

# SPECIFICATIONS

## Measurements

**Frequency**  
200 kHz

**Beam Angle**  
7

**Depth Resolution**  
0.1ft/0.01m

**Accuracy**  
±1cm±0.1 D (0.1% of depth value)

**Ping Rate**  
14Hz, Maximum 30Hz

**Sound Velocity**  
1300-1700m/s, resolution is 1m/s

**Depth Range**  
0.3-300m/900ft

**Draft**  
0-9.9m

**Gain Control**  
AGC and TVG, depth and gain, a double door tracking

**Output data format**  
SOUTH, SDH-13D, DES025, INN455, ODOM etc

## Physical

**Environmental**  
-30 ~+60 non-condensing

**Output Power**  
Up to 300 watts

**Power Supply**  
9-15V DC, less than 25w,  
110~265V AC (optional),

**Dimension**  
35cm 29cm 14cm

**Weight**  
7.5kg

## Hardware part

**Embedded system index**  
CPU frequency 1.6GHz  
Internal memory 2G  
Memory capacity 8G high-speed CF card  
(supports extended storage)

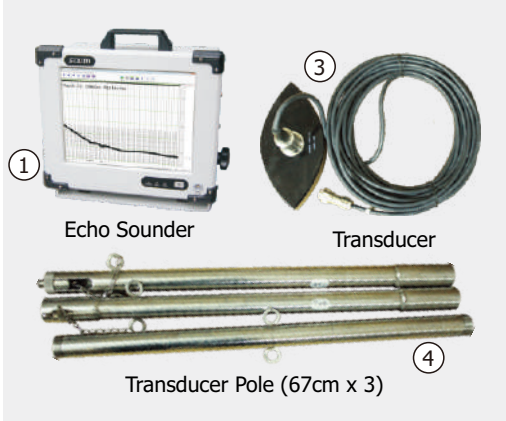
## I/O interface

2 USB  
2 RS232  
1 VGA interface

**Display Panel Layout**  
12.1-inch color LCD  
Touch screen  
Embedded windows XP OS  
Power ON/OFF  
Interface protection  
Separate Panel Overlay for  
Keyboard  
Mouse

## Remarks

Measurement accuracy and operation range might vary due to atmospheric conditions, signal multipath, obstructions, observation time, temperature, signal geometry and number of tracked satellites. Specifications subject to change without prior notice.



## STANDARD CONFIGURATION

1. Echo Sounder SDE-28S+	1pc
2. Carrying Case (for echo sounder)	1pc
3. 200KHz Transducer	1pc
4. Transducer Pole	1pc
5. Carrying Case for Transducer	1pc
6. Double RS-232 Communication Cable	1pc
7. 220V External Power Supply Cable	1pc
8. 220V External Power Supply Cable Adapter	1pc
9. 12V External Power Supply Transfer Cable	1pc
10. Keyboard (USB)	1pc
11. Mouse (USB)	1pc
12. Adapter Cable for Mouse & Keyboard	1pc
13. Pen Drive	1pc
14. SDE-28S+ Software	on board
15. PowerNav Software (with dongle key)	on board

Dealer info

**SOUTH**  
Target your success



# SDE-28S+

Single Frequency Digital Echo Sounder



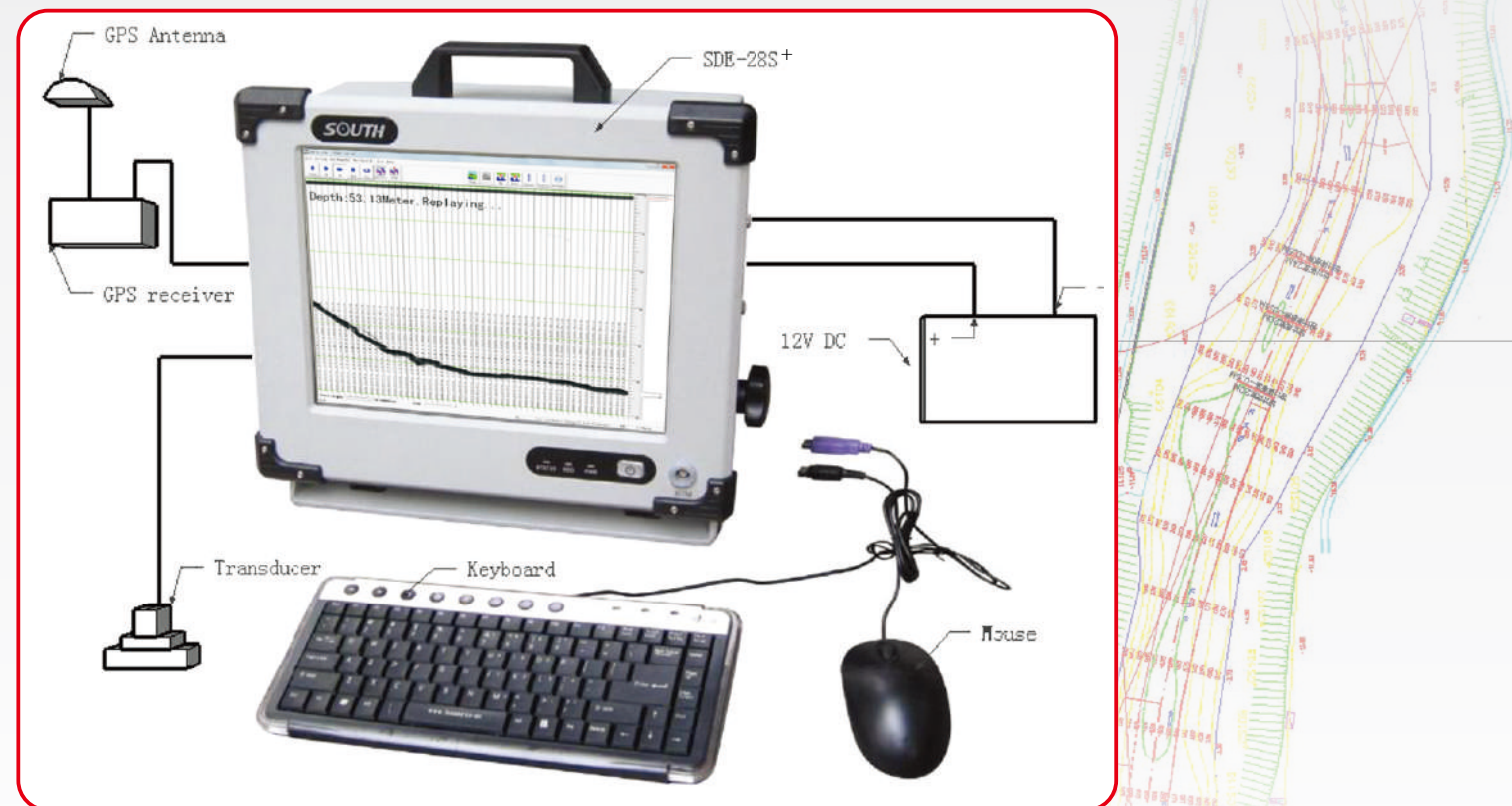
**SOUTH**  
Target your success

## SOUTH SURVEYING & MAPPING INSTRUMENT CO.,LTD.

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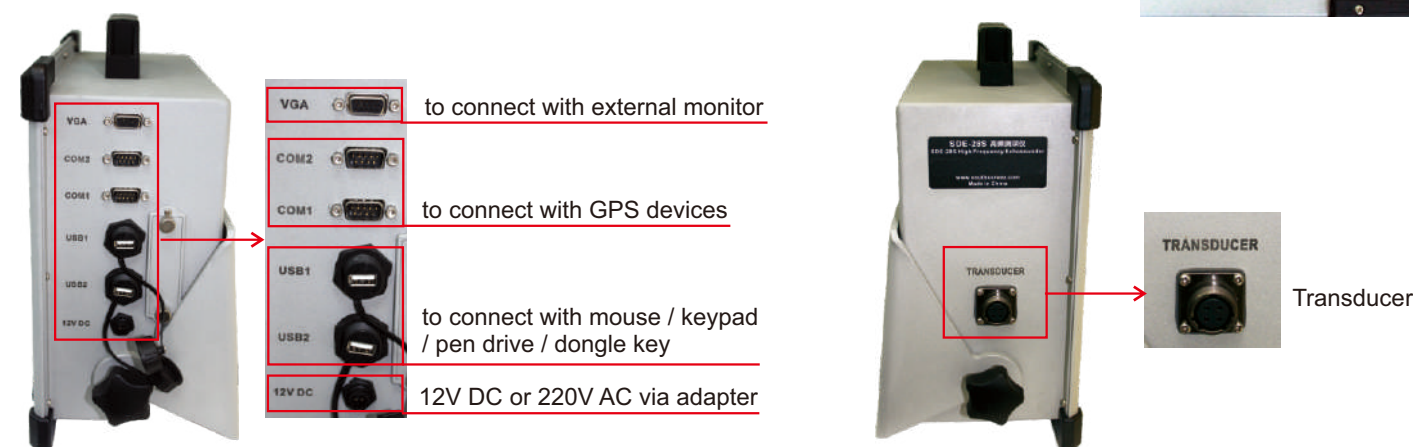




## KEY FEATURES

- Embedded WindowsXP operating system, user-friendly interface
- Integrated with both computer and echo sounder at industrial level, yet low power consumption
- Full aluminum housing, compact and handy, particularly designed for less-than-ideal circumstances
- High-speed DSP chip processing technology to ensure reliable waveforms and depth values
- Supports NMEA-0183 communication to gain orientation information
- High compatibility, flexible to connect different GPS devices
- Built-in flash memory upgradeable to larger capacity for diverse demands
- 12.1-inch color LCD featuring a wide viewing angle and adjustable brightness
- Automatic storage of depth data up to 24 hours, supports replay

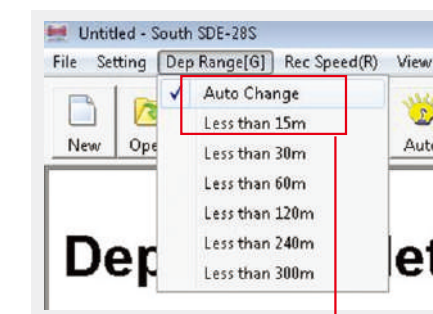
## USER INTERFACES



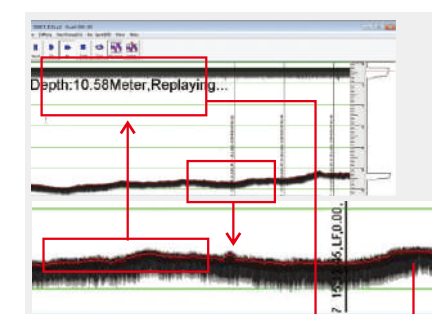
## ONBOARD SOFTWARE

### SDE-28S+ (for depth measurements)

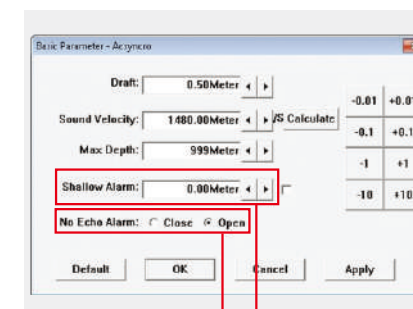
Real-time vivid display of graphic and data,  
easy approach to underwater waves  
Integrated sound velocity calculation for  
more accurate results  
Smart alarm for shallow water and “No  
echo”  
tracking to secure hydrographic operations  
Real-time display of the water depth value  
tracking lines, easy to be compared with  
underwater waves  
Automatic measurements and switch,  
Intelligent operation, easy to use  
Optional output formats and convenient



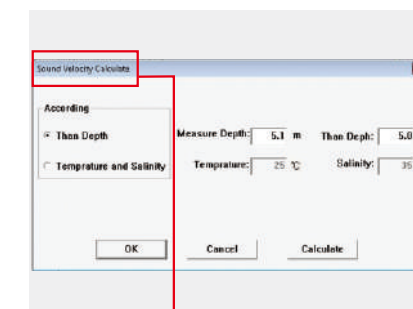
Auto Change  
Of Depth Range



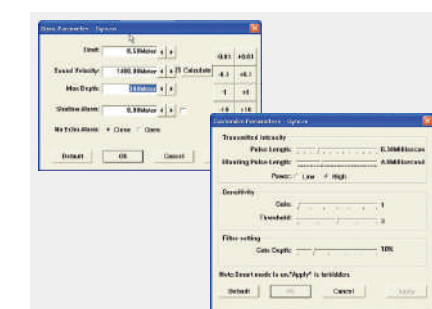
Real-time display of  
water depth data



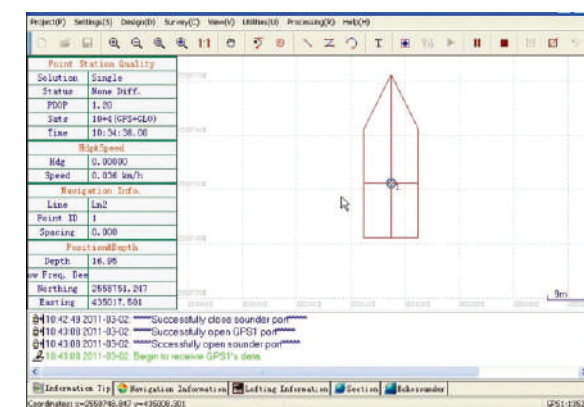
“No Echo” Alarm Shallow-water Alarm



Sound Velocity Calculation



Basic and Customized Parameter Settings



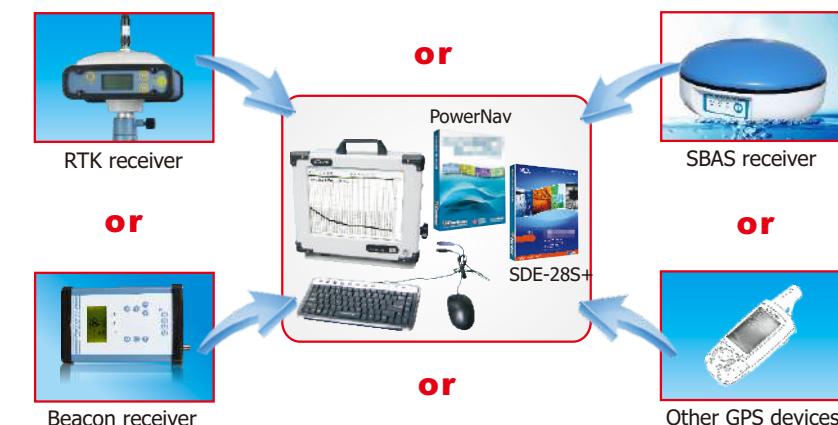
PowerNav

### PowerNav (for navigation purpose)

New software kernel, faster processing and more stable  
Professional Engineering map sheet and data management, wizard-  
style parameter setting  
High compatibility, flexible to import graphs and data, connectible to  
all GPS devices and echo sounders  
Modular designed, meets diverse needs of hydrographic engineering  
projects  
Direct graphical navigation window box, auto voice prompt for yaw  
Intelligent scheme line model, available for fast drawing of waterway,  
Area, arc, etc.  
Customized formats for data export edit, easy to export To all  
Mapping software

## APPLICATIONS

Coastland, fairway depth measurements  
Freshwater, lake, reservoir depth measurements  
Dredging engineering measurements  
Integrated automated depth measurement  
(navigation measurement software required)  
Positioning navigation terminal (compatible to all  
GPS models with NMEA-0183 data exported) for  
dredging engineering projects



A Variety of Solutions for Different Hydrographic Projects  
(Note: different accuracy levels result from working with different GPS receivers.)