

NET20Plus

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.

L-Band Atlas

Atlas is a service to provide global precision correction service over L-band satellites. With ATLAS subscription, Net20 Plus is able to achieve centimeter accuracy without any correction data.

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		Ethernet	Support
Satellites Tracking	GPS: L1CA/L1P/L1C/L2P/L2C/L5 BDS: B1I/B2I/B3I/B1C/B2a/B2b/ ACEBOC GLONASS: G1/G2/G3, P1/P2 GALILEO: E1/E5a/E5b/E6/ALTBOC QZSS: L1CA/L1C/L2C/L5/LEX IRNSS: L5 SBAS¹: L1/L5 L-Band: Atlas H10/H30/Basic	Port	1 x Lemo-0, 2-pin, DC in 1 x Lemo-0, 7-pin, USB OTG, host/client 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
Channels	800		1 x TF card
Signal Reacquisition	< 1 sec		1 x RJ45 ethernet
Cold Start	< 60 sec		1 x GNSS TNC female
Warm Start	< 30 sec		1 x OSC, MMCX, 50 ♀, 5/10 MHz
Hot Start	< 10 sec	Baud Rate	9600 ~ 115200 bps
Initialization Reliability	> 99.9%	Web UI	Support
Update Rate	10 Hz standard, up to 50 Hz	NMEA Output	NMEA0183, NMEA2000, Binary
Operation System	Linux	·	RTCM2.X, RTCM3.X, CMR, CMR+, DGPS
Internal Memory	32 GB	Correction Data	BINEX, RAW
External Memory	TF card	Data Recording	Support 8 recording simultaneously
		Recording Format	Binary, RINEX, BINEX
Performance			2s, 5s, 10s, 15s, 30s, 60s
High Precision Static	H: 2 mm + 0.1 ppm V: 3 mm + 0.4 ppm	Recording Interval ²	1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz, 50 Hz 1 x Bluetooth
Static/Fast Static	H: 2.5 mm + 0.1 ppm V: 3.5 mm + 0.4 ppm	Data Stream	3 x Serial port 4 x NTRIP server streams
RTK	H: 8 mm + 1 ppm V: 15 mm + 1 ppm		1 x NTRIP client streams 5 x Socket (TCP/UDP) streams
Code Differential	H: 0.3 m V: 0.6 m	Smart Alert	Email and SMS alert FTP server
SBAS	H: 0.3 m V: 0.6 m	FTP Function	FTP client (FTP push)
	Atlas H10: 4 cm RMS	NTP Server	Support
L-Band	Atlas H30: 4 cm RMS Atlas Basic: 30 cm RMS	Others Physical	DDNS, SNMPD, Firewall, VPN
1PPS	10 ns	Dimension	222 x 164 x 79 mm
		Weight	2 Kg
Internet Modem		Screen	2.75", 64 x 256 pix, yellow font
Support Band	GSM/WCDMA/LTE	 Operating Temperature 	-40°C ~ +65°C
		Storage Temperature	-45°C ~ +80°C
Power Supply		- Water/Dust Proof	IP67
Battery	7.2 V, 13600mAh	Shock and Vibration	Survive a 1.2 m drop on concrete floor
Working Time	Up to 18 hours with internal battery	Humidity	Up to 100%
Voltage	9~28 VDC, 2A	Indicators	Battery, recording, Bluetooth, datalink
with over-voltage protection Communication		Button	1 x Power/confirm button 1 x Function button
Bluetooth	V2.1 + EDR/V4.1 dual model		2 x Selection button
WIFI	802.11 b/g/n, hotspot/client mode	Certificate	CE

^{1.} BAS supports WAAS, EGNOS, GAGAN, SDCM, MSAS.

^{2.} The maximum rate depends on the GNSS registration.

