e-survey

NET10

PORTABLE CORS & HIGH PRECISION RECEIVER

- **Multi-constellation and multi-frequency**
  Obtain all available, and reliable data source, with full channels and all signals (GPS, BDS, GLONASS, GALILEO, IRNSS, and QZSS) of GNSS tracking.
- **Rich wireless communication**
  Send and receive data through multiple methods, including Wi-Fi, Bluetooth, Ethernet and external radio, which offers more possibility for communication.
- **L-Band supported (rover mode)**
  Gain global precision correction service over L-band satellites. With subscription, you can work with centimeter accuracy without any correction data.
- **Web UI**
  Enjoy convenient remote connection to the web user interface, including viewing position status, configuring device, downloading data and updating firmware with any phone, tablet or PC.
- **Smart alert**
  Receive an alert email once the satellite number is less than the set value, temperature is too high or memory storage is almost full.
- **Easy installation and configuration**
  Master the operations with quick training, supported by its small but efficient design, which can decrease the operation difficulty.
- **Large memory storage**
  Store the data for a long time, supported by its internal 32 GB storage, and manage data more conveniently, supported by FTP push.
- **Rugged design**
  Work in all harsh environments due to its main body, made of aluminum alloy materials to provide strong shock and vibration resistance, and its IP67 certification.

NET10 is designed for continuous operation and a wide range of monitoring scenarios, especially for users who need to set up reference stations. With the 3D choke-ring antenna, it can provide high quality GNSS signals.

Specification

		NET10-H	NET10-T
GNSS			
Satellites tracking	■ GPS	L1CA/L1P/L1C/L2P/L2C/L5	L1CA/L2E/L2C/L5
	■ BDS	B1I/B2I/B3I/B1C/B2a/B2b/ACEBOC	B1/B2
	■ GLONASS	G1/G2/G3	L1CA/L2CA/L3 CDMA13
	■ GALILEO	E1/E5a/E5b/E6/ALTBOC	E1/E5a/E5b/E5ALTBOC
	■ QZSS	L1CA/L1C/L2C/L5/LEX	L1CA/L1 SAIF/L2C/L5/LEX
	■ IRNSS	L5	L5
	■ SBAS1	L1CA/L5	L1CA/L5
	■ L-Band	Atlas H10/H30/Basic	OmniSTAR, RTX
Channels		800	336
Signal reacquisition		< 1 second	< 2 seconds
Cold start		< 60 seconds	< 45 seconds
Warm start		< 30 seconds	
Hot start		< 10 seconds	
Initialization reliability		> 99.9%	
Update rate		10 Hz standard, up to 20 Hz	20 Hz standard

System	
Operation system	Linux
Internal memory	32 GB

Performance	
Static	■ H: 2.5 mm + 0.5 ppm ■ V: 5 mm + 0.5 ppm
Real-time kinematic	■ H: 8 mm + 1 ppm ■ V: 15 mm + 1 ppm
SBAS	■ H: 0.3 m ■ V: 0.6 m

Power Supply	
Power	2-pin DC in
Voltage	8 - 36 V dc, with over-voltage protection

Physical	
Dimension	131 mm x 36.5 mm x 97 mm
Weight	435 g
Operating temperature	-30°C - +65°C
Storage temperature	-40°C - +80°C
Water/dust proof	IP67
Shock and vibration	Survive a 2 m drop on concrete floor
Humidity	Up to 95%
Indicators	Power, satellite, recording, datalink
Button	1 x Reset button
Certificate	CE, FCC

Communication	
Bluetooth	BT5.0 + EDR, compatible with BLE
Wi-Fi	802.11 b/g/n
Ethernet	Support
Port	■ 1 x Lemo-0, 2-pin, DC in ■ 1 x DB9 female, RS232 ■ 1 x RJ45 Ethernet ■ 1 x GNSS TNC female
Baud rate	9600 - 115200 bps
Web UI	Support
NMEA output	NMEA0183
Correction data	RTCM3.X, CMR, CMR+, DGPS, RAW, ROX
Recording format	Binary, RINEX, BINEX
Recording interval	■ 2s, 5s, 10s, 15s, 30s, 60s ■ 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz[2]
Data stream	■ 1 x Bluetooth ■ 1 x Serial port ■ 3 x NTRIP server streams ■ 1 x NTRIP client streams ■ 5 x Socket (TCP/UDP) streams
Smart alert	Email alert
FTP function	FTP server FTP client (FTP push)
NTP server	Support
Others	DDNS, SNMPD, Firewall, VPN

1.SBAS supports WAAS, EGNOS, GAGAN, SDCM and MSAS.
2.The maximum rate (20 Hz) depends on the GNSS board registration.

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