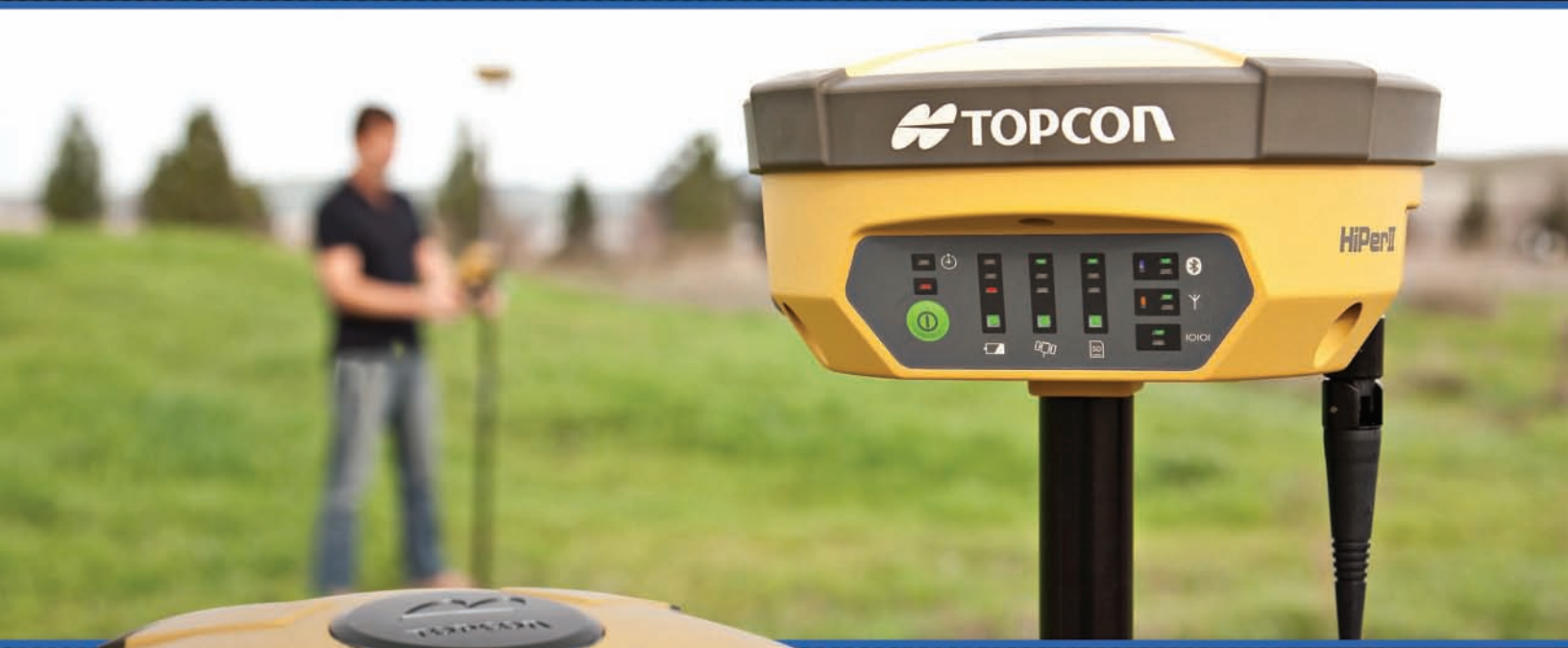
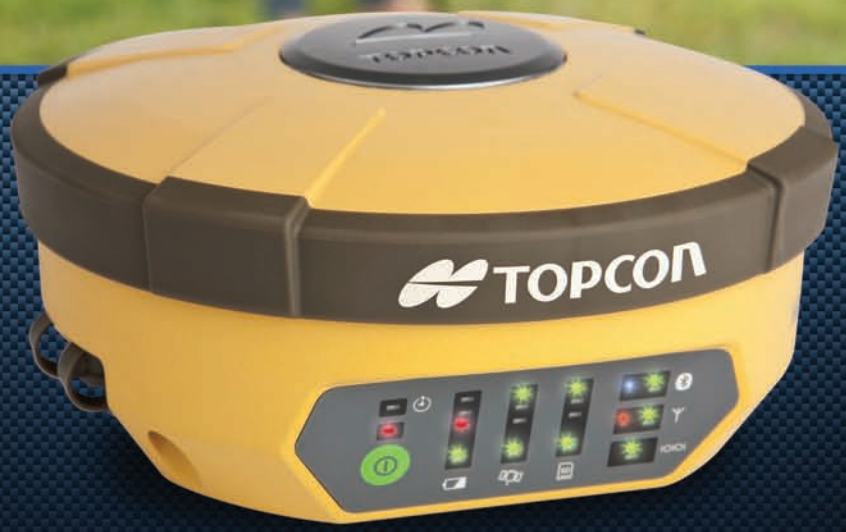
HiPer II

The Next Generation Dual Frequency GNSS Receiver





- Smaller. Lighter. Faster. More Affordable.
- Integrated GPS+GLONASS RTK & Static Receiver
- Rugged, Lightweight, Magnesium Alloy Construction
- Cable-free *Bluetooth*® Wireless Operation
- Optional integrated SS 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

TOPCON

HiPer II The Next Generation Dual Frequency GNSS Receiver

Completely Integrated, Advanced GNSS Solution

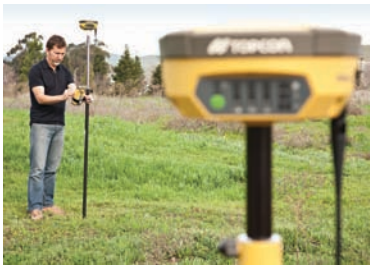
In the early 2000's, Topcon revolutionized the GNSS positioning technology with the HiPer series of receivers. Its fully integrated design gave the highest agility to RTK rovers ahead of its time, by eliminating extra equipment such as backpacks and cables.

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.

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 blockages.



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

No more hassles of connecting an external radio. The HiPer II has an optional internal radio with receive and transmit capabilities, eliminating cables from both rovers and base stations. Topcon provides a choice of internal radio from either Spread Spectrum 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.

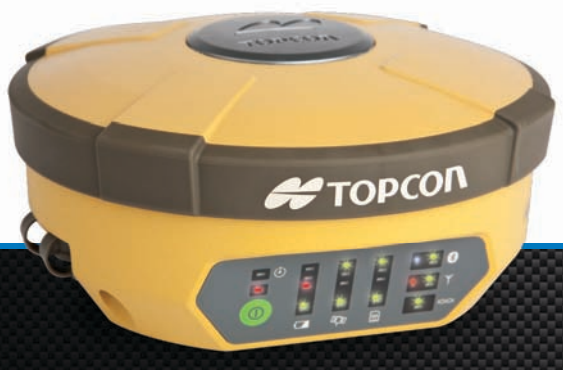
Voice Messages for Receiver Status

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.

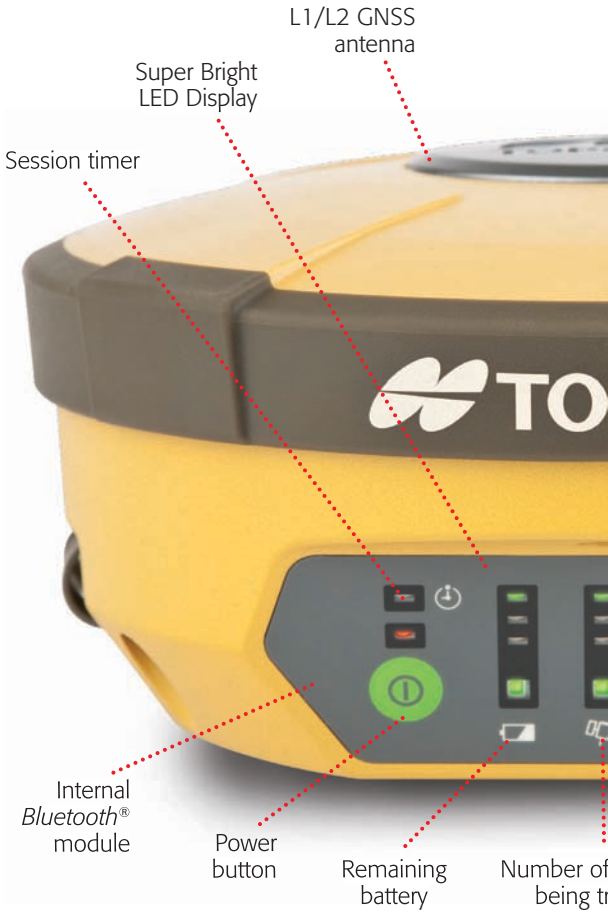
Tailor the System to Your Own Requirements

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

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



Smaller. Lighter. Fast
Compact, Lightweight, Cable-free Solutio



External power port
Serial port

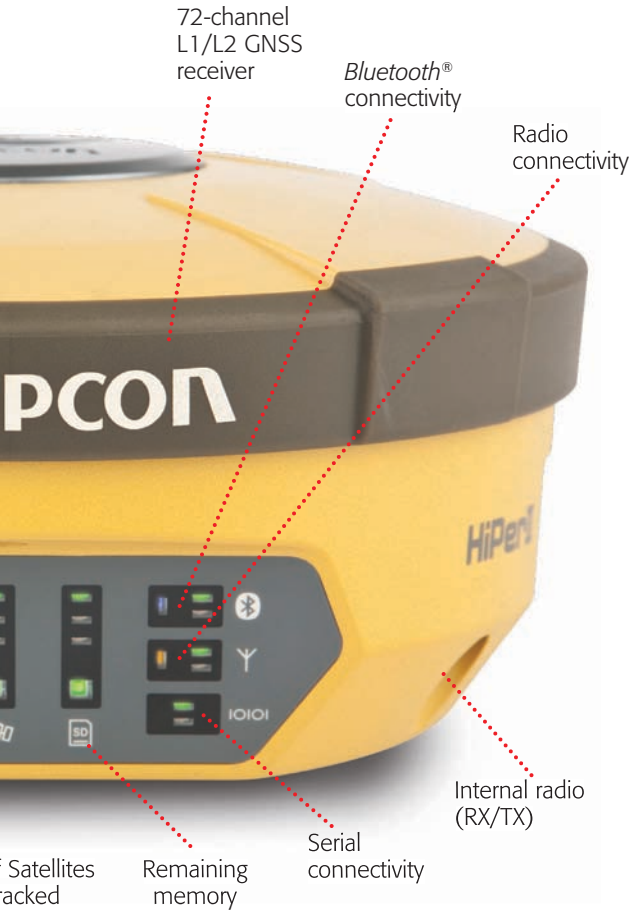
Speaker

Choice of Field Controller Solutions

Topcon not only provides the greatest flexibility with the HiPer II receiver design, but also provides you with the choice of field controller. Choose from the small, lightweight FC-25, FC-250, FC-236 or the ultrarugged, full-keyboard model FC-2500 for the ultimate field performance.

FC-25

er. More Affordable.
ns for All GNSS Positioning Applications.

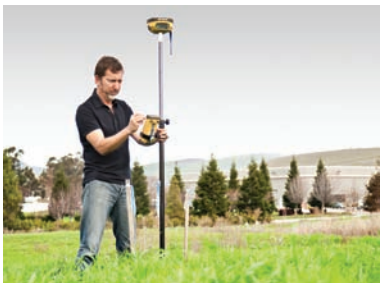


Tape measure hook

FC-250

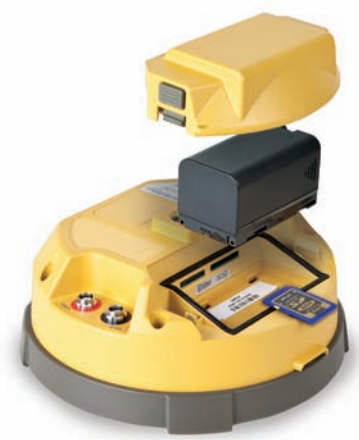
FC-236

FC-2500



Durability that Withstands the Severest Condition

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



Long-Life Li-ion Battery

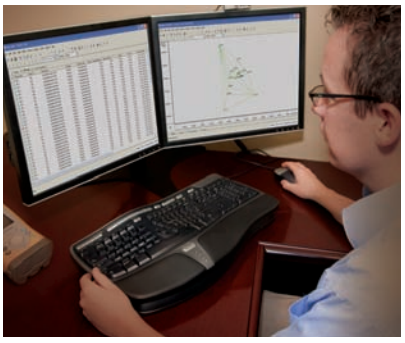
Topcon's HiPer II comes standard with a modern design long-life Lithium Ion battery that is located safely behind a sealed battery cover.

Data Storage with SD or SDHC Cards

A 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.

TopSURV 8 Field Controller Software

The easy-to-navigate, intuitive user interface of TopSURV software offers all users 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.

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" conversion plug
- User's manual (CD-ROM)
- Carrying case

Optional Accessories

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

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HiPer II SPECIFICATIONS

TRACKING CAPABILITIES			
Number of Channels[1]		72 Universal Channels	
Tracked Signals	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	
DATA MANAGEMENT			
Memory		Multi-lingual voice messages for receiver status information	
Data Format		RTCM SC104 2.1/2.2/2.3/3.0/3.1, CMR, CMR+, NMEA, TPS	
Update/Output Rate		1Hz, 5Hz, 10Hz, 20Hz options	
Communication Port		RS-232C (4,800 to 115,200bps)	
WIRELESS COMMUNICATION			
***Bluetooth*® Modem**		V2.1 + EDR, Class 1, 115,200bps	
UHF Radio[4]		Internal, receiver (RX) and transmitter (TX), 410 to 470MHz	
Spread Spectrum Radio[4]		Internal, receiver (RX) and transmitter (TX), 915MHz	
GSM/CDMA Modem[4]		Internal	
ENVIRONMENTAL			
Dust/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 with battery	-40 to +149°F (-40 to +65°C)
		BDC58	-4 to +149°F (-20 to +65°C)
		Radio/GSM modems	-4 to +131°F (-20 to +55°C)
Storage Temperature		-49 to +158°F (-45 to +70°C)	
Humidity		100%, condensing	
PHYSICAL			
Enclosure		Magnesium alloy housing	
Size		7.24" Diameter x 3.74" Height (184mm Diameter x 95mm Height)	
Weight		HiPer II receiver	2.43 lb. (1.1kg)
		BDC58	6.9 oz. (195g)
		Radio/GSM modems	4.1 to 8.2 oz. (115 to 230g), depending on modem specifications
POWER SUPPLY			
Standard Battery BDC58		Detachable, Li-ion rechargeable battery, 7.2V, 4.3Ah	
Operating Time at 68°F (20°C)		>7.5 hours in static mode w/*Bluetooth*® connection	
Charger CDC68		Recharging time	Approx. 4 hours at 77°F (25°C)
		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] RMS Values. 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] 10 Hz standard. Higher rates available as options.

[4] Internal "UHF modem" or "UHF+GSM modem" available as factory options.

[5] Use with an appropriate AC power cable.

Your local Authorized Topcon dealer is:

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topconpositioning.com

7400 National Drive • Livermore • CA 94550