

NET-G5



GNSS Reference Receiver

The NET-G5 uses Topcon's premium Vanguard and Universal Tracking Channel technologies, incorporating 452 channels capable of tracking multi-frequency signals from all GNSS constellations including GPS, GLONASS, SBAS, QZSS, Galileo and BeiDou. This includes current and modernized signals across the full GNSS spectrum, including multiple L-band signals. The integrated Vanguard Technology™ has also demonstrated successful tracking and demodulation of advanced QZSS signal structures such as the LEX signal in E6.

The NET-G5 receiver can be accessed via Ethernet, Wi-Fi, or Bluetooth® as well as by using standard serial or USB connections. The NET-G5 can serve as a USB Host and provides a web-based user interface offering flexible configuration options and portability. The USB Host allows the user to connect a USB memory stick or USB Mass Storage Device (UMS) to the NET-G5 receiver.

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GNSS TRACKING

Number of Channels	452-Channel Vanguard Technology with Universal Tracking Channels
Signals Tracked	GPS, GLONASS, QZSS, SBAS, Galileo, BeiDou (BDS), IRNSS and L-band
Antenna Type	External – Geodetic full wave CR-G5 or PN-A5 antenna

POSITIONING ACCURACY

Static/Fast Static	H: 3.0 mm + 0.4 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 (L1 + L2)	H: 5 mm + 0.5 ppm; V: 10 mm + 0.8 ppm

DATA AND MEMORY

Memory	Removable SD/SDHC memory card up to 32 GB and USB Host support for external USB mass storage devices
Data Update/Output Rate	1 Hz - 100 Hz selectable
Data Output Format	TPTS, RTCM SC104 v2.x, 3.x and MSM, CMR/CMR+, BINEX, RINEX
ASCII Output	NMEA 0183 version 2.x, 3.x and 4.x

COMMUNICATION

Cellular Communications	Integrated HSPA+
I/O Communications	Class 2 Bluetooth® v2.0 + EDR Wi-Fi 3x RS-232 serial ports USB Host and Device supporting OTG functionality Ethernet (PoE Class 3)
NTRIP	Client, Caster, and Server functionality
TCP/IP and FTP	Multiple address ports
Web User Interface	Secure device access and configuration via Ethernet and Wi-Fi connectivity

ENVIRONMENTAL

Operating Temperature	-40°C to 80°C with external power -30°C to 65°C with integrated batteries
Dust / Water Rating	IP67
Vibration	Compliance with MIL-STD 810G, Method 514.6, Category 4
Humidity	100% condensing
Shock	Method 516.6 (40 g RMS)
Drop	2 m drop to concrete surface, IEC 60068-2-29, IEC 60068-2-27

POWER

External Power Input	Nominal 12 VDC (external power input range 9 to 28 VDC)
Power Consumption	Less than 5.0 W (typical)
Power Ports	2x Power ports (1 primary and 1 backup) plus Class 3 PoE

PHYSICAL

Dimensions (w x d x h)	150 x 200 x 60 mm
Weight	Less than 2 kg
Status Indicators	8 LEDs Topcon MINTER
User Interface	Multi-function power button supporting data logging and factory reset operations

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