

HiPer II Standard Configuration

- HiPer II GNSS Receiver
- BDC58 Li-ion battery x2
- CDC68 charger
- Serial cable
- 100mm spacer (for HiPer II with UHF radio)
- 5/8 inch conversion plug
- User manual (CD-ROM)
- Carrying case

Optional Accessories

- Bipod
- Bracket for FC-250
- 5.5m tape measure
- Type 3WP Prism adapter
- Type 2 Base

Basic Specifications

Tracking capability

Number of channels ^{*1}	72 Universal Channels		
Tracked signals ^{*1}	GPS	L1 CA, L1/L2 P-code, L2C	
	GLONASS	L1/L2 CA, L1/L2 P-code	
	SBAS	WAAS, EGNOS, MSAS	

Positioning accuracy^{*2}

Static	L1+L2	H: 3mm + 0.5ppm	V: 5mm + 0.5ppm
	L1 only	H: 3mm + 0.8ppm	V: 4mm + 1ppm
Fast static	L1+L2	H: 3mm + 0.5ppm	V: 5mm + 0.5ppm
Kinematic	L1+L2	H: 10mm + 1ppm	V: 15mm + 1ppm
RTK	L1+L2	H: 10mm + 1ppm	V: 15mm + 1ppm
DGPS		< 0.5m	

User interface

Operation	Single-button operation for power, receiver reset, memory initialization
Display panel	22 LED status indicators
Voice navigation	Multi-lingual voice messages for receiver status information

Data management

Memory	SD/SDHC card (FAT16/32 formats)
Data format	RTCM SC104 2.1/2.2/2.3/3.0/3.1, CMR, CMR+, NMEA, TPS
Update/output rate ^{*3}	1Hz, 5Hz, 10Hz, 20Hz
Communication port	RS-232C (4,800 to 115,200bps)

Wireless communication

Bluetooth modem	V.1.1, Class 1, 115,200bps
Radio ^{*4}	Internal, receiver (RX) and transmitter (TX), 410 to 470MHz
Cellular modem ^{*4}	Internal, GSM or CDMA

Environmental

Dust and water protection	IP67 (IEC 60529:2001) at closing all connector caps. Protected against temporary immersion up to 1m(3.3ft.) depth.
Shock	2m (6.56ft.) pole drop
Operating temperature	HiPer II receiver: -40 to +65°C (-40 to +149°F) BDC58 battery: -20 to +65°C (-4 to +149°F) Radio/cellular modem: -20 to +55°C (-4 to +131°F)
Storage temperature	-45 to +70°C (-49 to +158°F)
Humidity	100%, condensing

Physical

Enclosure	Magnesium alloy housing
Size	Dia. 184 x H 95mm (dia. 7.24 x H 3.74 in.)
Weight	HiPer II receiver: 1.1kg (2.43 lb.) BDC58 battery: 195g (6.9 oz.) Internal modems: 115 to 230g (4.1 to 8.2 oz.), depending on modem specifications

Power supply

Standard battery BDC58	Removable, Li-ion rechargeable battery, 7.2V, 4.3Ah
Operating time at 20°C (68°F)	> 7.5 hours in static mode w/Bluetooth connection
Charger CDC68	Recharging time: Approx. 4 hours at 25°C (77°F) Input voltage: 100 to 240V AC (50/60Hz) ^{*5}
External power	Input voltage: 6.7 to 18V DC

^{*1} Number of channels and tracked signals vary according to receiver configurations.

^{*2} Accuracy depends on the number of satellites used, obstructions, satellite geometry (DOP), occupation time, multipath effects, atmospheric conditions, baseline length, survey procedures and data quality.

^{*3} 1Hz standard. Higher rates available as options.

^{*4} Internal "radio" or "radio+cellular modem" available as factory options.

^{*5} Use with an appropriate AC power cable.

Your local Authorized Topcon dealer is:



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Specifications subject to change without notice

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HiPer II

The Next Generation, Dual-Frequency GNSS Receiver



**Completely Integrated,
Advanced GNSS Solution**

- SMALLER. LIGHTER. FASTER.
- INTEGRATED GPS+GLONASS RTK & STATIC RECEIVER
- RUGGED, LIGHTWEIGHT MAGNESIUM ALLOY CONSTRUCTION
- CABLE-FREE BLUETOOTH WIRELESS OPERATION
- OPTIONAL INTEGRATED UHF OR DIGITAL UHF RADIO
- OPTIONAL INTEGRATED GSM OR CDMA MODEM
- BRIGHT, EASY-TO-READ LED PANEL
- VOICE MESSAGES FOR RECEIVER STATUS
- SD/SDHC MEMORY CARD SLOT
- REMOVABLE LI-ION BATTERY



It's time.

In the early 2000s, Topcon revolutionized the GNSS positioning technology with the HiPer series of receivers. Its fully integrated design gave the highest agility to RTK rovers ahead of its time, by eliminating extra equipment such as backpacks and cables.

Now Topcon raises the industry standard once again by presenting the next-generation of the world's most popular receiver system – the HiPer II.

Smaller. Lighter. Faster. More Affordable.

The HiPer II receiver is designed on these clear-cut concepts. This state-of-the-art receiver not only offers further enhanced agility, but also increases receiver performance and user-friendliness as well as the fully customizable structure providing our customers with the maximum flexibility to choose the system options they require.



HiPer II
The Next Generation
Dual-Frequency GNSS Receiver



Compact, Lightweight, Cable-free Solutions for All GNSS Positioning Applications



GPS+ Dual-Frequency Signal Tracking

Topcon's industry-leading GPS+GLONASS, dual-frequency signal tracking technology offers superior positioning capability over the GPS only receivers. It makes a difference where sky visibility is limited, such as in urban canyons or in woodlands, near tall fences, or other obstructions.



Cable-free RTK Base and Rover with an Internal Radio Transmitter/Receiver

No more hassles with connecting to an external radio. The HiPer II has an optional internal radio with receive-and-transmit capabilities, which eliminates cables for both rover and base stations. Topcon provides a choice of internal radio from either UHF or Digital UHF technologies.



Internal GSM/CDMA Modem for Network RTK

Designed as a perfect network RTK rover, the HiPer II gives you the option of an internal GSM or CDMA cellular modem. With its completely integrated design, the HiPer II eliminates the hassles of external modems and cables, all in a lightweight, rugged design.



Voice Messages for Receiver Status

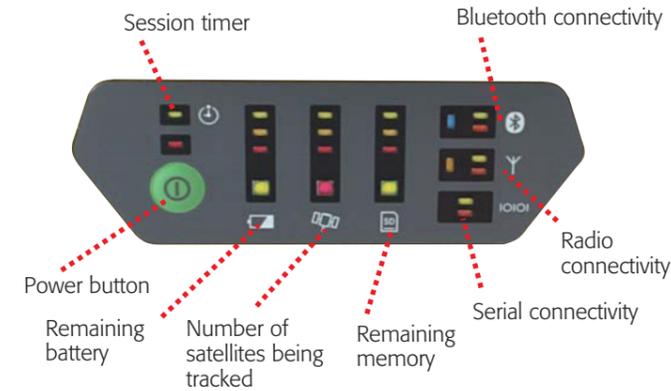
Multi-lingual, clear-tone voice messages notify the users of critical receiver information and status such as satellite signal interruption, radio interference, low battery, low memory and more. This feature improves your efficiency by providing information without having to look at the LED display or controller screen.



Tailor the System to Your Own Requirement

Fully customizable receiver functionality and a wide variety of options provide the maximum flexibility to tailor the HiPer II system to your own requirement.

- GPS or GPS+GLONASS
- L1 or L1/L2
- Static or RTK+Static
- Internal Radio and/or Cellular Modem
 - UHF or Digital UHF
 - GSM or CDMA
- Choice of:
 - Memory Devices
 - Field Controllers
 - Software Solutions



Rugged Receiver and Powerful Field Controller/Software



Durability that Withstands the Severest Condition

The magnesium alloy housing provides maximum ruggedness to the compact and lightweight receiver body. With an IP67 environmental rating, the HiPer II can handle almost any field condition.



Data Storage with SD or SDHC Cards

The large volume of static observation data from long-term survey projects, long sessions and displacement monitoring can be stored onto the popular SD cards or SDHC cards with 4GB or larger capacity.



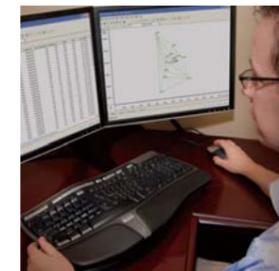
Choice of Field Controller System Solutions

Topcon provides you with the choice of field controller. Choose from the small, lightweight FC-250 or the ultrarugged, full-keyboard model FC-2500 for the ultimate field performance.



TopSURV Field Controller Software

Easy-to-navigate, intuitive user-interface of the TopSURV software allows all users to utilize its full functionality with the shortest learning curve. TopSURV supports all surveying tasks, including topo data collection, as-built survey, and stakeout.



Topcon Tools Complete GNSS Data Management & Post Processing Software

The powerful Topcon Tools software suite completes the full Topcon field-to-finish GNSS solution. With comprehensive data manipulation, processing, and analysis, Topcon Tools unlocks the full power of the Topcon GNSS systems solution.

* Field controllers and software are sold separately.