

FieldBee Datasheet



Centimeter-level accuracy RTK receiver

FieldBee is integrated L1 GNSS RTK receiver and antenna in a single rugged housing. With accuracy from 50 cm to 1 cm. Supports NMEA-0183, RTCM 3.x SkyTraq protocols

Benefits

- Multi Constellation type GPS+Glonass+SBAS
- Fast RTK Convergence Time
- Wireless interfaces LoRa/WiFi/Bluetooth
- Triple interfaces RS232/CAN/USB
- Regular Upgrades

GNSS

- Centimeter-level accuracy RTK receiver
- Multi Constellation types
- L1 C/A code, 167 channels GNSS engine
- GPS L1 + GLONASS + QZSS + SBAS
- Carrier Phase RTK processing
- Update Rate
 - RTK 4cm accuracy (Hz) 1 - 10 Hz
 - DGPS 50cm accuracy (Hz) 2 - 40 Hz
- Min. velocity: 0.1m/sec
- TPV output: NMEA-0183 V3.01
 - GPGGA, GPGLL, GPGSA, GLGSA, GPGSV, GLGSV, GPVTG, GPRMC
- Correction input: RTCM 3.0, 3.1, SkyTraq raw data binary

Precision

- 2.5m CEP autonomous mode
- Submeter accuracy - DGPS mode
- Decimeter accuracy - Float RTK mode
- Centimeter accuracy - RTK mode
- 1 second to First Fix - hot start under open sky (average)

- 28 seconds - warm|cold start under open sky (average)
- 90 seconds to 1st ambiguity fixed solution at 7Km baseline
- Reacquisition 1s

Mechanical



- 150mm X 75mm, 200g
- Magnet mount
- Operating temperature -20.. + 85 C
- RoHS compliant, IP 67

Power

- 12v-40v, 230mW low power consumption
- 10 h autonomous work
- Replaceable battery

Interfaces

- Wireless interfaces LoRa/WiFi/Bluetooth
- Triple interfaces RS232/CAN/USB

Applications

- Tractor guidance, Autosteer, Soil sampling, Scouting, Mapping