### **SPECIFICATIONS**

Measurements

Frequency

200 kHz

**Beam Angle** 

**Depth Resolution** 

0.1ft/0.01m

Accuracy

 $\pm 1$ cm $\pm 0.1$  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.





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 $\textcircled{1}$ )	on board





### STANDARD CONFIGURATION





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

Add: 2/F, Surveying Building (He Tian Building), NO.26, Ke Yun Road, Guangzhou 510665, China Tel: +86-20-23380891/85524990/23380888 Fax: +86-20-85524889/85529089/23380800 E-mail: mail@southsurvey.com export@southsurvey.com

http://www.southinstrument.com http://www.southsurvey.com

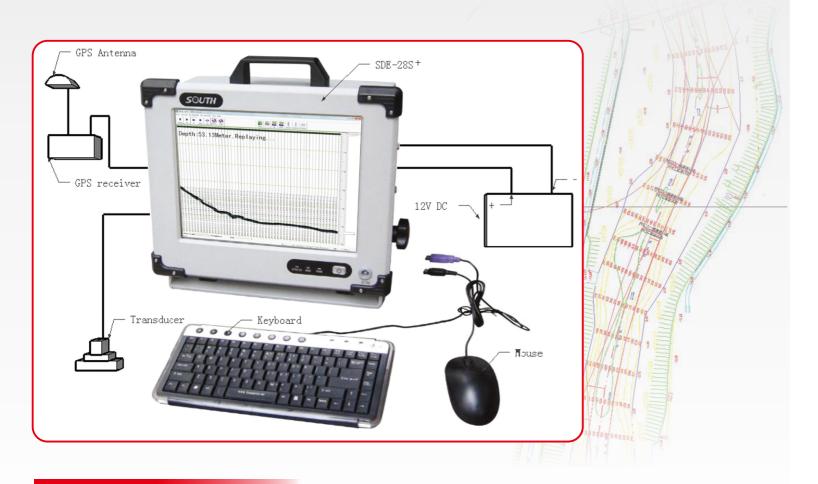




# SDE-28S+

Single Frequency Digital Echo Sounder



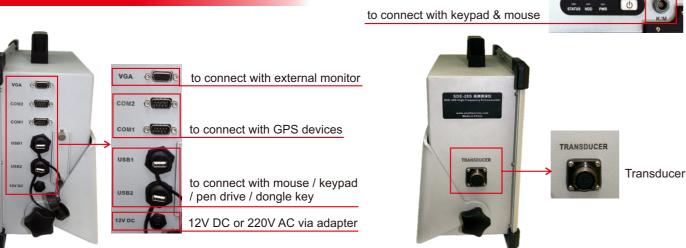


## **KEY FEATURES**

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

# **USER INTERFACES**

Automatic storage of depth data up to 24 hours, supports replay



## **ONBOARD SOFTWARE**

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

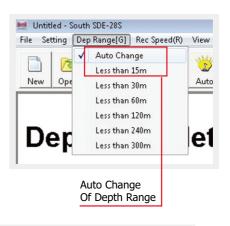
Real-time vivid display of graphic and data,

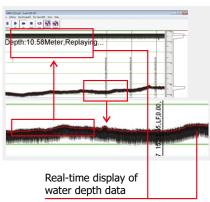
easy approach to underwater waves Integrated sound velocity calculation for more accurate results

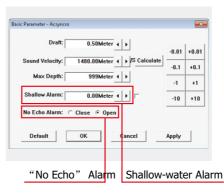
Smart alarm for shallow water and "No echo"

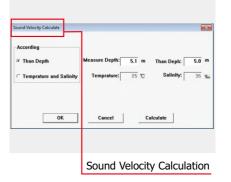
tracking to secure hydrographic operations Real-time display of the water depth value tracking lines, easy to be compared with underwater waves

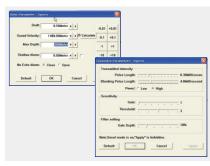
Automatic measurements and switch, Intelligent operation, easy to use Optional output formats and convenient



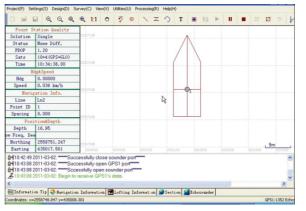








Basic and Customized Parameter Settings



PowerNav

#### PowerNav (for navigation purpose)

New software kernel, faster processing and more stable Professional Engineering map sheet and data management, wizardstyle 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

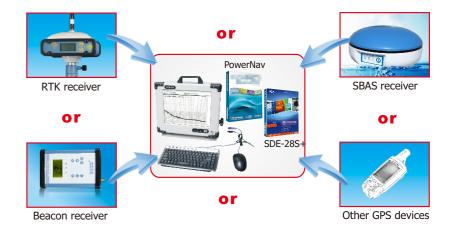
Direct graphical navigation window box, auto voice prompt for yaw Intelligent scheme line model, available for fast drawing of waterway,

Area are 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.)