HiPer Pro

Completely cable-free, GPS+ RTK system with integrated UHF radio
Topcon is proud to introduce the next addition to the popular HiPer family of GPS+ receivers, the new HiPer Pro!

This revolutionary receiver is truly worthy to join this extremely successful line-up of precision GPS+ products. The HiPer Pro also is consistent with Topcon’s tradition of innovation not imitation; by being the World’s First completely cable-free base and rover RTK system with an integrated UHF radio system.

Just as the Topcon HiPer Lite and HiPer Lite+ revolutionized the design of modern GPS receiver technology, the HiPer Pro offers the same completely cable-free system design and operational advantages. With the added extended range performance of a UHF style radio system.

Topcon engineers and scientists have once again developed a revolutionary, integrated design that incorporates a transmitting UHF radio in the base receiver, eliminating the need for external radios and batteries. The new HiPer Pro will provide up to 4 miles of coverage with the internal radio, a 1 watt transceiver working in the 380 – 470 MHz range. Topcon also offers a simple, but powerful repeater system to extend your range as your needs change.

In order to eliminate the radio interference hassles of traditional UHF radio designs, the Topcon HiPer Pro incorporates advanced radio technology called “Free Channel Scan”, which automatically detects disruptive radio interference and changes channels to compensate.

The new HiPer Pro offers you a complete RTK GPS system that leaves behind the mess of complicated, tangled cables we have come to expect at the typical RTK base station. Compare HiPer Pro to the competition. You will find that although they have tried to make efforts to improve the rover end of the RTK system, the base station still includes a complex design with a slew of cables and modular components!

That’s right, no more hassles of an RTK Base Station with its convoluted mess of external batteries, antennas, and RTK radios that all are connected with fragile cables. Topcon has designed a complete, integrated RTK Base & Rover system that is completely cable free. No more cables to break, and no more wasted time of a complicated base receiver setup.

At Topcon, we strive to produce advanced product designs that make your life easier by solving the everyday problems you encounter on the job site such as broken cables and complicated systems setups. The new HiPer Pro offers the advantages of less equipment to carry into the field, and less to forget back at the office!

The Topcon HiPer Pro also incorporates Topcon’s industry leading GPS+GLONASS satellite tracking technology. The added advantage of dual constellation tracking provides more satellite coverage, increased performance, and improved precision over GPS only systems. Topcon leads all others in the GPS industry as the only dual-frequency, dual-constellation system manufacturer.

Topcon is proud to be leading the precision GPS industry with the most advanced technology, the most innovative system designs, and the most complete and diverse precision product lineup available. Contact your local dealer to find out why more professionals are choosing Topcon GPS+ solutions over all the rest!

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**Specifications**

- **Description:** 40 channel integrated GPS+ receiver/antenna with MINTER interface.
- **Tracking Specifications**
  - **Tracking Channels, standard:** 40 L1 GPS (20 GPS L1+L2 on Cinderella® days)
  - **Tracking Channels, optional:**
    - 20 GPS L1+L2 (GD), GPS L1 + GLONASS (GG),
    - 20 GPS L1+L2+GLONASS (GGD)
- **Signals Tracked:** L1/L2 C/A and P Code & Carrier and GLONASS
- **Performance Specifications**
  - **Static, Rapid Static:**
    - H: 3mm + 0.5ppm
    - V: 5mm + 0.5ppm
  - **RTK:**
    - H: 10mm + 1ppm
    - V: 15mm + 1ppm
- **Power Specifications**
  - **Battery:** Internal Lithium-Ion batteries for up to 14+ hours of operation (10 hrs TK)
  - **External power input:** 6 to 28 volts DC
  - **Power consumption:** Less than 4.2 watts
- **GPS+ Antenna Specifications**
  - **GPS / GLONASS Antenna:** Integrated
  - **Ground Plane:** Integrated flat ground plane
  - **Radio Antenna:** Center-mount UHF Antenna
- **Radio Specifications**
  - **Radio Type:** Internal TxF/Rx UHF (Selectable frequency range)
  - **Power Output:** 1.0W/O.25W (selectable)
- **Wireless communication**
  - **Communication:** Bluetooth™ version 1.1 comp.
- **I/O**
  - **Communication Ports:** 2x serial (PS232)
  - **Other I/O Signals:** 1pps, Event Marker
  - **Status Indicator:** 4x3-color LED’s, two-function keys (MINTER)
  - **Control & Display Unit:** External Field Controller
- **Memory & Recording**
  - **Internal Memory:** Up to 128 MB
  - **Data Update Rate:** Up to 20 times per second (20Hz)
  - **Data Type:** Code and Carrier from L1 and L2, GPS and GLONASS
- **Data Input/Output**
  - **Real time data outputs:** RTCM SC104 ver 2.1, 2.2, 2.3, 3.0, CMR, CMR+
  - **ASCII Output:** NMEA D103 version 3.0
  - **Other Outputs:** TPS format
  - **Output Rate:** Up to 20 times per second (20Hz)
- **Environmental Specifications**
  - **Enclosure:** Aluminum extrusion, waterproof
  - **Operating Temperature:** -30°C to 55°C
  - **Dimensions:** W:159 x H:172 x D:38 mm / 6.25 x 6.75 x 3.5 in
  - **Weight:** 1.65 kg / 3.64 lbs

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1 Specifications are subject to change without notice. Performance specifications assume a minimum of 6 GPS or 3 GPS/GLONASS satellites above 15 degrees in elevation and adherence to procedures recommended by GPS for the appropriate manual. In areas of high multipath, during periods of high PDOP and during periods of high ionosphere activity performance may be degraded. Reset shooting procedures are highly recommended in areas of extreme multipath or under adverse ionosphere.

2 Cinderella feature activates GGD reception at GPS midfield every other Tuesday for 24 hours.

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**Patents Pending.**

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