

## HD-370 & HD-380 Digital Hydrographic Echo Sounders

- With advanced frequency conversion technology, HD-370 & HD-380 reduce noise caused by transducer and enhanced echo intensity. In addition, both the HD-370 and the HD-380 support different frequency transducers to meet the demands of different hydrographic projects.
- The optimal TVG curve of HD-370 & HD-380 is designed according to the transmission properties of sonar in water which can greatly optimize sounding performance and solve the issue of shoal water sounding.
- Portable design, high-definition LCD screens and mass storage make field operations much more convenient.
- Preinstalled Hi-Sounder software reduces your software cost.
- With the low frequency sounding function, HD-380 can easily get mud thickness data.

Digital Echo sounder	HD370 Single Frequency	HD380 Dual Frequency
Frequency	200 KHZ	High: 100-750KHZ (Adjustable) Low: 10-50KHZ (Adjustable)
Transmission Power	500W (200KHZ transducer)	500W (200KHZ High frequency band ) 1000W (20KHZ Low frequency band)
Bathymetric Range	0.3m-600m	0.3m-600m (High frequency); 0.3m-2000m (Low frequency)
Depth Resolution	0.1ft/0.01m	
Accuracy	±0.01m+0.1% of h( depth value)	
Ping rate	1Up to 30Hz	
Draft Range	0.0m~15m	
CPU	1.6GHZ	
Memory & Storage	1G DDR2 & 4G storage	
LCD Display	12 inches, 1024X768 resolution , 1000cd/ m²	
I/O interface	2×RS-232 ports, 3×USB ports, 1×DC power port, 2×TX ports (for transducer)	
Power Supply	DC 9~36V / AC 220V	
Operation Temperature	-30°C~60°C, non-condensing	
Dimension	44mmL X 341mmW X 164mmH	
Weight	9 kg	

Descriptions and specifications are subject to change without notice

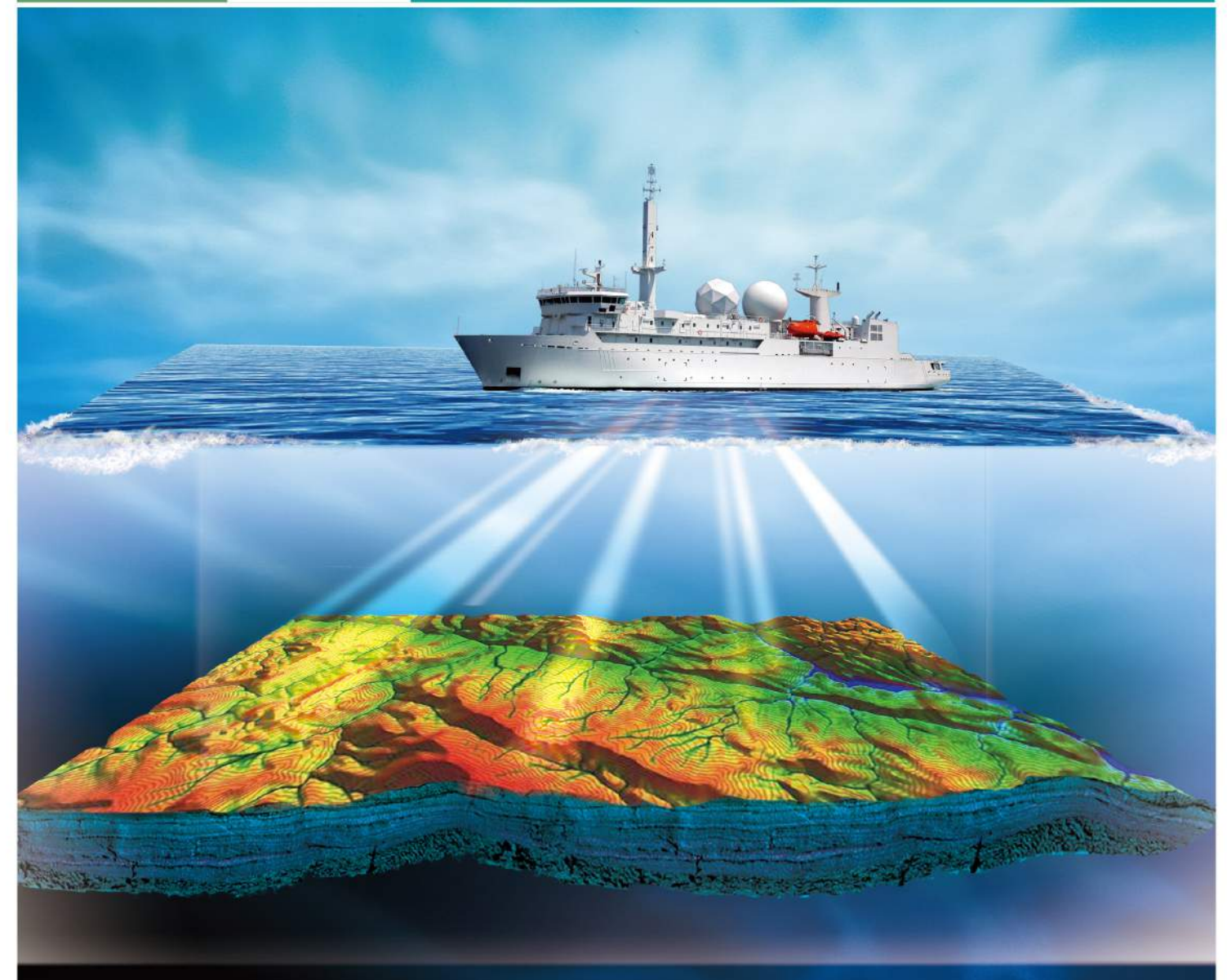
## HI-TARGET

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# Marine Surveying Solution





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With more than 15 years of marine research and development, Hi-Target delivers state-of-the-art marine solution. The K series split-type receivers offer a modern design with a solid metal body to quickly deliver accurate location even orientation data which makes it an invaluable device for marine engineering projects. The HD-370 and HD-380 echo sounders offer stable performance coupled with powerful yet easy-to-use Hi-Target depth sounding and marine positioning software. Both devices promise to be your best partner in any marine survey project.

## K3 Split Design Beacon Receiver

- Positioning precision up to 0.5m
- 8~36V wide range power supply to adapt to unstable voltage on board
- Supports PPS signal output to meet the time synchronization demands of multi-beam echo sounder

## K5 Heading and Positioning Beacon Receiver

- Positioning precision up to 0.5m
- 8~36V wide range power supply to adapt to unstable voltage on board
- Built-in Electronic gyro to ensure navigation data output when GPS is unlocked
- PPS support



### Technology Parameters

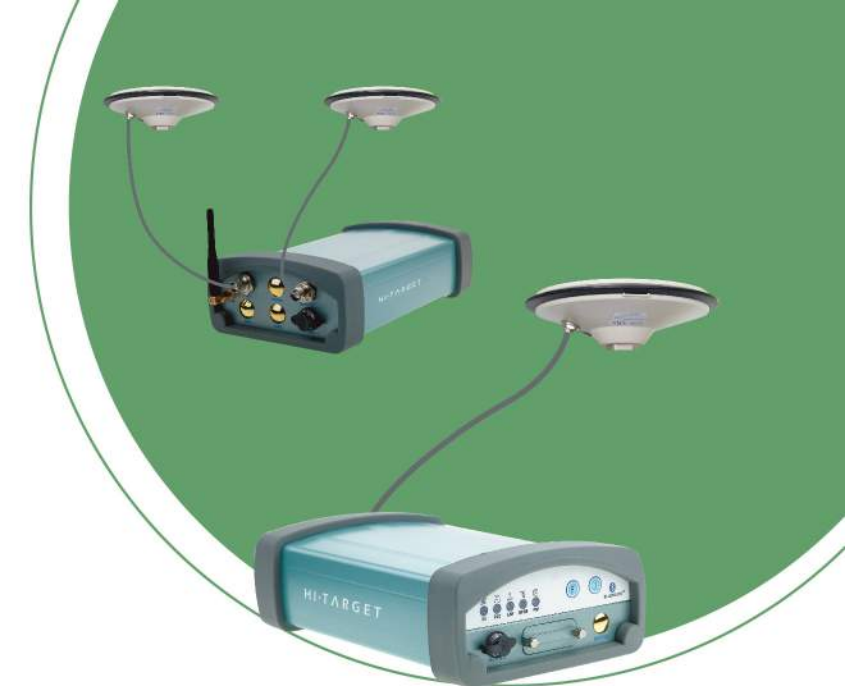
	K3	K5
GPS/beacon signal	14 channels GPS+SBAS	540 channels GPS, GLONASS, SBAS
Frequency range	Dual-channel searching signal automatically	
Operational distance(based on beacon signal)	283.5KHz~325KHz	
Positioning accuracy	Marine 500km, land 200km	
Heading accuracy	0.5m (1σ)	< 1°(1σ), up to 0.02°when base line is 1m.
Pitch angle accuracy	—	< 1°
Data transmission	Standard NMEA-0183 output format, 1PPS pulse output	
Interface	RS232	
Power supply voltage	DC 8V~36V	
Power consumption	2W	
Volume	255mm×138mm×70mm	
Weight	0.9kg	1.0kg
Working temperature	-30 C to 70 C	
Storage temperature	-40 C to 80 C	
durability	IP65 waterproof and dustproof	

## K9 RTK Heading and Positioning Receiver

- Supports GPS, GLONASS, BDS
- Supports GPRS and UHF
- 10m base line: orientation precision up to 0.05°; 2m base line: orientation precision up to 0.09°
- USB raw data storage, enables full-day data collection
- PPS support

## K10 Split RTK Receiver

- Supports GPS, GLONASS, BDS
- Supports GPRS and UHF
- USB raw data storage, enables full-day data collection
- PPS support



### Technology Parameters

	K9	K10
GNSS signal	220 channels GPS L1 C/A, L2E, L2C, L5 GLONASS L1 C/A, L1P, L2C/A and L2P BDS B1 B2 SBAS WAAS MSAS EGNOS GALILEO Reserved	
Positioning accuracy	Static Horizontal±2.5mm+1ppm Vertical±5mm+1ppm RTK Horizontal±8mm+1ppm Vertical±15mm+1ppm	
Heading accuracy	10m base line: orientation precision up to 0.05°; 2m base line: orientation precision up to 0.09°.	—
Output frequency	1Hz, 2Hz, 5Hz, 10Hz, 20Hz, 50Hz	
Initialization time	<30s	<10s
Initialization reliability	> 99.9%	
Differential data formats	CMR, RTCM2.1, 2.3, 3.0, 3.1,3.2, sCMRx	
Data transmission	NMEA0183, Trimble GSOE, 1PPS	
Power supply voltage	DC 7V~36V	
Power consumption	2W	
Volume	255mm×138mm×70mm	
Weight	1.0kg	
Working temperature	-30 C to 60 C	
Storage temperature	-30 C to 65 C	
durability	IP65 waterproof and dustproof	

## Applications

Hi-Target K series split type receiver can provide compass signal, location, orientation and time information for multi-beam echo sounder, side scan sonar, sub-bottom profile, dredging, marine construction, ADCP, piling, marine laying and mechanical control systems.