X20i GNSS

KEY FEATURES

- **Cost-effective -**
  Professional L1 GNSS survey technology in an inexpensive package

- **Fool Proof -**
  'Single Button' operation for automatic static recording

- **Easy Data Download -**
  High-speed USB port compatible with all operation systems

- **Compact and Rugged -**
  Small, lightweight and cable-free for easy field operation

- **Upgrable -**
  Purchase a pair of X20i RTK units with the optional UHF transmitter radios for a complete off-grid RTK system

- **iOS Location Services Bluetooth -**
  Enables all iOS apps to collect high accuracy real-time positions

The CHC X20i GNSS receiver is powered by a high precision GNSS engine with the industry's most trusted tracking technology.

Cost Effective and Accurate

Save money not only on the affordable X20i receiver, but on additional equipment costs. The traditional high cost proprietary data collectors have become a thing of the past, replaced by devices you use for everyday tasks such as iPads and smartphones. These modern devices surpass legacy devices in critical categories of GPRS data speed, screen resolution, storage capacity, and CPU speed. The high accuracy surveys benefit from the additional, simultaneous baselines.

Static Surveys - Easy to use

Position the X20i, turn on, and data starts recording automatically. Collection continues until the receiver is turned off. Plug & Play USB support makes copying log files as simple as dragging them with your mouse.

Compact and Lightweight

X20i, including battery, weighs less than 0.8 kg (1.76 lb) and measures 17.5 cm (6.9 in) in diameter. Its low cost makes the x20i easy to deploy in large numbers, while its lightweight design reduces operator fatigue.

Expandable

Add an X900s-OPUS receiver to extend your static project's cm level baselines to hundreds of kilometers! Purchase a pair of X20i RTK units with the optional UHF transmitter radios for a complete off-grid RTK system.

Reliable - Powerful - Competitive

Technical Specifications

Comparison	X20i DGNSS	X20i RTK
Channel	372	220
Satellite Signals	GPS: L1 GLONASS: L1 BeiDou: B1 SBAS	GPS: L1C/A, L1C, L2C, L2E, L5 GLONASS: L1C/A, L1P, L2C/A, L2P, L3 BeiDou: B1, B2 Galileo:E1, E5A, E5B SBAS
SBAS	Horizontal < 30 cm RMS	Horizontal < 1 m RMS
Realtime Correction	Horizontal: 30 cm+2 ppm RMS	Horizontal: 8 mm ± 1 ppm RMS Vertical: 15 mm ± 1 ppm RMS
Post Processing Static	Horizontal: 5 mm ± 1 ppm RMS Vertical: 10 mm ± 2 ppm RMS	Horizontal: 3 mm ± 0.5 ppm RMS Vertical: 5 mm ± 0.5 ppm RMS
Size(H×D)	65.5 x 175 mm (2.6 x 6.9 in)	85 x 180 mm (3.3 x 7.1 in)
Weight	0.8 kg with battery (1.76 lb)	1.35 kg with battery (2.97 lb)
Operating Temperature	-30 °C to +60 °C (-22 °F to 140 °F)	-40 °C to +65 °C (-40 °F to 149 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to 158 °F)	-40 °C to +75 °C (-40 °F to 167 °F)
GSM/GPRS Modem	N/A	Integrated
Power Consumption	1.8 W	2.6 W
Radio	N/A	Rx: 450-470 Mhz Rx/Tx: 403-473 MHz (optional)
Operating System	Windows, Android, iOS	Windows, Android, iOS
Battery Life	9 hours	6 hours

Communications
- 1x RS232 serial port
- 1x high speed USB
- iOS Bluetooth[1]
- Protocols:
    - RTCM 2.x/RTCM 3.x, CMR/CMR+ input and output
    - NMEA 0183 output
    - HCN outputs for GNSS raw data (convertible to Rinex static format)
    - iOS location sevices
- Data Storage:
    - 4 GB internal memory
    - GPS device mounts as a USB memory drive

Physical
- Humidity: 100% condensation
- Dust proof and waterproof: IP67 (total dust protection; temporary immersion to depth of 1 m; floats)
- Shock: survives a 2-meter drop on to concrete

Electrical
- Li-ion battery capacity: 3400 mAh
- External power input: 9-18 VDC

Software
- CHC's LandStar field data collection software
- Carlson's SurvCE/SurvPC field data collection software
- TerraGo Edge
- ESRI ArcView Collector
- All location aware iOS applications
- All android applications supporting SPP and NMEA

[1] CHC BT chip takes over the iPhone & iPad location services allowing all iOS apps to capture half-meter or better positions.

Specifications are subject to change without notice.

Made for iPhone   iPad