A50 GNSS Receiver

- Smart design, remarkable performance
- Professional GNSS Satellites tracking(GPS,Glonass,Galileo,Beidou)
- Equipped with industry standard GNSS engine (Trimble, NovAtel...)
- Adopts multiple communication modules(Radio,GSM...)
- Automatic data collection during centering
- Applies WIFI connection to realize WebUI control designed to modify settings and monitor the receiver status
- When the pole is tilted in ±30 degree, the A50 still could get the right point data by automatic correct system

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GNSS Engine

- Trimble BD970 (220 channels)
  Fully independent code and phase measurements
  Advanced multipath mitigation
  Update rate: 1,2,5,10,20 Hz Selectable
  - GPS: L1 C/A,L2E,L2C,L5
  - GLONASS: L1 C/A,L1P,L2 C/A,L2P
  - SBAS(WAAS/EGNOS/MSAS): L1 C/A,L5
  - GIOVE-A:L1 BOC,E5A,E5B,E5AltBOC
  - GIOVE-B: L1 CBOC,E5A,E5B,E5AltBOC
  - GALILEO: L1 CBOC,E5A,E5B,E5AltBOC (Reserved)
  - Beidou: B1,B2
- NovAtel OEM628 (Optional): 120 channels

Real-Time Accuracy (rms)*1

- SBAS (WAAS/EGNOS/MSAS)
  Horizontal: <3 m (10 ft)
- Real-Time DGPS position
  25 cm (0.82 ft)+ 1.0 ppm (rms) in typical condition
- Real-Time Kinematic Position (fine mode)
  Horizontal 8 mm(0.03ft) + 1.0 ppm
  Vertical 15 mm(0.05ft) + 1.0 ppm

Real-Time Performance &Stop and Go solution

- Instant-RTK Initialization
  Typically <10 s (Initialization for baselines < 20 km)
  99.9% reliability
- RTK Initialization range >40 km

Post Processing Accuracy (rms)*2

Static, Rapid Static

- Horizontal 2.5 mm (0.008 ft) + 1.0 ppm
- Vertical 5 mm (0.016 ft) + 1.0 ppm

Post-Processing Kinematic

- Horizontal 10mm(0.033 ft) ± 1.0 ppm
- Vertical 20mm(0.066 ft) ± 1.0 ppm

Solutions

Field Software Suite

FOIF Survey ,FOIF FieldGenius or Carlson SurvCE

- Main functions include:
  A50 GNSS Support: configuration, monitoring and control
- Volume computation
- Background raster image
- Network connectivity
- Coordinate System Support: predefined grid systems, predefined datums, projections, Geoids, local grid
- Map view with colored lines
- Geodetic Geometry: intersection, azimuth/distance, offsetting, poly-line, curve, area
- Road Construction(3D)
- Survey Utilities: calculator, RW5 file viewing
- Data import/Export: DXF, SHP, RW5

Data logging

- Recording Interval
  1- 60 seconds

Physical

- Size
  Unit: 15x14.8 cm(Φ x H)
- Weight
  Rover:1.2kg (W/O battery)
  1.4kg (With battery)

Monitoring Screen

- Graphical OLED display resolution:
  128 X 64

Memory

- Internal memory: 4G
  Up to 400 hours of 15 sec. raw GNSS data from 18 satellites

I/O Interface

- LEMO portsX2
- TNC portsX2
- 1 PPS Output (optional)
  1 Event Market Input (optional)

Tilt survey sensor (Optional)

Automatic correct system by 30 degrees

Data Format

- RTCM 2.x
- RTCM 3.x
- CMR, CMR+
- NMEA 0183 2.x ,3.0 and 4.1(optional)
  RTCA (Optional)

Operation

- RTK rover/base, post-processing
- RTK Network rover: VRS, FKP, MAC
  Point-to-Point GPRS through Real-time Data Server Software (internal GPRS or external cell phone)
- LandXML(FOIF FieldGenius support)
  Total Station support (FOIF FieldGenius)
- Import and stake directly from a DXF File (FOIF FieldGenius)

Office Software Suite:

FOIF Geomatics office

Main functions include:

- Network post-processing
- Integrated transformation and grid system computations
- Pre-defined datums along with use -defined capabilities
- Survey mission planning
- Automatic vector processing
- Least-squares network adjustment
- Data analysis and quality control tools
- Coordinate transformations
- Reporting
- Exporting
- Geoid

Environmental

- Operating temperature:
  -30℃ to +65℃(-22°F to 149°F)
- Storage temperature:
  -40℃ to +75℃(-40°F to +167°F)
- Humidity: 100% condensing
- Waterproof: IP67(IEC60529)
- Shock: 2 m (6.56 ft) pole drop

Power

- Battery: BT95 Li-ion
  &life time:3.4Ah(>6.2hrs)
  (UHF rover at 20℃)
- External power supply 9~25 VDC input
  Battery Charger kit FOIF FDQ15

Optional System Components

- Communication Module
- Internal radio
  -Satel UHF-Link(403-473MHz) Rx&Tx both
- Rx&Tx internal radio
  -UHF-Link(403-473MHz)
- External radio
  -FOIF external radio Rx & Tx(FDL-5, 5/35W selectable)
- Network module
  -Quad-Band GSM module with GPRS class 12 support: 850/900/1800/1900MHz
  -Five-Band 3G (HSPA) module: 800/850/900/1900/2100MHz(Optional)
- Controller
  -F52G and F55-A(B)

*1 Performance values assume minimum of five satellites, following the procedures recommended in the product manual. High-multipath areas, high PDOP values and periods of severe atmospheric conditions may degrade performance.
*2 Long baselines, long occupations, precise ephemeris used.

FOIF Geomatics CAD

Main functions include:

- DWG file format, compatible with AutoCAD
  Integrated transformation and grid system computations
- Full 3D least squares adjustment, blunder detection, graphical ellipse display
- DTM contouring/Modeling volumes/3D rendering
- Site Design: Ponds, ditches, stockpiles and slopes
- Road Design: horizontal and vertical alignments, cross sectional templates
- Completely customizable user interface
  -Toolbars - can be arranged with "drag and drop" functionality
  -Menus - can be re-organized with our graphical menu editor
  -Screen - items can be turned off for more graphics area
  -Layout - of command window - top or bottom
- Reporting, exporting and printing

A50 2015.08

Related Products


A30 Receiver

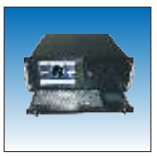

A20 Receiver


A3 Static Receiver


F60 Receiver


F55 GNSS/GIS Handhelder


A100 Reference Receiver


A200 CORS Receiver

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Illustrations, descriptions and technical specifications are not binding and may change

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TÜV CE ISO-9001 DNV CERTIFICATED FIRM Certifcate No.QSC-5112

Local Dealer: