

## Dual-Frequency GNSS Receiver



- Vanguard Technology™
- Universal Tracking Technology
- Rugged, Magnesium Alloy Construction
- Integrated RTK and Static Receiver
- Fence Antenna™ Advanced Performance

# HiPer V Dual-Frequency GNSS Receiver

## Compact, cable-free solution with Vanguard Technology for all GNSS positioning applications.

Topcon enhances the HiPer family of products by adding Vanguard Technology to the HiPer V. In the early 2000's Topcon revolutionized GNSS receivers by integrating the design to be compact and light weight. Topcon continues the revolution with Vanguard Technology™.

Topcon raises the standard once again by adding Vanguard Technology with 226 channels, Universal Tracking Technology, and the Fence Antenna into the versatile and configurable HiPer V. Universal Tracking Technology is an advanced firmware process that allows each of the 226 channels to be assigned to any satellite signal.

### Internal Radio Configurations

The HiPer V can be configured with the radio and cellular modem that best fits your needs. You can choose from Digital UHF or Spread Spectrum radio. Further, you can choose from HSPA, CDMA, or no cellular module. If you start your HiPer V investment with static only receivers, they can later be upgraded to include radio and cellular modules at one of many Topcon service facilities around the globe.



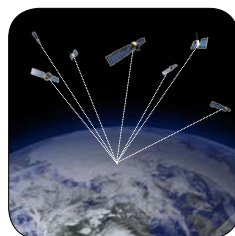
### Integrated Radio and Modem Choice

- Spread Spectrum Radio
- Digital UHF II Radio
- HSPA Cellular Modem
- CDMA Modem



### Rugged Design

- Magnesium metal housing
- Drop-proof
- Durable, rugged
- Waterproof



### Integrated GPS and GLONASS

- USA based GPS satellites
- Russian based GLONASS satellites



### Housing Features

- External power port
- External serial port
- Tape measure hook
- Shock protected ring

### Rugged and Waterproof

The HiPer V is designed rugged enough to perform in a real jobsite. It is also waterproof IP67, which means it can be submersed into water. The ports, speaker and battery door are all completely sealed from dust and water.



### Voice Alerts

Voice status messages keep you informed without having to look at the screen of the field controller, or the status lights above your head. Stay safe in traffic situations by looking at oncoming traffic rather than looking for the word "Fixed".

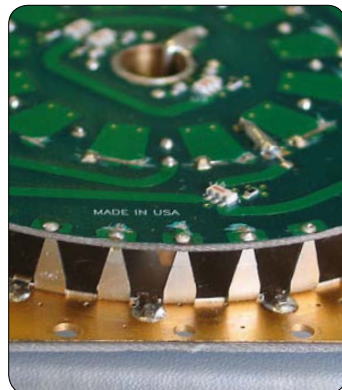


**PRIMARY FEATURES**



**Fence Antenna™ Technology**

This superior GNSS antenna element is light-weight, rugged, and sensitive enough to track signals in environments where other receivers fail. Obtain lock sooner, and track longer with Fence Antenna™ technology.



**KIT COMPONENTS BASE AND ROVER**

**System Components**

- 2 HiPer V Receivers
- 4 Batteries / 2 Dual Chargers
- Radio Antenna
- Carrying Case
- Power Cable
- 10cm Spacer and 3m Tape Measure
- Tribrach and Adapter w/Optical Plummet





## SPECIFICATIONS

### Tracking Capabilities

Number of Channels	226 Channels with Universal Tracking Technology
Tracked Signals	GPS L1 CA, L1/L2 P-code, L2C
	GLONASS L1/L2 CA, L1/L2 P-code
	SBAS WAAS, EGNOS, MSAS, QZSS

### Positioning Accuracy

Static*	L1 Only	H: 3mm + 0.8ppm V: 4mm + 1ppm
	L1+L2	H: 3mm + 0.1ppm V: 3.5mm + 0.4ppm
	RTK	L1+L2 H: 10mm + 1ppm V: 5mm + 1ppm
DGPS		<0.5m

### Wireless Communication

Bluetooth®	V2.1 + EDR, Class 2, 115,200bps
Radio	UHF, Spread Spectrum, Cellular (options)

### Environmental

Dust/Water Protection	IP67	
Shock	6.56 ft. (2m) pole drop	
Operating Temperature	External Power	-40°F to 149°F (-40°C to 65°C)
	Battery	-4°F to 149°F (-20°C to 65°C)
Cellular	-4° to 131°F (-20° to 55°C)	

### Physical

Enclosure	Magnesium alloy housing
Size	7.24" D x 3.74" H (184mm D x 95mm H)
Weight	HiPer V receiver 2.20 lb. to 2.82 lb. (1.0kg to 1.28kg)
Battery (BDC70)	7.23 oz. (195g)

### Power Supply

Standard Battery	Detachable, Li-ion rechargeable battery, 7.2V, 4.3Ah
Operating Time	>7.5 hours in static mode at 68°F (20°C) w/Bluetooth® connection
External Power Input Voltage	6.7 to 18V DC

\* 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).

For more specification information:  
[topconpositioning.com/hiper-v](http://topconpositioning.com/hiper-v)

## SOFTWARE

# MAGNET

A family of software solutions that streamlines the workflow for surveyors, contractors, engineers and mapping professionals.

### MAGNET Field

MAGNET Field provides a bright, graphical user interface with large touch icons and bright readable text. Select your color scheme Black, Gold, Blue, Silver, for your best visibility.



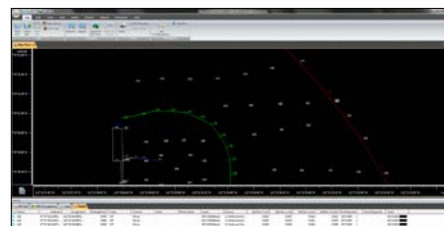
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### MAGNET Enterprise

A managers dream of tracking all field and office data in one simple to access web interface. Store and exchange your field data in the Enterprise cloud.

### MAGNET Office

Full CAD functionality with MAGNET Office Site and Topo. Or field data processing with MAGNET Office Tools inside AutoCAD® products, like Civil3D®. The MAGNET Office solution has what you need.



For more specification information:  
[topconpositioning.com/hiper-v](http://topconpositioning.com/hiper-v)



7400 National Drive • Livermore • CA 94550  
(925) 245-8300

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