FieldBee L2 RTK GNSS receiver

Datasheet

BENEFITS

- Concurrent reception of GPS, GLONASS, Galileo, and BeiDou;
- Multi-band RTK with fast convergence time and reliable performance;
- Wireless interfaces: WiFi and Radio;
- RS232 interface;
- Regular firmware upgrades.

GNSS

- Carrier phase RTK processing;
- 184 channel GNSS engine;
- GPS L1C/A L2C, GLO L1OF L2OF, GAL E1B/C E5b, BDS B1I B2I, QZSS L1C/A L2C;
- Update Rate: 10 Hz -he highest navigation rate that may limit the number of supported constellations;
- Velocity accuracy: 0.05 m/sec;
- Heading accuracy: 0.3 deg;
- TPV output: NMEA-0183 V3.01 GPGGA, GPGLL, GPGSA, GLGSA, GPGSV, GPRMC;
- Correction input: RTCM 3.3.

PRECISION

- RTK 0.01 m + 1 ppm CEP;
- Autonomous mode: 2.5m CEP;
- First RTK Fix < 60 sec. depending on atmospheric conditions, baseline length, GNSS antenna, multipath conditions, satellite visibility;
- Reacquisition time: 2s;
- Tilt compensation in range of +/-15 deg accuracy 1 deg. (Available from Oct. 2020)

MECHANICAL

- 150mm X 75mm 200g;
- Operating temperature: -20.. +65 C;
- RoHS compliant;
- IP 67.

POWER

- 9v-36v, 4W power consumption;
- Optional - 8 h autonomous work;
- Rechargeable battery(-s) 18650.

INTERFACES

- WiFi 2.4Ghz;
- RS232 (115200);
- LoRa 868/915 Mhz 2.5 km open air.

APPLICATIONS

- Tractor guidance;
- Autosteer;
- Planting;
- Seeding;
- Spraying;
- Spreading;
- Cultivating;
- Land levelling;
- Harvesting;
- Soil sampling;
- Scouting;
- Mapping.