A90 Intelligent GNSS Receiver

- Compact design, more productive
- Professional GNSS satellites tracked simultaneously(GPS,Glonass,Galileo,Beidou)
- Automatic data collection during centering
- IMU tilt function is adopted
- Applies WIFI connection to realize WebUI control designed to modify settings and monitor the receiver status
- Bundled Android field software brings a big change in user experience and accessibility

A90 GNSS Receiver Specifications

GNSS Engine

- Channels: 800
- Receiver type: GNSS multi-frequency RTK with carrier phase
- Updata rate: 1Hz standard, 10, 20, 50Hz optional
- SBAS Tracking: 3-channel, parallel tracking
- Signal received:
  GPS L1CA/L1P/L1C/L2P/L2C/L5
  GLONASS G1/G2, P1/P2
  BeiDou B1/B2/B3
  GALILEO E1BC/E5a/E5b
  QZSS L1CA/L2C/L5/L1C
  L-Band(optional)

Performance Specifications

- Time to First Fix(TTFF):
  Cold start:<60 s typical (no almanac or RTC)
  Warm start:<30 s typical (almanac and RTC)
  Hot start:<10 s typical (almanac, RTC and position)
- Maximum Speed: 1,850 kph (999 kts)
  Maximum Altitude: 18,288 m (60,000 ft)
- Differential Options: SBAS, Autonomous, External RTCM,RTK, L-band (Atlas) DGPS

Real-Time Accuracy (rms)*1

- SBAS(WAAS)
  Horizontal: 0.3m, Vertical: 0.6m
- Autonomous, no SA
  Horizontal: 1.2m, Vertical: 2.4m
- Real-Time Kinematic Position
  Horizontal: 8mm + 1.0 ppm
  Vertical: 15mm + 2.0 ppm

Solutions

Field Software Suite
FOIFPad(WM/Android) ,FOIF FieldGenius or Carlson SurvCE

- Main functions include:
  A90 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
  0.1- 999 seconds

Physical

- Flat design
- Size: 156mm*76mm(Φ x H)
- Bottom cover: Aluminium magnesium alloy

Memory

- Internal memory: 8GB standard; Supports extending to 32GB

I/O Interface

- TNC port: connecting built-in radio antenna
- 5-pin lemo port: connecting external power supply and external radio
- 7-pin lemo port(USB+serial port): connecting PC and handheld

Operating system

- Based on Linux; Supports Web UI

Voice

- Multi-language supported

Tilt survey sensor

Automatic correct system by 30degree

Data Format

- RTCM V2.3
- RTCM V3.2
- CMR, CMR+

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℃
- Storage temperature:
  -40℃ to 80℃
- Humidity: 100% condensing
- Waterproof: IP67(IEC60529)
- Shock: 2 m (6.56 ft) pole drop
  1.2m(3.94ft) free drop

Power

- 7.2V, 6800mAh,removable battery

Optional System Components

Communication Module

- Internal radio
  -UHF-Link(410-470MHz) Rx&Tx both -1W
- External radio
  -FOIF external radio Rx & Tx(TRU35, 2/35W selectable)
- 4G LTE module:
  Fits various networks
- BlueTooth
  2.1+EDR Class 2
- WiFi
  IEEE 802.11 b/g/n
- Antenna
  Built-in antenna,integrating GNSS, BT/WLAN and network antenna
  Controller
- - F59

*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

Related Products

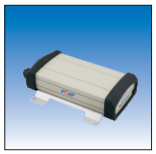

A30 Receiver


A60 Receiver


A3 Static Receiver


A50 Receiver


F59 GNSS Handhelder


A100 Reference Receiver


A200 CORS Receiver

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

FOIF Since 1958
It's professional

Suzhou FOIF Co.,Ltd.

Local Dealer: