



V₈ CORS RTK SYSTEM

- 12 channels GLONASS L1 (Optional)
- 12 Channels GLONASS L2 (optional)

V₉ GNSS RTK SYSTEM

- 12 channels GLONASS L1 included
- 12 Channels GLONASS L2 included





V8 CORS RTK SYSTEM

Hi-Target V8 GPS RTK is the advanced multi-channel, multi-frequency GPS system based on the CORS technology, antenna and data-link radio combined in one compact unit.

V8 GPS RTK receiver employs the Sound Navigation Operation technology to instruct the whole process of operation.

Combined USB device file management technology, towed download; Integrated built-in main unit, waterproof, dustproof, shock-resistance design, detailed considerations for field work environment; mature GPRS/CDMA network communication technology, one-key switch among GPRS/CDMA/UHF.

V8 RTK has completely seamless compatibility with CORS, and economical HD-CORS technology for initiative of network-building, which is your ideal assistant to your surveying job.



V9 GNSS RTK SYSTEM

Hi-Target V9 GNSS RTK is a latest advanced multi-channel, multi-frequency GLONASS system based on the CORS technology, antenna and data-link radio combined in one compact unit. The system can receive GLONASS signal.

V8 GNSS RTK receiver employs the Sound Navigation Operation technology to instruct the whole process of operation.

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8 Technology Breakthroughs

Seamlessly compatible with CORS system

Base on the technology of CORS system design, perfect network data transmitting, seamless join with CORS system, one single receiver can perform RTK work.

Initiative of network-building HD-CORS technology

The HD-CORS (Hi-Target Continuous Operation Reference Station System) which comprises Hi-Target unique data transmitting network server technology, excellent long-distance RTK working technology, and V8 GNSS RTK system, has many advantages including free network-building, low run cost, convenient maintenance, suited to meet the user's surveying need in regional continuous RTK work in medium & small city. You can also set up HD-CORS in your region with help of Hi Target software.

GPRS/CDMA/UHF data transmitting technology

Free switch among GPRS/CDMA/UHF, with powerful anti-disturbance, GPRS data transmitting technology gets rid of the limit of working distance, especially suits to work at a low cost in tough area, such as urban, mountain area where the traditional radio signal is seriously blocked.

Soundable Intelligent RTK GPS System

With the initial innovation of Soundable Intelligent Technology, the V8 RTK receiver is able to speak to prompt the operation you have just performed and to inform the current working condition.

USB device files management

File management adopts USB device storage technology, plug and play, towed download, without the trouble of procedure download.

Superb long-distance working technology

Powered by the latest advanced NovAtel OEMV dual-frequency mother board, V8 RTK receiver gets rid of the limit of traditional RTK working distance, and let your GPS system perform higher benefits by using the long-distance working technology.

Supports GNSS Modernization

Powered by the Latest Advanced NovAtel dual-frequency RTK engine, Hi-Target V8 RTK receiver supports the coming L5 band and the new L2 C/A signals by software upgrading technology.

Completely Enhanced Integrated System

Integrated RTK receiver in industry-standard design, enhanced main unit design in waterproof loop and mat for the hostile working environment. Waterproof, dustproof and shock-resistant.

● As Rover Receiver

Industry-level Integrated Mainframe

- Industry-level design with waterproof rubber loop and mat, waterproof, dustproof and shock-resistant.
- Completely integrated built-in industry level receiver unit, solid and compact.
- Built-in reliable wireless bluetooth device, eliminate the traditional limit of cable.



Card Slot & Built-In Dual Lithium Battery

- Embedded GPRS/CDMA communication module, easy-operated.
- Built-in dual lithium battery, ensure switching power without interrupting your surveying work, large battery capacity for 12 hours continuous work



Industry-Level Controller

- Dolphin 9500 industry-level touched colorful-screen controller, built-in blue-tooth wireless communication with GPS receiver.
- Operation in English version by professional RTK controller software, allows you to experience easy job in the field.



Controller Bracket & Carbon-Fiber Pole

- Professional controller bracket support fixing angle at any direction, convenient for rotation, equipped with professional compass to improve efficiency.
- 2M carbon fiber GPS pole, portable and durable with precise level bubble, allows you to control your operation easily



Control Panel

- Unique control panel design with 2 keys and 3 LED indicators, plus intelligent voice navigation.



USB Communication Port

- 64M large capacity of FLASH memory meets the need of 120 hours continuous static data collection.
- USB communication port, plug and play; USB device static data download make you experience the joy of high speed download



As Base Station

Industry-level Integrated

Bluetooth highly proof, and shock natural drop
 Intelligent Base Station
 Support one-key set at direction setting, and view remaining from long

Professional UHF Data

460m/230m data transmitting speed, less

Mature GPRS/CMDA

Completely built-in GPRS communication obstacle, suitable for surveying in station and send

Support UHF/GPRS

UHF and GPRS data link can be set broadcasting simultaneously, one key switching between UHF and GPRS data link on the rover receiver, dual insurance for the data communication.

Professional Network Server Technology

24 hours network server online support, performing real time monitor,. data save and online upgrade.

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Design

integration, water proof, dust resistant, floatable, bear 2 meters

Technology

any point, rover receiver opposite the base station battery power distance

Link Technology

transmitter. Maximum 19200bps power loss and more stable

Technology

module without big battery, no without distance limit, especially hostile environment, control base message to each other.

Broadcast Simultaneously

Carrying Case

- Solid & durable, light weight, portable & striking color fit field work



Professional UHF Data Link

- To use the professional UHF data link, you just need to select UHF data link model



● Technical Parameters

Receiver Component

- 54 Channels receiver, including
 - 14 channels GPS L 1 + 2 channel SBAS
 - 14 channels GPS L2P (Y) code or L2 C code
 - 12 channels GLONASS L 1
 - 12 channels GLONASS L2
- PAC technology
- VISION related technology
- Fast recapture
- Output refresh rate 5Hz (Customized Maximum of 20Hz)
- Superb long-distance RTK solution capability

Internal UHF Radio Component

- f) Frequency bands: 225-235MHz, 450-470MHz, meeting different requirements,
- f) 19, 2k bps wireless data rate
- f) 16 flexible switching channels (direct-switched of the panel buttons without controller or computer), users can alter the frequency table

GSM Module

- GPRS or CDMA network communication service
- Worldwide applicable, network automatically login
- Provide the HD-CORS users with free server service, or network server customized-made

Port Component

- Two RS-232 serial ports(Port 1, Port 2), port 1 (big 5-pin port): Baud Rates up to 115,200 bps Port 2 (small 5-pin port): Baud Rates up to 115,200 bps
- One USB port supporting data download
- One Bluetooth wireless communications port f) Two external DC ports
- One GSM/CDMA SIM card compartment
- Two internal lithium battery compartments
- One UHF antenna mount

Panel Key-Press and Lamp

- 2 panel key-presses, 1 power key-press, 1 function key-press, the flexible combination of two keys varies setting on receiver, with sound and light indication,
- Setting receiver working model
- Setting data link way
- Setting radio channel
- Setting basing station automatically (without controller)
- Lamp direct: electricity, satellite lock status, data link signal and data flow

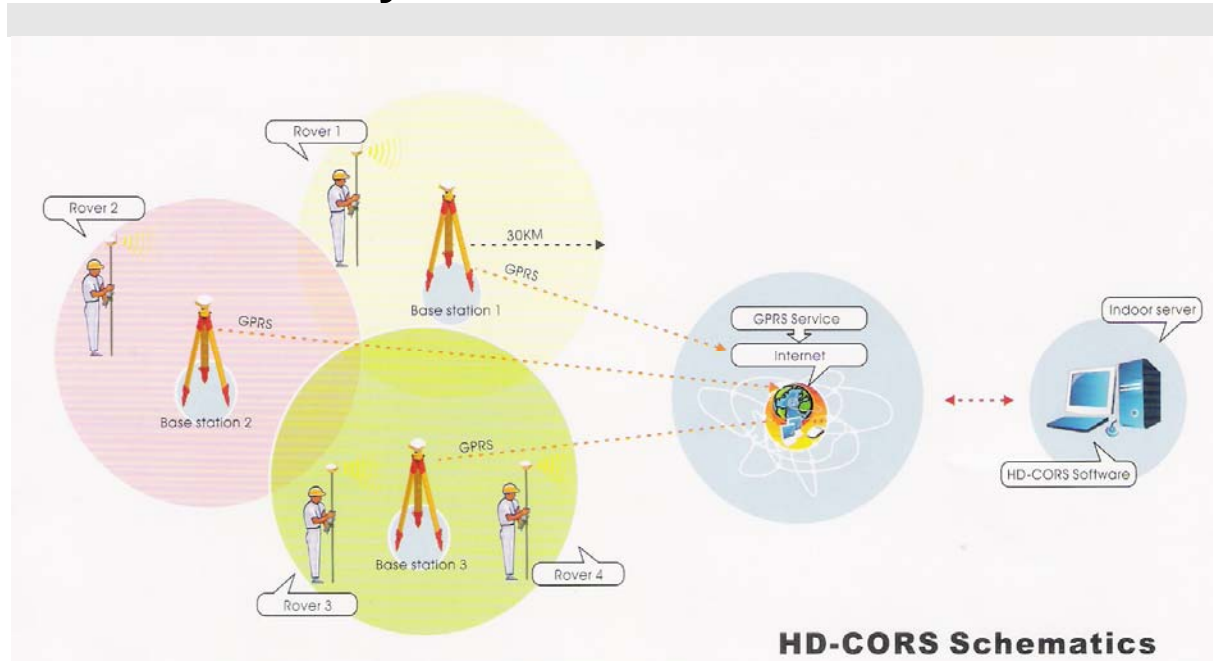
Positioning Specifications/Accuracy

Positioning	Horizontal Accuracy(RMS)	Vertical Accuracy (RMS)
RTK	± 1 cm + 1 ppm (x baseline length)	± 2 cm + 1 ppm (x baseline length)
Static/ Fast Static	± 2.5 mm + 1 ppm (x baseline length)	± 5.0 mm + 1 ppm (x baseline length)
Single Positioning	1.5m (CEP)	
RTD (Code-differential)	0.45m (CEP)	

Physical Specifications

Feature	Specification
Storage	ARM9 core control chip, built-in 64M Flash memory cord
Size	19cm x 10cm
Weight	0.9KG (with 2 batteries inserted)
Anti-drop	2m natural drop
Battery system	Internal dual compartment Lithium battery system Ensure continuous power supply without interrupt
Battery life (at 20 °C)	Each battery capability 1400m Ah, voltage: 7.6V Dual battery continuous working up to 10 hours
Power input	External DC acceptable, 7 - 36 V DC, Auto switch between Internal and external battery
Main unit power	2W
Operating temperature	-30 °C to 60 °C
Storage temperature	-30 °C to 60 °C
Casing	Water-proof, dust-proof, shock-and vibration-resistant, IP67 grade

● HD-CORS System



Initiative of Network-Building HD-CORS System in Medium& Small city

HD-CORS is launched particularly suitable for small and medium-sized cities in the continuous reference station system, which is developed for two years base on mature net RTK technology application, integrating GPRS/CDMA transmitting technology, combining ultra-long RTK with own researched and developed net RTK server. System consists of the fixed base station, rover, network server, covering comprehensive area of operation, forming the continuous operation reference station system in regional scope, which is suitable for frequent measurement, construction positioning, GPS monitoring operations in small and medium-sized cities.

System Components: GPS base stations (single or multiple), GPS rover (unlimited), indoor server (Hi-Target software)

Coverage: single base station is of coverage within 30 KM radius. The distance between the base stations is up to the largest 50 KM - 60KM

Operations Mode: one base station to one rover; one base station to multiple rovers; multiple base stations to multiple rovers. multiple RTK receivers are in operations, arbitrary grouping without interference.

Advantages:

1. Low input cost: the cost of constructing base station is low, can withstand by most of enterprises;
2. Low operating cost. applying GPRS / CDMA communications, single GPRS communications Monthly cost less than 120 RMB /month
3. Less difficulty of building a network: wireless GPRS / CDMA communications technology, no requirement for fiber-optic network, easy building base stations with concise accessory supporting
4. Fine compatibility: rover seamless access to local CORS system in good compatibility
5. Simple maintenance: applying conventional RTK GPS equipment, simple maintenance.
6. Additional base stations and rovers can be added arbitrarily.

● Applications



CORS Application



Surveying Control



Marine Surveying



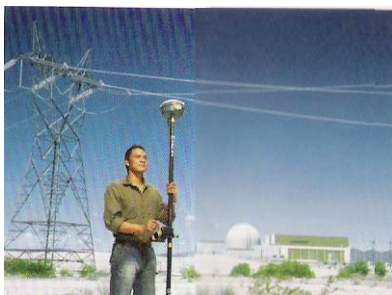
Laying Out



Data Collection



Construction Position (marine)



Transport of Electricity Power



Static HD8200G

Integrated Static Bluetooth GPS



HD8200G integrated Bluetooth static GPS is a new generation static GPS developed by Hi Target. In integrated design, all key parts are built-in. HD8200G is highly sealed, waterproof, dustproof and shockproof. Equipped with popular Bluetooth communication technology and controller terminal, HD8200G can be used to check satellite status and input key surveying items.

Application:

Control surveying, Diagram root surveying, Traverse survey, Distortion monitor, Project construction survey and Various GIS data collection.

Highlights:



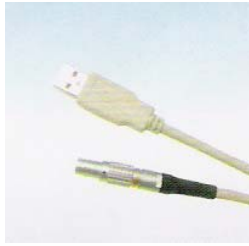
Intergrated Mainbody

- Highly integrated, built-in all key parts, PVC cover, natural fall-proof from 1 meter high
- Professional waterproof designing, 5degree inclination water drain, well designed heat dispersing (Battery built-in), military standard, floatable



Remote Controller Terminal

Bluetooth, full alphanumeric, figure key, convenient for view info, enter info &down loading data, especially suitable for post-difference working



USB Communcation Port

USB port, download ports optional(USB & Bluetooth), 64Mb high capacity memory, fast data processing function



Power System

- High capacity professional Lithium battery, long working time, short charging time, and uninterrupted batteries charging.
- Professional waterproof and open heat-dispersing design



GPS Post Processing Software

Professional post-processing software, convenient man-machine conversation function & detailed result output

Specifications and Parameters:

Static Surveying:	
Horizontal	± 5 mm+1 ppm
Vertical	± 10 mm+1 ppm
Working distance	≤ 50km
Electronics:	
Main board	parallel24 channels, L 1 carrier phase C/A code
Epoch Interval	1s-9999s adjustable
Satellite Mask Angle	0° - 60° adjustable
Main Loss	700mW
First Acquisition Time	≤ 60s
Physical:	
Mainboard	0.5g
Dimensions	Φ20cm, H: 10cm

Working Environment	-40°C + 70°C
Storage Environment	-50°C +80°C, water proof, dust proof
Communications:	
Bluetooth	USB RS-232
Data Storage:	
Memory	64MB
Memory Media	Flash EPROM
Feature	Save 10 years turning off
Power System:	
Battery	Double lithium
Voltage	7.2v
Working Time	40h
Charging Time	<4h
Wireless Controller:	
Module	Bluetooth
Working Distance	≤15m
Software	DHS2003 Data processing Software
Function	Base processing, network, adjustment, height fitting
Compatibility	Single/Dual-frequency combined solution, combined surveying and calculation with different brand instruments

Standard package:

HD8200G	1 unit
Charger	1 unit
HD8200G data processing software –	1 set
Communication cable	1 set
BL-2000 Lithium Battery	2 units



HD8600

High Accurate Beacon DGPS Receiver



Applications:

Marine Surveying, Marine Navigation, Dredging up, Beach and Island Surveying

Features:

- High Accuracy: positioning accuracy less than 0.5m
- Integration: Built-in beacon, GPS receiver and antennas, without antenna grounding
- Wide Voltage: by 8-36V wide DC power source, 12V Accumulator or 24V DC power source
- Photoelectricity Isolation Transmitting: employ photoelectricity isolation or RS-485 long distance transmitting

Specification

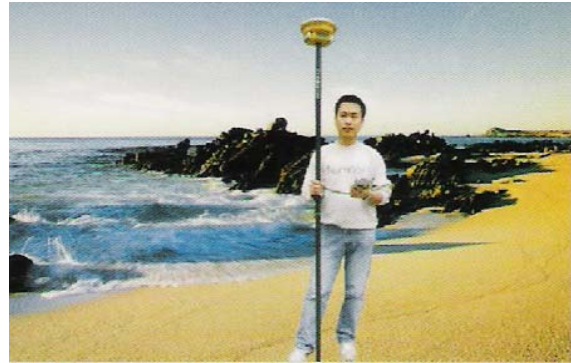
- 12 channels GPS receiver
- Dual channels auto searching beacon
- Beacon receiver frequency band: 283.5KHz-325KHz
- Beacon station operation distance: marine < 500Km, land 100-200Km
- Standard NMEA-0183 data output format
- Photoelectricity isolation RS-232/RS-485 port, baud rate 4800-57 600bps
- DC power supply: 8V-36V
- Power Loss: 2W
- Size: <P 20cm X 12cm
- Weight: 0.5Kg
- Work Temperature: -30 ~ 70
- IP64 grade, waterproof, dustproof and shock-resistant

The National Differential GPS(NDGPS)

Beacon technology is one of the differential GPS technologies, which takes advantage of the existing marine-used wireless radio beacon stations, and add an assisted carrier in the transmitting signal to offer positioning navigation service via transmitting the differential correction signal, At present, universal frequency has been established and unified in most countries and areas, which enormously reduces user's cost

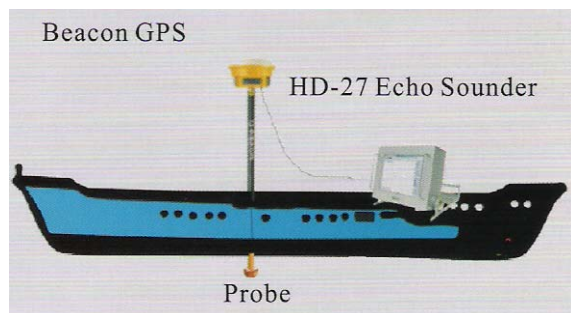
Terrestrial Survey

Mount the receiver on the top of the Carbon Fiber Pole when HD8600 Beacon GPS system is applied in a terrestrial mobile survey job, And select a lightweight & practical PDA controller, which will make the data collecting more convenient.



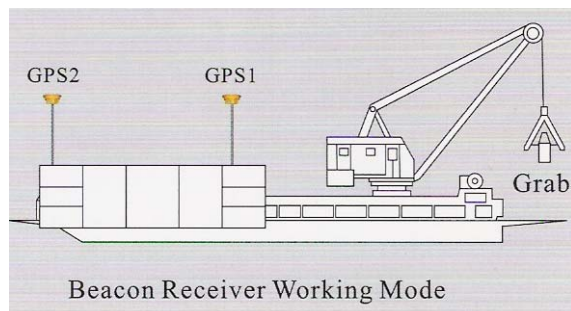
Hydrographic Survey

HD8600 makes good use of Beacon Differential Function for hydrographic survey application, Combined with the Hi-Target Survey Software and Digital Echo Sounder, you can perform a quick & effective hydrographic navigation job in the HDGPS covering area, HD8600 can be easily connected to a vessel power source or DC power source, Well compatible and stable.



Construction Application

HD8600 is applicable on dredging up and submarine cable laying, Duai GPS positioning offers real-time positioning and enhance the work efficiency and project quality.



Hi-Target Marine Surveying Software

HD 5.8 marine surveying software is the most wide used on hydrosurvey. Functions are in hydrosurvey, hydro constructing & positioning and marine project monitoring. System is stable, multi-functional and easy to operate.



Q Cool Handheld GIS Collector



Q Cool Highly integrated unit, with GPRS and bluetooth communications, WINCE operation system, operation in touch mode, high-capacity memory, applying ergonomics shape design with keyboard functionality, allowing you to process the field operation easily.

Features

- Built In GPRS communications module, compatible with CORS system
- High accuracy, real time difference positioning accuracy 0.5m, post processing accuracy 0.3m
- Apply to high accuracy controlling surveying (static surveying)
- WINCE 5.0 operation system, touched color screen

Specification

- CPU: ARM9 high-speed processor
- Operation System: WINCE 5.0
- Display: 3.5 inch TFT color touched screen
- Memory: 64M SDRAM+64M FLASH RAM, SD card slot, compatible with large-capacity SD card
- Port: External USB port, and RS-232 serial port
- Power: 1400mAh, 7.6V lithium battery, continuous power supply for 5 hours with single battery
- Dimension: 250mm x 88mm x 40mm
- Weight: 0.5KG
- Protection Grade: IP64

Position Accuracy

- 12 channels L1 +Carrier Code, cold boot 45 seconds, recapture less 1 second
- Real time difference: 0.5m (3 δ)
- Post processing difference: 0.3m(< 50KM)
- Static base line:± 5cm+ 1 ppm, (need external antenna)
- Single position accuracy: 2.5m (3 δ)

Applications

- Facilities verification on electricity, telecommunications and network
- Natural resource survey on land, forestry, agriculture and mining
- Application on traffic roads, environmental protection and water conservancy industry
- Application on Mapping and geography information industry

Package Software

- Static collection software (GIS software)
- Post processing static and kinematic processing software (PC software)
- Data communications software (map import and export) (PC software)
- GIS collection software (GIS software)

Functions

- Data Dictionary: Containing various symbols, real-time visual reality of various features on the map
- Layer Management: In accordance with the features layering and management, raster map, vector map and background map can be imported
- Calculating function: Efficient calculating function on length, distance and area
- Data formats: Support ArcGIS, MapInfo and AutoCAD data input and export
- Desktop software: The fine GPS post-processing software for processing static and post difference data, The powerful data interface software can have data conversion with mainstream of GIS platform
- Data collection:
 - GPS Collection and hand-painted acquisition ways
 - View GPS satellites condition
 - Support acquisition of point feature, line feature and block feature
 - Function in cross-collection, suspended collection and offset collection
 - Function in surveying repair to have easy maintenance on existing GIS collected data

