



KEY FEATURES

- Future proof 120channel core GNSS with the ability to track GPS, GLONASS, Galileo and BeiDou
- High performance GNSS RTK positioning covering wide range of applications
- Landstar or Carlson's SurvCE Field data collection software scale to your survey need
- Integrated Bluetooth, GPRS and radio modem
- Innovative and rugged design built for harsh environment

The X900* GNSS receiver from CHC leverages the latest GNSS technology by integrating 120 channels with the ability to track GPS, GLONASS, Galileo and Beidou and field software dedicated to topographic and construction surveying. The X900 series is one of the most costeffective GNSS receiver selected by large number of surveyors for its outstanding performances and reliability.

Outstanding RTK Performances

The X900* offers greater performances with proven and innovative GNSS functionality. The future proof multiconstellation tracking feature increases availability in obstructed sky conditions such as construction sites in urban areas while securing RTK accuracy.

A Selection of Field Surveying Software

The CHC Landstar 5 gives full control over data collection and stakeout, without compromising easeofuse and high productivity.

Carlson SurvCE combines advanced functionality and an intuitive user interface. SurvCE is a complete data collection system for real time RTK GPS and can be upgraded to take control of total stations and advanced road projects.

Compact and rugged

The X900⁺ innovative design integrates a builtin GNSS core, multiconstellation antenna, Bluetooth® communication and optional UHF and GSM/GPRS modules in one single receiver.

Exceptional Performances to Price Ratio

CHC X900* GNSS receiver brings extremely affordable highend GNSS RTK solution to surveyors without the conventional cost associated.

Technical Specifications

GNSS characteristics

 120channel signal tracking GPS: L1, L2, L2C, L5 GLONASS: L1, L2

SBAS: WAAS, EGNOS, MSAS

BeiDou: B1, B2

Galileo: E1, E5A, E5B (optional)

- Advanced multipath mitigation technology
- Low noise carrier phase measurement

Performance specifications(1)

• Real Time Kinematics (RTK)

Horizontal: 10 mm + 1 ppm RMS Vertical: 20 mm + 1 ppm RMS Initialization time: < 10 s Initialization reliability: > 99.9%

Post Processing Static

Horizontal: 3 mm + 0.5 ppm RMS Vertical: 6 mm + 0.5 ppm RMS

Rapid Static

Horizontal: 5 mm + 0.5 ppm RMS Vertical: 10 mm + 0.5 ppm RMS

Communications

- 1x RS232 serial port
- 1x high speed USB
- Integrated Bluetooth® class 2
- Integrated GSM/GPRS modem
- CHC radio modem internal Rx: 430450/450470 MHz
- Optional radio modem⁽²⁾:

Internal Rx/Tx: 403-473 MHz

External Tx DL5: 1W 20W adjustable

Protocols

RTCM2.1, RTCM2.3, RTCM3.x, CMR, CMR+ and

NMEA0183 output

RINEX and HCN outputs for GNSS raw data

Physical

- Size (HxD): 84 x 179 mm (3.3 x 7.0 in)
- Weight: 1.4 kg with battery (49 oz)
- Operating temperature: 40 °C to +65 °C (40°F to 149°F)
- Storage temperature: 40 °C to +75°C (40°F to 167°F)
- Humidity: 100% condensation
- Waterproof and dust proof: IP67 protected from temporary immersion to depth of 1 meter, floats
- Shock: survives a 2-meter drop on to concrete

Electrical

- Power consumption: 2.6 W
- Liion battery capacity: 2200 mAh
- Battery life: typical 5 hours in RTK mode
- External power input: 918 VDC

Software (optional)

- CHC's Landstar field data collection software
- Carlson's SurvCE field data collection software

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

Specifications are subject to change without notice.

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