

NET20 Plus

High-quality CORS Solution

NET20 Plus is specially designed for high-precision CORS reference stations. The rich data interface demands various of applications such as monitoring and machine control. User can use any phone or tablet to configurate device easily from the powerful Web UI.



Multi-constellation and Multi-frequency

With 800 channels of GNSS tracking, NET20 Plus covers all GNSS signals including GPS, BDS, GLONASS, GALILEO and IRNSS, QZSS to provide stable and reliable data source.

Rich Data Interface

Net20 Plus supports multiple data interface such as serial port, 1PPS, event to demand various of applications. Its powerful Linux system ensures a smooth operation without any worries.

Rich Wireless Communication

Net20 Plus supports WIFI, Bluetooth, Ethernet, SIM card. User can send or receive data through any methods.

Large Battery

The 13600 mAh battery lasts up to 12 hours to respond to emergencies. It also ensures the data is stored safely.

Large Memory Storage

The internal 32 GB storage and TF card expansion ensure user to store the data for long time. It also supports FTP push to make it more convenient for data management.

Web UI

It is able to view position status, configurate device, download data and update firmware from Web user interface with any phone, tablet or PC.

Smart Alert

It will alert user through email or SMS once the charger is disconnected, battery level is too low, temperature is too high or memory storage is almost full.

Rugged Design

Net20 Plus main body is using aluminum alloy materials to provide strong shock and vibration resistant characteristics. IP67 certification ensures operation in various of tough environments.

Product Specification

GNSS	-		1 x Lemo-0, 7-pin, USB OTG, host/client
Satellites Tracking	GPS: L1CA/L2E/L2C/L5 BDS: B1/B2/B3 GLONASS: L1CA/L2CA/L3 CDMA GALILEO: E1/E5a/E5b/E6/ALTBOC QZSS: L1CA/L1 SAIF/L1C/L2C/LEX NAVIC: L5 SBAS ¹ : L1/L5 L-Band: RTX		1 x Lemo-0, 5-pin, RS232 1 x Lemo-0, 5-pin, RS232/RS485 1 x DB9 female, RS232 1 x LTE, SMA female 1 x 1PPS, SMA female 1 x Event, SMA female 1 x Nano SIM 1 x TF card
Channels	336	_	1 x RJ45 ethernet
Signal Reacquisition	< 1 sec		1 x GNSS TNC female
Cold Start	< 60 sec	_	1 x OSC, MMCX, 50Ω, 5/10 MHz
Warm Start	< 30 sec	Baud Rate	9600 ~ 115200 bps
Hot Start	< 10 sec	Web UI	Support
Initialization Reliability	> 99.9%	NMEA Output	NMEA0183, NMEA2000, Binary
Update Rate	50 Hz standard, up to 50 Hz	Correction Data	RTCM2.X, RTCM3.X, CMR, CMR+, DGPS,
Operation System	Linux	 Correction Data 	BINEX, RAW
Internal Memory	32 GB	Data Recording	Support 8 recording simultaneously
External Memory	TF card	Recording Format	Binary, RINEX, BINEX
Performance		Recording Interval	2s, 5s, 10s, 15s, 30s, 60s 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz, 50 Hz
High Precision Static	H: 2 mm + 0.1 ppm V: 3 mm + 0.4 ppm		1 x Bluetooth 3 x Serial port
Static/Fast Static	H: 2.5 mm + 0.1 ppm V: 3.5 mm + 0.4 ppm	Data Stream	4 x NTRIP server streams 1 x NTRIP client streams
RTK	H: 8 mm + 1 ppm		5 x Socket (TCP/UDP) streams
	V: 15 mm + 1 ppm	Smart Alert	Email and SMS alert
Code Differential	H: 0.3 m V: 0.6 m	FTP Function	FTP server FTP client (FTP push)
SBAS	H: 0.3 m	NTP Server	Support
	V: 0.6 m	Others	DDNS, SNMPD, Firewall, VPN
1PPS	10 ns		
		Physical	
Internet Modem		Dimension	222 x 164 x 79 mm
Support Band	GSM/WCDMA/LTE	Weight	2 Kg
		Screen	2.75", 64 x 256 pix, yellow font
Power Supply		Operating Temperature	-40°C ~ +65°C
Battery	7.2 V, 13600mAh	Storage Temperature	-45°C ~ +80°C
Working Time	Up to 12 hours with internal battery	Water/Dust Proof	IP67
Voltage	9~28 VDC, 2A	Shock and Vibration	Survive a 1.2 m drop on concrete floor
	with over-voltage protection	Humidity	Up to 100%
Communication		Indicators	Battery, recording, Bluetooth, datalink
Communication		_	1 x Power/confirm button
Bluetooth	V2.1 + EDR/V4.1 dual model	Button	1 x Function button
WIFI	802.11 b/g/n, hotspot/client mode		2 x Selection button
Ethernet	Support	Certificate	CE
Port	1 x Lemo-0, 2-pin, DC in		

1. BAS supports WAAS, EGNOS, GAGAN, SDCM, MSAS.



Shanghai e-Compass Science & Technology Co., Ltd Building 4, No. 651 Wanfang Rd, Minhang District, Shanghai 201112, China Tel: +86 21 54467215 Email: info@esurvey-gnss.com Web: www.esurvey-gnss.com Edition: 20201123