FORA GNSS
ADVANTAGES OF A LEADER

e-survey eHP10

INDUSTRY DESIGN HEADING AND NAVIGATION GNSS RECEIVER



As a heading GNSS receiver, the eHP10 integrates dual-antenna, TX/RX radio, lora, serial port and 4G network, with a variety of working modes, suitable for Machine control, Marine survey, Geodesy and other industries.Due to its unique interface and internal design, the eHP10 greatly improves the waterproof and shock resistance performance, and can work stably in a variety of environments.



Dual Antenna: Heading and Navigation

Connect positioning and heading antennas to the eHP10 to output heading information and be used in scenarios with heading demands.

Internal Radio/Lora

The eHP10 has internal radio and supports Satel, PCC, TrimTalk, Trimark III, South, and HiTarget radio protocols, ensuring it can work properly even in bad network conditions.

Richer Data Interface: Making Versatile Applications Possible

Enjoy multiple data interfaces, such as DB9 serial port, M12 serial port, 1PPS, CAN, Event, UHF, to various applications and etc., to conveniently facilitate synchronization with other devices.

Rich Wireless Communication

The eHP10 supports Wi-Fi, Bluetooth, Ethernet, and SIM cards. Users can send or receive data through any method.

Rugged Design: Designed for Harsh Environments

Drop it from a height of 1.5 m without any damage and enjoy a dustproof and waterproof rating of IP67, salt spray proof level of C4, mold proof level 1 to use it in all harsh vibration environments, such as vehicles and aviation, due to its simple and modular internal structure design.

Suitable for Base and Rover

Its lightweight design makes the eHP10 perfect as a rover or base station for multiple applications.

Product Specification

eHP10

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GNSS		
Satellites tracking	GPS	L1CA, L2P (Y), L2C, L5
	BDS	B1I, B2I, B3I
	GLONASS	L1, L2
	GALILEO	E1, E5a, E5b
	QZSS	L1, L2, L5
	SBAS	L1
	L-BAND	B2b-PPP (Only for the Asian-Pacific region) E6HAS
Channels		1408
Signal reacquisition		< 1 second
Cold Start		< 60 seconds
Warm Start		< 30 seconds
Hot Start		< 10 seconds
Initialization reliability		> 99.9%
Update Rate		20Hz standard
Operation system		Linux
Internal Memory		32GB
External memory		Support TF Card

Performance	
RTK	■ H: 8 mm + 1 ppm RMS ■ V: 15 mm+ 1 ppm RMS
DGPS	■ H: 0.4 m ■ V: 0.8 m
Heading	0.2°@1.0 m Baseline
1PPS	20 ns

Power Supply	
Power	2-pin DC in
Power Voltage	10 - 28V dc

Internet Modem	
Supported band	Global GSM, WCDMA, LTE

Internal Radio	
Type	TX and RX
Frequency range	410 - 470 MHz
Channel spacing	12.5 KHz / 25 KHz
Emitting power	1 W
Operating range	■ 3 - 5 km typically ■ 10 km with optional conditions
Protocol	Satel, PCC, TrimTalk, TrimMark III, South, HiTarget

Lora (Optional)	
Type	TX&RX
Frequency range	410.125 - 480.125 MHz
Baud Rate	2400-62500

Communication	
Bluetooth	BT5.0 + RDR, compatible with LE
Wi-Fi	802.11 b,g, access point and client mode WPA/WPA2/WEP64/WEP128 encryption
Ethernet	✓
Port	■ 2-pin, DC in ■ DB9 male, RS232 ■ M12 female (* RS232+RS485+CAN+EVENT+1PPS) ■ RJ45 Ethernet ■ UHF standard,(Lora, TNC female, optional) ■ LTE, TNC female ■ GNSS TNC female x 2 ■ Nano SIM ■ TF Card
Baud rate	4800 - 460800
WEB UI	✓
NMEA Output	NMEA0183
Correction Data	RTCM2.x, RTCM V3.2,CMR,CMR+
Recording Format	Binary, RINEX, BINEX
Correction Data	RTCM V3.0,RTCM V3.3. RTCM2.3, CMR.DGPS,RAW
Data Stream	■ Bluetooth ■ Serial port x 2 ■ Ntrip Server stream x 4 ■ Ntrip Caster stream x1 ■ Ntrip Client stream x 1 ■ Socket (TCP/UDP) stream x5
FTP Function	■ FTP server ■ FTP client (FTP push)
NTP Server	✓
Alerts	E-mail, SMS
Others	DDNS, SNMPD, Firewall, VPN, Frp
Device Management	Wi-Fi, Bluetooth, Serial

Physical	
Dimension	158.4 mm x 142.4 mm x 33.6 mm
Weight	670g
Indicators	Heading, Cellular, Datalink
Operation temperature	-40°C - +80°C
Storage temperature	-45°C - +85°C
Humidity	Up to 100%
Shock	Survive a 1.5 m drop on concrete floor
Water/Dust Proof	IP67
Salt Spray Proof	C4
Mold Proof	Level 1
Maximum speed	1854km/h (1000 kts)
Certificate	CE, FCC