

N72 GNSS



KEY FEATURES

- *220 channels core GNSS module, including GPS, GLONASS, Galileo and BeiDou tracking*
- *Integrated battery, also can worked as uninterruptible power supply*
- *16 GB mass memory, support 8-thread logging and circulating data logging*
- *Flexible configuration methods with Bluetooth, LAN, Serial and LCD front panel*

The CHC N72 GNSS sensor provides advanced multi-industry solutions to various demanding applications such as mining monitoring, geologic hazard monitoring, water conservancy monitoring, machine control, vehicle dispatching, etc.

Easy-to-use, compact and rugged, designed for advanced monitoring performances, the N72 GNSS sensor makes field work more comfort for the surveyors.

Excellent Data Management Capability

With 16 GB mass memory, N72 supports continuous data logging for 3 years with 15 s. In addition, N72 supports external portable hard drive and USB flash disk which enable huge storage extension. Meanwhile, various formats of data can be stored simultaneously. Combined with the technology of circulating data storage and 8-thread storage, the up-to-date data can be recorded. While for data output, local USB port, FTP push and web page download are all available for users. Also, data could be directly stored into the external portable hard drive and USB flash disk.

Flexible Configuration Methods

N72 adopts liquid crystal display for front panel. Users can configure the system parameters through Network, serial ports and front panel randomly.

Powerful Web Page

Based on Linux system, users can remotely access the receiver by web browser to realize multiple operations, such as checking the running status, setting the outputs of data, downloading the observable data, FTP pushing, Email alerting, remotely restarting, modifying system configuration, firmware updating and registering.

Diverse Power Supply Modes

Integrated with built-in 7800 mAh battery, N72 may survive continuous working for 12 hours. The internal battery can be charged automatically and when it is fully charged, the receiver will cut off the power supply which may increase the service life of the battery. Under the situation of power supply interruption, the internal battery can work as UPS, realizing the seamless switch between internal and external power supply. Also, N72 supports the power supply from the complement of wind, light and electricity.

Technical Specifications

GNSS characteristics

- 220 channels with simultaneously tracked satellite signals
 - GPS: L1C/A, L2C, L2E, L5
 - GLONASS: L1C/A, L1P, L2C/A (GLONASS M only), L2P
 - SBAS: WAAS, EGNOS and MSAS
 - Galileo: E1, E5A, E5B
 - BDS: B1, B2
- Pseudo-range measurement with high-precision multi-correlator
- Very low noise carrier phase measurement with <1 mm precision in 1 Hz bandwidth

Performance specifications⁽¹⁾

- Real Time Kinematics (RTK)
 - Horizontal: 8 mm + 1 ppm RMS
 - Vertical: 15 mm + 1 ppm RMS
 - Initialization time: typically < 10 s
 - Initialization reliability: typically > 99.9%
- Post Processing Static
 - Horizontal: 2.5 mm + 0.5 ppm RMS
 - Vertical: 5 mm + 0.5 ppm RMS

Communications

- 1 x LAN port
 - Supports links to 10BaseT/100BaseT auto-negotiate networks
 - HTTP, TCP/IP, UDP, FTP, NTRIP Caster, NTRIP Server, NTRIP Client
 - Simultaneously transmits multiple data stream
- 3 x RS232 ports
- 1 x GNSS antenna port
- 1 x USB port
- Protocols:
 - Correction formats: CMR, CMR+, SCMRx, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2, RTD
 - Observables: RT17, RT27, BINEX, RTCM 3.x
 - Position/Status I/O: NMEA-0183 V2.30
- Internal data logging storage capacity: 16 GB

Physical

- Size (LxWxH): 265 x 143 x 68 mm (10.4 x 5.6 x 2.7 in)
- Weight: 2.1 kg (74 oz)
- Operating temperature: -40 °C to +65 °C (-40 °F to 149 °F)
- Storage temperature: -45 °C to +80 °C (-49 °F to 176 °F)
- Humidity: 100% condensation
- Waterproof and dust proof: IP67, protected from immersion to depth of 1 meter for 30 minutes
- Shock: survives a 1-meter drop on to concrete

Electrical

- Power consumption: 3.5 W nominal, dependent on user settings
- External power input: 9-18 VDC
- Internal battery capacity: 7800 mAh, 7.4 V
- Battery life: up to 12 hours

User Interface

- Front panel display
 - 1 X LED power indicator
 - 7 X Key-press, with LCD
- Web User Interface

Antenna option

- Recommended antenna products
 - CHC A220GR GNSS Geodetic Antenna
 - CHC C220GR GNSS Choke Ring Antenna

(1) Accuracy and reliability specifications may be affected by multipath, satellite geometry and atmospheric conditions. Performances assume minimum of 5 satellites, follow up of recommended general GPS practices.

Specifications are subject to change without notice.



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