

# **A90 Intelligent GNSS Receiver**



Compact design, more productive

Professional GNSS satellites tracked simultaneously(GPS,Glonass,Galileo,Beidou)

Cutting-edge IMU tilt survey technology is adopted, supporting up to 60° tilt angle

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**

- Channel: 1408
- Signal received: All constellation and all band reception
   BDS B1I/B2I/B3I/B1C/B2a/B2b
   GPS L1C/A/L2P (Y)/L2C/L5
   GLONASS G1/G2/G3
   Galileo E1/E5a/E5b/E6
   QZSS L1/L2/L5

### Performance

- Time Accuracy(RMS):20 ns
- Velocity Accuracy (RMS): 0.03 m/s
- Cold start:<30 s</p>
- Initialization Time: < 5s(typical)</p>
- Initialization Reliability: > 99.9%
- Single-point positioning(RMS): Horizontal: 1.5m, Vertical: 2.5m
- DGPS(RMS): Horizontal: 0.4m, Vertical: 0.8m
   Static:
  - Horizontal: ±(2.5mm+0. 5ppm)RMS Vertical: ±(5mm+0. 5ppm)RMS
- RTK(RMS): Horizontal: ±(8mm+1ppm)RMS Vertical: ±(15mm+1ppm)RMS

## Data

- Internal memory: 8GB standard, supports TF card extending to 32GB;
- Differential data: RTCM V3.x ;
- Data format: NMEA 0183;
- Data security: RTK survey data secured in three ways(synchronizing storage in both controller and A90, and uploading to cloud for backup is available)

## Environmental

- Temperature: -30°C to 60°C for operating temperature,-40°C to 80°C for storage temperature;
- Humidity: 100% condensing resistant;
- Shock: 2 m pole drop resistant in normal temperature;

#### Protection: IP68

## Configuration

- Bluetooth: built-in, Bluetooth 2.1+EDR/Bluetooth 4.0 BLE;
- Electronic bubble: supported ;
- Tilt survey: IMU inertial navigation module, 6-axis 400Hz dynamic output, calibration-free;
- Network communication: fits various networks;
   WIFI:802.11b/g/n, can connect to controller through WIFI replacing Bluetooth, supports WebUI wireless management including firmware
- update, data download, settings, station setup;
  Radio: internal 1w radio(Rx/Tx) with a typical working range of above 5km, external 2/35w radio(Tx) with a typical working range of above 15km, and supports protocol like PCC-EOT, TrimTalk450S, TrimMarkIII, South, HiTarget, GeoTalk, GeoMark, etc

#### Physical

- Size: 156mm\*76mm(Φ x H),
- Material: bottom is magnesium alloy and top is polymer plastics;
- Battery: 7.4V x 3400mAh x 2pcs,smart removable lithium battery(with power indicator);
- User interface: 4 LED indicator lights, 1 TF card slot, 1 SIM card slot, 1 button, real-time voice broadcasting, 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 controller)

#### Other

- ■Controller:P9III or P9IV;
- Software: FOIF Surpad;
- Application: Power system, land, construction, transportation, forestry, agriculture, deformation

forestry, agriculture, deformation monitoring, water conservancy system





TEL:+86 512 65234905 FAX:+86 512 65230619 Http://www.foif.com E-mail:internationalsales@foif.com.cn ADD: 18 Tong Yuan Road, Suzhou 215006, P.R. China

Local Dealer:	