

# Premier, Multi-Purpose Receiver

### HiPer HR



## **Better things in** smaller packages

The HiPer HR is smaller and lighter, but don't let its small size fool you. It is not only packed with the advanced GNSS technology, it also built to withstand the harsh field environments with a rugged magnesium-alloy housing.

#### **TILT**<sup>TM</sup>

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

- Compact, lightweight, rugged design
- Field tested, field ready IP67 design
- · Compact form factor ideal for Hybrid Positioning
- · Revolutionary 9-axis IMU and ultra-compact 3-axis eCompass

- \*\* Subject to successful TILT calibration and operating environment free of magnetic disturbances.
- \*\*\* Varies with terrain and operating conditions.
- (UHF radio only)
  \*\*\*\* Please contact your local dealer for more information regarding available offerings in your area

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www.topconpositioning.com

GNSS TECHNOLOGIES (SIGNAL TRACKING)	
GPS	L1 C/A, L1C, L1P(Y), L2P(Y), L2C, L5
GLONASS	L1 C/A, L1P, L2C/A, L2P, L3C
Galileo	E1, E5a, E5b, E5 AltBOC, E6
BeiDou	B1, B2, B3
IRNSS (NavIC)	SPS-L5
SBAS	WAAS/EGNOS/MSAS
QZSS	L1 C/A, L1C, L2C, L5, L6
L-band	Yes
Universal Tracking Channels™	452 GNSS channels Vanguard Technology™ with Universal Tracking Channels™; 4 reserved for L-band
TILT™	Topcon Integrated Leveling Technology™
GNSS Antenna	Integrated Full wave Fence Antenna™ technology

#### **POSITIONING PERFORMANCE**

Precision Static	H: 3 mm + 0.1 ppm   V: 3.5 mm + 0.4 ppm
Static/Fast Static*	H: 3 mm + 0.3 ppm   V: 5 mm + 0.5 ppm
RTK	H: 5 mm + 0.5 ppm   V: 10 mm + 0.8 ppm
Code Differential GNSS	H: <0.4 m   V: <0.6 m
RTK. TILT Compensated	H: 1.3 mm/°Tilt: Tilt ≤ 10°   H: 1.8 mm/°Tilt: Tilt > 10°

#### COMMUNICATIONS

Internal Radio (Optional)	405-470 MHz UHF or FH915 spread spectrum Max Transmit Power: 1W Range: 5-7 km typical; 15 km in optimal conditions.***
Cellular	4G (subject to regional offering)****
LongLink™ Bluetooth®	Up to 300 m / 1000 ft.
Wi-Fi	Yes
Bluetooth®	Yes
Connectors	Power, 1 Serial, 1 USB     external GNSS antenna (for variants without 4G cellular)     external cellular antenna (for 4G cellular variants only)

#### **DATA FORMAT AND MEMORY**

Data Output	TPS, RTCM, CMR/CMR+, NMEA, BINEX
Internal Memory	8 GB
Update Rate	Up to 20 Hz

#### **POWER**

External Power Supply	9.0 – 28.0 V DC
Battery	Internal: Li-ion 5,200 mAh, 3.7 V
	External: Li-ion 2,900 mAh, 7.2 V (Hot swappable)
Operating time with radio	Up to 9 hours with included batteries.
	(Refer to the operator's manual for more information)

#### **HARDWARE**

Dimensions (L x W x H)	11.5 x 11.5 x 13.2 cm (4.53 x 4.53 x 5.20 in.)
Weight	1.172 kg (2.58 lb.) with batteries
Ingress Protection	Dust and water IP67
Vibration	MIL-STD 810G
Drop test	2m (6.56 ft.) pole drop on concrete surface
Operating Temperature	-40° C to 65° C (-40° F to 149° F)
Humidity	100%

<sup>\*</sup> 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).