

# X900 GNSS



## KEY FEATURES

### • **FIELD PROVEN TECHNOLOGY**

Embedded leading GNSS core  
GPS/GLONASS module

### • **SOLID PERFORMANCES**

A large customer base for many  
different applications

### **BUILT FOR HARSH ENVIRONMENT**

- Innovative and rugged design to  
fit demanding survey projects

### **EASE OF USE**

- LED driven receiver status and  
intuitive field software user interface

The CHC X900 is the GNSS survey solution selected by large number of surveyors for its outstanding performances and reliability. Its is a powerful and cost effective GNSS receiver designed for every day field works.

### **RTK Performances**

The X900 offers greater performances with GNSS functionality. The GPS+GLONASS feature increases availability in obstructed sky conditions such as construction sites in urban areas while securing RTK accuracy and fast initialization. Its optimized power management allows half day of non-stop RTK work with a single battery.

### **Cable Free**

Built-in GNSS engine, antenna, Bluetooth® communication and optional UHF and GSM/GPRS modules in one single unit.

### **Compact and lightweight**

The size of 84mm×190mm×200mm makes the X900 only weight 1.4kg. It significantly reduces tiredness of the surveyors in the field work.

### **Competitive and Reliable**

The X900 GNSS is the first-choice solution for GPS+GLONASS RTK surveying at fraction of cost.

# Technical Specifications

## GNSS characteristic

- 72 channels :
  - GPS L1, L2
  - GLONASS L1, L2
  - SBAS
- Advanced multipath mitigation
- Low noise carrier phase measurement

## Performance specifications <sup>(1)</sup>

- Real Time Kinematics (RTK)
  - Horizontal: 10mm+1ppm RMS
  - Vertical: 20mm+1ppm RMS
  - Initialization time: 10s
  - Initialization reliability: typical >99.9%
- Post Processing Static
  - Horizontal: 5mm+1ppm RMS
  - Vertical: 10mm+2ppm RMS

## Communications

- 1 RS232 serial port
- 1 high-speed USB
- Optional GSM/GPRS modem
- Integrated Bluetooth® communications port
- Optional radio modem
  - CHC DL5: 1W-20W adjustable <sup>(2)</sup>
  - Bandwidth: 450-470 MHz
- Protocols
  - RTCM2.1, RTCM2.3, RTCM3.0, CMR ,CMR+ input and output
  - NMEA0183 and GSOFF outputs
  - RINEX and HCN outputs for GPS raw data

## Physical

- Size (H×L×W): 84mm×190mm×200mm
- Weight: 1.4Kg with battery
- Working Temperature: -30 °C to +65 °C
- Storage Temperature: -40 °C to +75 °C
- Humidity: 100% condensation
- Dustproof: IP67
- Waterproof : protected from temporary immersion to depth of 1 meter, floating.
- Shock : survive a 2 meters drop onto concrete

## Electrical

- Typical power consumption: 2.8W
- Battery capacity : 2200mAh
- Operating times on internal battery : 8 hours (Static), 4.5 hours(RTK)
- External power input : 9-18VDC

## Software

- Optional Landstar field software
  - Intuitive and easy to use data field survey software (logging, stake-out, site calibration, ...)

- (1) Accuracy, TTFF and reliability specifications may be affected by multi path, satellite geometry and atmospheric conditions.  
Performances assume minimum of 5 satellites and follow up of recommended survey practices.
- (2) UHF type approvals are country specific

Specifications are subject to change without notice.

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