

A100 Reference Receiver

Specifications



GNSS engine

- Trimble BD970:
 - 220 channels:
 - GPS: L1, C/A, L2E, L2C, L5
 - GLONASS: L1, C/A, L1 P, L2 C/A, L2 P
 - 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 (Reserved)
- Initialization: typically < 10 seconds
- Initialization reliability: > 99.9%
- Novatel OEM628(Optional): 120 channels

Accuracy

- RTK
 - Horizontal $\pm 10 \text{ mm} + 1 \times 10^{-6} \cdot D$
 - Vertical $\pm 20 \text{ mm} + 1 \times 10^{-6} \cdot D$
- Static collection
 - Horizontal $\pm 3 \text{ mm} + 1 \times 10^{-6} \cdot D$
 - Vertical $\pm 6 \text{ mm} + 1 \times 10^{-6} \cdot D$
- Navigation (RTD) $\leq 1 \text{ m 3D}$

Environmental

- Operating temperature: -30°C to $+65^{\circ}\text{C}$
- Storage temperature: -40°C to $+75^{\circ}\text{C}$
- Humidity: 100% condensing
- Waterproof & Dustproof: IP67 (IEC60529)
- External power supply 12VDC (7-18VDC) input

Communication

- 2 × RS232 (DB9 & LEMO) port
- 1 × SD port
- 1 × Bluetooth
- 1 × RJ45 port for internet
- Optional parts: PPS port, internal radio, SIM port, GSM module etc.

Physical

- Dimension (L × W × H) 265mm × 130mm × 55mm
- Weight: 1.5Kg
- Shock: designed to survive 1.5m drop onto hard surface

User Interface

- OLED pixel: 128 × 64,
- Operating temperature: -40°C to $+80^{\circ}\text{C}$
- 6 × buttons
- 4 × lights
- Multiple languages available

Data Storage

- External SD card (4G)

Data Format

- CMR, CMR+, RTCM2.x, RTCM3.x
- RTCA (Optional)



Related Products



A10 Static Receiver



A20 Receiver



A30 Receiver



F50 GIS/RTK Handheld



F60 Receiver



A200 CORS Receiver

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A100 2012.09

A100 Reference Receiver

Multi-Constellation GNSS Solution
(GPS / GLONASS / Galileo / BeiDou...)



- Flexible CORS GNSS receiver
- Professional GNSS satellite tracking (GPS/GLONASS/Galileo/BeiDou...)
- Easy operating by computer or bluetooth connecting
- OLED display with superior brightness & temperature range
- Voice messages of multiple languages, support customized voices according to customers requirements.
- Multiple data file formats
- Compatible with other brands CORS systems
- FOIF PRS (Portable Reference System) technology
- Small investment while building multi-reference stations.

FOIF Since 1958
It's professional

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Http://www.foif.com

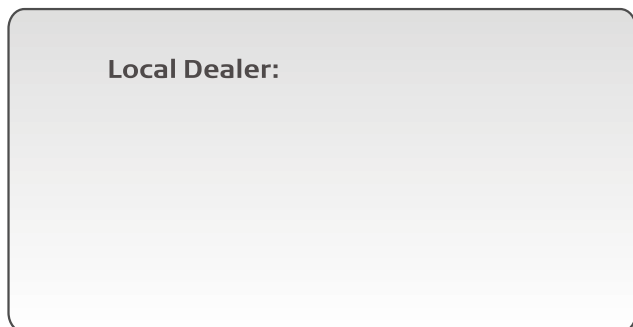
E-mail: internationalsales@foif.com.cn

ADD: 18 Tong Yuan Road, Suzhou 215006, P.R. China

Headquarters: Lat N31°15'48.6", Long E120°40'2.1"



Local Dealer:



A100 Reference Receiver

The FOIF A100 reference receiver is small, convenient, fully featured GNSS reference receiver which provide network with maximum features and functionality from a single receiver platform. It also could as a campaign receiver for post-processing, as a CORS receiver or portable base station for RTK applications, and as scientific reference station. A100 is becoming the best choice for customers to build reference stations without large investment on it.

Solution

FOIF PRS

◆ FOIF PRS (Portable Reference System) is transferring software used for building the communication of base and rover via internet. It enables single or multiple bases login to A100 server. After difference data transferring from base to server, the rovers could connect with the corresponding base through server by mobile net to accomplish RTK job with high precision fix solution.

- **Real-time capability**

Only with cell phone coverage, you can build PRS system at any time. Does not require a fixed reference station and can be built anywhere.

- **Extensibility**

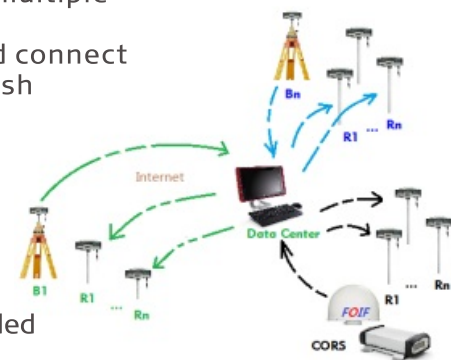
Just append A100 receiver, you can combine multiple PRS system when needed

- **Compatibility**

The system is compatible with GPRS data link functions of the other brands of GNSS receivers

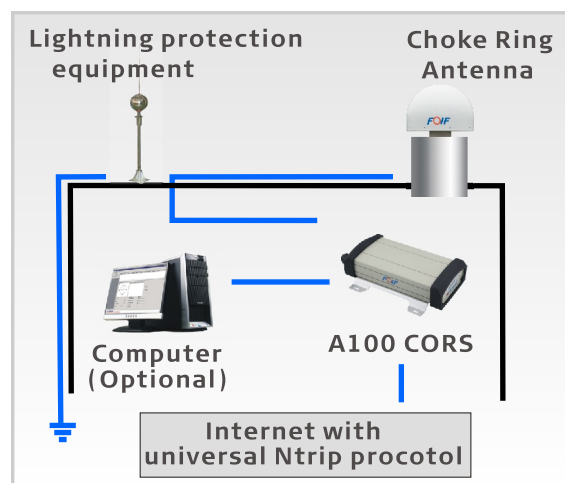
- **Flexibility**

Best CORS solution in area where is no fixed CORS station

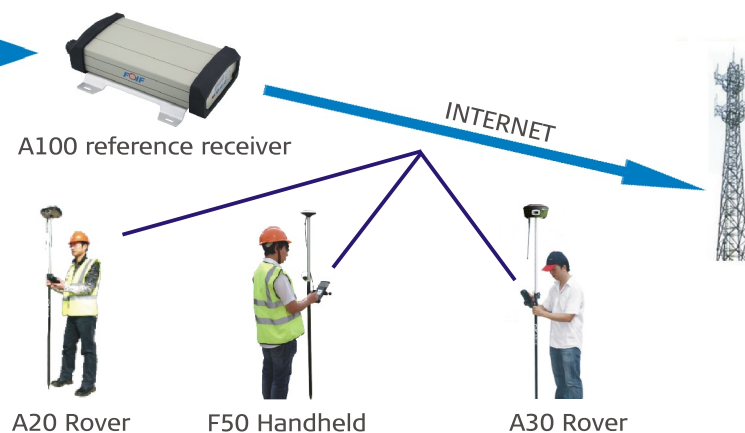


Single A100 CORS

◆ As single CORS, the data could be transferred through one set A100 automatically depending on the demand when rover logging in. The computer is used for user management if needed.



Network RTK



◆ As Network RTK, the CORS antenna would transfer the satellites' signal to A100. Then difference data would be calculated by the server. The rovers register to the A100 CORS by mobile net and start working with high precision fix solution.

A100 Reference Receiver

High precision choke-ring antenna



Specifications:

Freq.: 1565-1615 MHz
1217-1257 MHz

Resistance: 50 Ω

VSWR: ≤1.5:1

LAN Gain: 50 ± 2dB

Phase Center Error: ±1mm

Noise: ≤1.5dB

Polarization: right-hand circular polarization

Operating voltage: 3-18VDC
Operating electric current: ≤40mA

Connector: TNC

Weight: ≤5.2kg

Humidity: 95%

Operating temperature: -40°C to +85°C

Storage temperature: -55°C to +85°C

Equipment list

- ◆ A100 reference receiver 1pc
- ◆ Choke-ring antenna 1pc
- ◆ Fixing parts for choke ring antenna 1pc
- ◆ Transfer cable for choke-ring antenna (30m) 1pc
- ◆ Server software 1pc
- ◆ Power supply part 1pc
- ◆ Data cable 1pc
- ◆ Lightning protection equipment (Supply by local market) 1pc
- ◆ Computer (Supply by local market) 1pc



Choke-ring antenna



A100



Computer (Supply by local market)

Application field

