

X20⁺ / X20i GPS



KEY FEATURES

- **Cost-effective - Professional L1 GPS 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**
- **Upgradable - The iOS bluetooth upgrade enables all iOS apps to collect reliable half meter real-time GPS positions**

The CHC X20⁺ / X20i L1 GPS receiver is powered by a high precision L1 GPS engine with the most trusted L1 tracking technology. Static surveys are reliably completed with short occupation times at a fraction of the cost compared to RTK systems.

Affordable and Reliable

The X20⁺ / X20i GPS system is affordable and offers precise accuracy. The high-accuracy surveys benefit from having extra simultaneous receivers in adjustments and precision mapping applications have the advantage of added survey accuracy from additional baselines.

Static Surveys - Easy to use

Position the X20⁺ / X20i, turn it on, and data records instantly. Collection continues until the receiver is turned off. Plug & Play USB support makes copying log files as simple as dragging your mouse.

Compact and Lightweight

X20 / X20i weighs less than 0.8 kg (1.76 lb), with a full battery, and measures 17.5 cm (6.9) in diameter. Its ergonomic design is easy to deploy in large numbers, allowing even sizable projects to be completed in a single day without fatigue.

Expandable

Add on an X90-OPUS or X900s-OPUS to extend your projects cm level baselines to hundreds of kilometers! Upgrade the unit with our iOS enabled bluetooth transceiver to wirelessly collect submeter positions in real-time or cm post processed.

Technical Specifications

GNSS characteristic

- 372 channels: GPSL1, GlonassL1, Beidou B1, C/A code, L1 full carrier, SBAS, DGPS
- Extremely low noise and low multi-path error
- Optimized for low-elevation satellite tracking

Performance specifications

- Post Processing Static
 - Horizontal: 5 mm + 1 ppm RMS
 - Vertical: 10 mm + 2 ppm RMS
- Real-Time SBAS
 - Horizontal < 30cm RMS
- Real-Time DGPS
 - Horizontal: 30 cm + 2 ppm RMS

Communications

- 1x RS232 serial port
- 1x high speed USB
- Protocols:
 - RINEX and HCN outputs for GPS raw data
 - NMEA GGA, GSV, RMC, GLL, VTG, ZDA, GST, GRS, GSA
 - iOS location services (X20i)
- Data Storage:
 - 4 GB internal memory
 - GPS device mounts as a USB memory drive
- iOS bluetooth (optional) ⁽²⁾

Physical

- Size (H×D): 65.5 x 175 mm (2.6 x 6.9 in)
- Weight: 0.8 kg with battery (1.74 lb)
- Working Temperature: -30 °C to +60 °C (-22 °F to 140 °F)
- Storage Temperature: -40 °C to +70°C (-40 °F to 158 °F)
- Humidity: 100% condensation
- Dust & Waterproof: IP67 (total dust protection; temporary immersion to depth of 1 m; floats)
- Shock: survives repeated 2m drops to concrete

Electrical

- Power consumption: 1.8 W
- Battery capacity: 2600 mAh

- Operating time (internal battery): 8 hours
- External power input: 9-18 VDC

Software

- Optional CHC CGO post processing software
- RINEX converter
- Hcconfig
- TerraGo Edge (X20i)
- All location aware iOS applications (X20i)
- All android applications supporting SPP and NMEA

⁽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 survey practices and baseline length < 10 km (static).

⁽²⁾ 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

Made for iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, iPad Air 2, iPad mini 3, iPad Air, iPad mini 2, iPad mini, iPad (4th generation), iPad (3rd generation), and iPad 2. "Made for iPhone" and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPhone or iPad, respectively, and has been certified by Apple and the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone or iPad may affect wireless performance. iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries. iPad Air and iPad mini are trademarks of Apple Inc.