

# NET20 PLUS

## HIGH-PERFORMANCE GNSS REFERENCE STATION RECEIVER

The eSurvey NET20 PLUS is designed for high-precision CORS reference stations. With a 13600 mAh battery that can ensure continuous recording and respond to the emergency. Users can use any phone or tablet to configure devices easily from the powerful Web UI. The rich data interface demands various applications such as monitoring and machine control.



GNSS Receiver

### Multi-constellation and Multi-frequency: Powerful Satellite Tracking Capacity

Obtain all available and reliable data sources, with total channels and all signals (GPS, BDS, GLONASS, GALILEO, IRNSS and QZSS) of GNSS tracking.

### Multiple Remote Administration Methods

- Support frp to remote control

Users can remotely operate Web UI through the frp setting to achieve checking or change settings without going to the site.

- Support FTP and SFTP

Users can set upload recording data to the FTP or SFTP server automatically or select the option on the download page.

### OTA Update Function

Support the OTA function so the user can check the latest firmware and choose whether to upgrade it with only one click, instead of downloading the firmware and then uploading it to upgrade.

### Complete Functional Continuous Operating Reference Station

- Richer data interface

Enjoy multiple data interfaces, such as serial port, IPPS, and event to various applications (e.g., meteorology), making versatile applications possible, such as monitoring and machine control.

- Richer wireless communication

Enjoy multiple methods of sending and receiving data, including Wi-Fi, Bluetooth, Ethernet, external radio, and SIM card, which offers more possibilities for communication.

### Visualization of Working Status

With a visual display screen, signal lights, and operation buttons, users can more conveniently know the current state of the NET20 Plus and make simple operations.

### Safe and Reliable Continuous Operating Reference Station

- Impressive battery life

Work up to 18 hours to respond to emergencies, such as power interruption, and no longer worry about a day's work; its 13600 mAh battery makes your data safe.

- Upgraded smart alert

Receive an alert email and SMS once the charger is disconnected, the battery level is too low, the temperature is too high, or memory storage is almost complete.

- Larger memory storage

Store the data for a longer time, supported by its internal 32 GB storage and TF card expansion, and manage data more conveniently, supported by FTP push.



Website



Social media

# Product Specification

# NET20 PLUS

## HIGH-PERFORMANCE GNSS REFERENCE STATION RECEIVER



GNSS		Communication		
Satellites tracking	GPS	L1C, L1C, L2P (Y), L2C, L5	Bluetooth	Bluetooth 2.1+EDR, V4.1
	BDS	BII, B2I, B3I, B1C, B2a, B2b	Wi-Fi	802.11 b/g/n
	GLONASS	L1, L2, L3	Ethernet	Support
	GALILEO	E1, E5a, E5b, E6	Port	■ 2-pin, DC in ■ 7-pin USB OTG, host / client ■ 5-pin RS232 ■ 5-pin RS232 / RS485 ■ DB9 female RS232 ■ LTE SMA female ■ 1 PPS SMA female ■ Event SMA female ■ SIM slot ■ TF card ■ RJ45 Ethernet, 100 / 1000 Mbit, POE ■ GNSS TNC female ■ MMCX female, 50Ω, 5/10 MHz
	QZSS	L1, L2, L5, L6 *		
	IRNSS	L5		
	SBAS	L1, L5 *		
	L-Band	B2bPPP (Only for the Asian-Pacific region) E6HAS		
	Channels	1408		
	Signal reacquisition	< 1 second		
Cold start		< 60 seconds	Baud rate	4800 - 921600
Warm start		< 30 seconds	Web UI	Support
Hot start		< 10 seconds	NMEA output	NMEA0183
Initialization reliability		> 99.9%	Correction data	RTCM V3.0, RTCM V3.3, RTCM2.3, CMR.DGPS, RAW
Update rate		20 Hz	Recording format	Binary, RINEX, BINEX
Operation system		Linux + A8	Recording interval	■ 2s, 10s, 15s, 30s, 60s ■ 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz
Internal memory		32G	Data stream	■ Bluetooth ■ Serial port x 3 ■ Ntrip Server stream x 4 ■ Ntrip Caster stream x 1 ■ Ntrip Client stream x 1 ■ Socket (TCP/UDP) stream x 5
External memory		TF Card		
Performance			Smart alert	E-mail, SMS
Static		■ H: 2.5 mm + 0.5 ppm ■ V: 5 mm + 0.5 ppm	FTP function	■ FTP Server ■ FTP Client (FTP push)
Real-time kinematic		■ H: 8 mm + 1 ppm ■ V: 15 mm + 1 ppm	NTP server	Support
SBAS		■ H: 0.4 m ■ V: 0.8 m	Others	DDNS, SNMPD, Firewall, VPN
IPPS		20ns	Physical	
Power Supply			Dimension	222 x 164 x 79 mm
Battery		7.2 V, 13600 mAh, 97.92 Wh, Lithium-ion	Weight	2000 g
Power		2-pin DC in	Screen	64 px x 256 px (yellow font)
Power Voltage		9 - 28 V dc, 2 A	Indicators	Battery, recording, Bluetooth, datalink
Working time		Up to 18 hours with internal battery	Button	■ Power/confirm button x 1 ■ Function button x 1 ■ Selectionn button x 2
Internet Modem			Operation temperature	-30°C - +65°C
Support band		Global GSM, WCDMA, LTE	Storage temperature	-40°C - +80°C
*It will be supported through future firmware update.			Humidity	Up to 100%
			Shock	Survive a 1 m drop on concrete floor
			Water/Dust Proof	IP67
			Certificate	CE, FCC, IC