

Precis-TX204G GNSS RTK Receiver

GPS L1/L2, GLONASS G1/G2 with GSM/GPRS/EDGE

Datasheet

V2.0-170324

Precis-TX204G is an integrated multi-GNSS receiver, which is light-weight, rugged with built-in centimeter accurate RTK engine, onboard storage and versatile connectivity. The built-in battery can support up to 5 hours of continuous field work. Up to 16GB SD card makes your field work easy. The rugged enclosure enables the receiver to work in harsh environment. It is ideal for the following applications:

- Providing differential data or logging observation
- Providing centimeter level position and velocity information
- Providing precise navigation information for UAVs, robotics, etc.

Key Features:



- Supports two constellations, four frequencies
 - GPS L1/L2
 - GLONASS G1/G2
- Supports 128 GNSS channels
- Rapid RTK integer ambiguity resolution
- Supports 5Hz or higher position/velocity/time solutions
- 16GB internal data storage for data logging
- Correction: RTCM 2.X/3.2/CMR/CMR+
- Integrated battery provides up to 5 hours of operation
- Integrated Bluetooth & Wi-Fi wireless technology
- Integrated display and keypad for system configuration without a controller
- Easy-to-use web-interface menu system for rapid configuration and status checking
- Supports GSM/GPRS/EDGE/receiving differential information and NTRIP protocol



Technical Specifications

Performance Specifications

- Channel Number.....128
- Frequencies.....GPS L1/L2
、 GLONASS G1/G2
- Standard Positioning Accuracy
 - Horizontal(RMS).....1.5m
 - Vertical(RMS).....3.0m
- RTK Positioning Accuracy
 - Horizontal(RMS).....10mm+1ppm
 - Vertical(RMS).....15mm+1ppm
- Observation Accuracy
 - C/A Code(zenith direction).....10cm
 - P Code(zenith direction).....10cm
 - Carrier Phase(zenith direction).....1mm
- Time to First Fix (TTFF)
 - Code Start.....<60s
 - Warm Start.....<10s
- Initialization(typical).....<10s
- Initialization Reliability.....>99.9%
- Differential Data Format.....RTCM 2.x/3.x/CMR/CMR+
- Max Update Rate.....5Hz

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Communication

- WIFI.....802.11b/g/n
- Bluetooth.....2.1+EDR
- GSM/GPRS/EDGE.....Dual band UMTS900/1800MHz
- Internet.....IEEE 802.3
- USB ports.....USB OTG x1
- CAN ports.....ISO/DIS 11898 x1
- PPS.....LVTTTL x1
- Event Mark.....LVTTTL x1

Physical Characteristics

- Input Voltage.....12V~36V DC
- Internal Battery.....7.4V, 4300mAh
- Power Consumption(typical).....4.2W
- Active Antenna Input Impedance.....50Ω
- Size.....110x81x52mm
- Weight.....489g
- Antenna Connector.....SMA Receptacle
- Operating temperature.....-20°C to +50°C

Optional Accessories

- AX370X series geodetic grade high performance antenna
- Adapter to Ethernet and RS-232 ports.