: IP67  
 Shock: Survive a 2m drop onto the concrete  
 Vibration: MIL-STD-810G Method 514.6 procedure I

**6. Communication**

1 Serial port (7 pin Lemo)  
 - Baud rates up to 921,600 bps  
 Enhanced UHF modem<sub>1</sub>  
 : Tx/Rx with full frequency range from 410-470 MHz<sub>2</sub>  
 - Transmit power: 0.5-2 W adjustable  
 - Range: 15 km<sub>3</sub>  
 WIFI/4G modem



مختصہ ذریعہ سے فراہم کیے گئے ہیں۔ اس کا استعمال اور دیگر تفصیلات کے لیے براہ کرم اس کے ساتھ فراہم کردہ دستاویزات کو دیکھیں۔

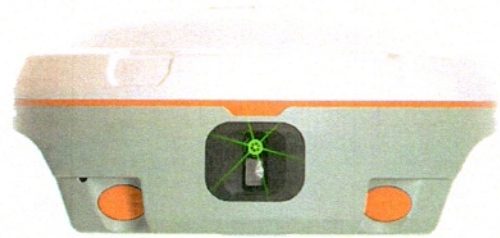
- LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28
  - LTE-TDD: B38/B39/B40/B41
  - WCDMA: B1/B2/B4/B5/B6/B8/B19
  - GSM: B2/B3/B5/B8
- Position data output rates: 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz  
5 LEDs (indicating Satellites Tracking, RTK Corrections data, GPRS Status and Power)  
2 Function buttons for Power and Static Data Record  
Bluetooth® : V 4.0 protocol, compatible with Windows OS and Android OS  
Calibration-free IMU integrated for Tilt Survey  
Up to 60°tilt with 2.5 cm accuracy

### 7. Physical Specification

Dimension:  $\Phi$  15.5cm x 7.3cm  
Weight: 1.2kg with two batteries

### 8. Laser Specification

Range: 10m  
Accuracy (room temperature): (3-5)mm + 1ppm  
Measuring Frequency: Classic Value: 3Hz  
Maximum Value: 5Hz  
Laser Injection Power: 0.9mW~1.5mW  
Working Temperature: -20°C~+50°C  
Storage Temperature: -30°C~+60°C



Sample

Official blue circular stamp with a signature over it.