Topcon HiPer XR

Precision you can always trust

The HiPer XR's lightweight design ensures effortless portability, allowing professionals to work efficiently across diverse job sites. Its multi-constellation support delivers improved accuracy by tracking multiple satellite systems simultaneously, ensuring reliable data even in complex conditions.

- » Calibration-free and immune to magnetic interference tilt compensation up to 60°
- » GNSS interference monitoring and mitigation technology for anti-jamming and anti-spoofing
- » Improved RTK performance for more reliable results
- » Universal USB-C connectivity and battery charging
- » Integrated web user interface for easy access and control

Tracking

Signals	GPS: L1 C/A, L1P, L2P, L2C, L5 GLONASS: L1 C/A, L2P, L2C/A, L3 Galileo: E1, E5a, E5b, E5 AltBOC, E6 BeiDou: B1, B1C, B2, B2a, B2b, B3 IRNSS (NavIC): L5 SBAS: L1, L5 QZSS: L1C/A, L1 C/B, L2C, L5 L-band
Channels	448 hardware channels for simultaneous tracking of all visible supported satellite signals
TILT	Topcon Integrated Leveling Technology™ Calibration-free and magnetically immune IMU
Signal integrity	– GNSS interference monitoring and mitigation technology for anti-jamming and anti-spoofing – Ionospheric scintillation monitoring and mitigation – Multipath estimation and mitigation

Positioning performance

Precision Static	H: 3 mm + 0.1 ppm V: 3.5 mm + 0.4 ppm
Static/Fast Static[1]	H: 3 mm + 0.5 ppm V: 5 mm + 0.8 ppm
PPP	H: 3 cm RMS[2] V: 5 cm RMS[2] Convergence time: < 5 mins[3]
RTK[4]	H: 5 mm + 0.5 ppm V: 10 mm + 0.8 ppm
RTK, TILT Compensated	RTK + 5 mm + 0.5 mm / ° tilt Compensation up to 60°

Communications

Internal Radio (Optional)	403-473 MHz UHF 902-928 MHz spread spectrum Max Transmit Power: 1 W
Cellular	Integrated 4G/LTE cellular modem
LongLink™	Up to 300 m range, with clear line of sight Supports up to three (3) simultaneous rover connections
Bluetooth®	v5.3 BR/EDR and low energy long range
Wi-Fi	802.11a/b/g/n/ax 2.400 to 2.500 GHz
Ports	USB-C

Learn more at **topconpositioning.com**

TOPCON

Topcon HiPer XR

Precision you can always trust

Data format and memory

Output formats	RTCM 3.1, RTCM 3.2, NMEA
Input formats	RTCM 2.x, RTCM 3.x, CMR, CMR+
Internal Memory	20 GB
Update Rate	Up to 20 Hz

Power

External Power Supply	USB Type-C Power Delivery 3.0, 5-20 VDC 60 W maximum
Battery	Two internal, non-removable, Lithium-Ion battery packs each battery pack rated at 7.2 V, 3.5 Ah
Operating time	15 hours – STATIC (1 Hz data logging) 7 hours – RTK BASE STATION (1 W UHF/FH) 10.5 to 13 hours[5] – RTK ROVER (UHF/FH, internal cell or LongLink)

Hardware

Dimensions (L x W x H)	13.9 x 13.9 x 9.7 cm (5.47 x 5.47 x 3.82 in.)
Weight	995 g (2.19 lb.)
Ingress Protection	Dust and water IP67
Vibration	MIL-STD 810G
Drop	Survive 2 m pole drop on concrete surface
Operating Temperature	-40°C to 65°C (-40°F to 149°F)
Humidity	100%

[1] Performance specifications assume optimal conditions, including dual-frequency GPS, precise ephemerides, low ionospheric activity, approved antenna calibration, unobstructed visibility above 10°, and ≥3-hour observation durations (dependent on baseline length).

[2] Specifications are derived from field and lab testing. Accuracy and convergence may vary with hardware, GNSS geometry (PDOP), and site conditions.

[3] Performance may degrade under high ionospheric activity, severe multipath, or dense vegetation. Adherence to GNSS best practices is recommended for optimal results.

[4] Applicable to baselines <40 km.

[5] Operating time varies by communication method.

Learn more at **topconpositioning.com**

TOPCON