TOPCON

HIPER HR

MULTI-PURPOSE
GNSS RECEIVER

Modern Hybrid of Positioning Technology

- Compact, lightweight, rugged design – capable of withstanding a 2 meter pole drop
- Five unique data communication options
- All signals, all satellites, all constellations
- Field tested, field ready IP67 design
- Compact form factor ideal for Millimeter GPS and Hybrid Positioning
- Revolutionary 9-axis IMU and ultra-compact 3-axis eCompass

Better things in smaller packages

The HiPer HR is smaller and lighter, but don't let it's small size fool you. It's not only packed with the most advanced GNSS technology, it is also built to withstand the harshest field environments. The HiPer HR is built with a rugged magnesium-alloy housing, not weak plastic, so it can take the punishment of the job site.

Using Topcon's patented Fence Antenna™ design and advanced GNSS chipset with Universal Tracking Channel technology, the receiver automatically tracks each and every satellite signal above – now and into the future.

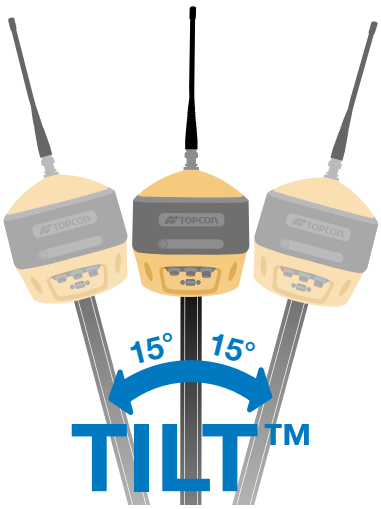
All signals, all satellites, all constellations — All in a compact, rugged design, with an integrated IMU and eCompass. Only available on the Topcon HiPer HR.

TILT™- Topcon Integrated Leveling Technology

The HiPer HR incorporates a revolutionary 9-axis Inertial Measuring Unit (IMU) and an ultra-compact 3-axis eCompass. This advanced technology compensates for mis-leveled field measurements out of plumb by as much as 15°.

Awkward shots on steep slopes or hard to reach spots are now a breeze with TILT™.

IP67 Waterproof Rating




UHF or FH 915
Next generation Fence Antenna™
Next generation Vanguard Technology™
3-axis ultra-compact eCompass
Bright, easy-to-read LED MINTER display
Rugged magnesium alloy housing
Rugged, waterproof IP67 environmental design
Integrated cellular, LongLink™, and Wi-Fi communications
452 Universal Tracking Channels
Revolutionary 9-axis internal IMU
Removable, hot-swappable battery
Durable, easy access connectors
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GNSS Tracking	
Number of Channels	452 with patented Universal Tracking Channel Technology
GPS	L1 C/A, L1C, L1P(Y), L2P(Y), L2C, L5
GLONASS	L1 C/A, L1P, L2 C/A, L2P, L3C
Galileo	E1, E5a, E5b, E5AltBOC, E6
BeiDou	B1, B2, B3 with ICD availability
IRNSS	SPS-L5
SBAS	WAAS/EGNOS/MSAS
QZSS	L1 C/A, L1C, L2C, L5, LEX
L-band	1525-1560 MHz
Satellites Tracked	All in view
Accuracy	
(L1 + L2)	H: 3.0 mm + 0.3 ppm V: 5.0 mm + 0.5 ppm
Precision Static*	H: 3.0 mm + 0.1 ppm V: 3.5 mm + 0.4 ppm
RTK, TILT Compensated**	H: 1.3 mm/°Tilt; Tilt ≤ 10° H: 1.8 mm/°Tilt; Tilt > 10° Maximum recommended angle for tilt compensation is 15°
Data Update / Output Rate	Up to 20 Hz
Communication	
Optional Radio Type	UHF (410-470 MHz) SS (915 MHz)
UHF radio range	5-7km typical; 15km in optimal*** conditions
Cellular	Integrated HSPA+/CDMA
Additional Communications	Internal cellular modem Wi-Fi Bluetooth® LongLink™
Data and Memory	
Real Time Data Output	TPS, RTCM SC104 v2.x, 3.x, CMR/CMR+, RINEX
NMEA 0183 Output	Version 2.x, 3.x and 4.x
On-board Memory	8GB Internal
Power	
Power Source	External power 6 to 28 VDC 1x internal battery (3.7 V, 5200 mAh) 1x removable battery (7.2 V, 2900 mAh)
Operating Time	Up to 9 hours with included batteries
Environmental and Physical	
Dimensions (w x h)	115 x 132 mm
Operating Temp.	-40ºC to 80ºC
Water/Dust Rating	IP67
Drop and Topple	2 meter pole-drop
Weight	1.172 g (including internal and hot swappable external batteries)

Form and Function

The most advanced GNSS technology available, yet compact enough to fit in the palm of your hand.

Highly configurable

Designed to grow with you, unique electronic option files empower you to activate available features instantly – increasing functionality as project demands expand.

Superior performance

Standard with integrated cellular and LongLink™ wireless communication modules, choose either long-distance UHF or convenient Spread Spectrum radio as well.

Future proof

Topcon's full-wave Fence Antenna™ tracks all GNSS signals currently available and is designed to track the constellations and signals of tomorrow.

* Under nominal observing conditions and strict processing methods, including use of dual frequency GPS, precise ephemerides, calm ionospheric conditions, approved antenna calibration, unobstructed visibility above 10 degrees and an observation duration of at least 3 hours (dependent on baseline length).

** Subject to successful TILT calibration & operating environment free of magnetic disturbances.

*** Varies with terrain & operating conditions.

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For more information:
topconpositioning.com/hiper-hr