

# Active DST module DST-1

## Breathe new smart digital life into your old or new transducers,

with this NMEA depth, speed & temperature digital signal processor ...

The Actisense™ Active Depth/Speed/Temperature module is the best solution for interfacing standard analogue transducers and NMEA 0183 compatible chart plotter's, radar's, and on-board laptop PC's.

Designed for use with most existing analogue transducers already fitted to a vessel, or new analogue transducers. Our industry proven depth sounder algorithm has the best-in-class seabed tracking, and when in conjunction with a good quality depth transducer, can track the seabed down to 0.3m or 1 foot (proven with Airmar transducers) .

100W peak depth power enables a maximum depth range of 200m or 660 feet under optimum conditions (proven with Airmar transducers).

150 KHz & 200 KHz depth transducer frequencies are available to match most existing transducers. For enhanced interference rejection, a 235 KHz capable module is also available.

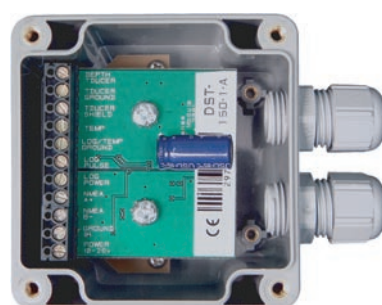
Log transducer and temperature thermistor interfaces allow additional data to be provided over the NMEA data stream, giving a cable saving when those extra measurements are required.

Easy reprogramming of the DST module is possible using free software available on the Actisense™ website. The DST module's software can be updated with the very latest software enhancements, or special purpose software such as a fish-finder/hydrograph software upgrade.



The DST module's data interface is configured for NMEA 0183, but can operate as a fully bidirectional RS485 interface for customised applications, such as an on-board multiple depth sounder network.

The DST module can be further enhanced with the Actisense™ NMEA display software for Windows™. This software displays the depth, speed, trip distance and temperature values, and plots a historical graph for each value. Available from the Actisense™ website.



## NMEA / RS485 Output system

- Exceeds all NMEA 0183 output voltage specifications
- Capable of driving up to 8 NMEA 0183 compliant devices
- Short circuit protected
- Static discharge protected
- Standard 4800 NMEA Baud rate. Other Baud rates up to 38400 are possible for customised software designs

## RS485 Input System

- Exceeds all NMEA 0183 input voltage specifications
- Standard RS485 input voltage specifications

## Data Output rate

- Depth, Speed, Trip and Temperature data output once per second if the respective transducer has been detected
- Customised output rates are available

## Processing specifications

- Depth: Minimum and maximum dependent on transducer.  
Narrow beam transducers, like the Airmar P66 transom-mount:  
0-10 knots: Minimum 0.3m, Maximum 200m  
10-40 knots: Minimum 0.3m, Maximum 100m  
Wide beam transducers, like the Airmar DT800 through-hull:  
0-10 knots: Minimum 0.3m, Maximum 150m  
10-40 knots: Minimum 0.3m, Maximum 100m
- Speed: Minimum and maximum dependent on transducer.  
Airmar standard paddle-wheel log transducer allows 0.5 - 50 knots
- Temperature: Minimum and maximum dependent on transducer.  
Uses an industry standard thermistor (10 K $\Omega$  at 25°C).

## Depth frequencies

- Transducer drive frequency of 150 KHz, 200 KHz, or 235 KHz

## Power supply

- Supply Voltage range: 10 to 28 volts DC
- Power Consumption: 40 mA @ 12v DC / 480 mW

## Environmental

- Recommended operating temperature: -20°C to +70°C
- Casing provided with sealing grommets to IP66

## General

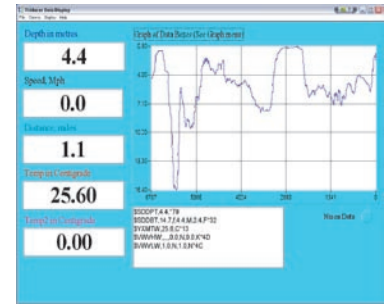
- Weight: 200 grams
- Dimensions: see diagram
- Guarantee: 2 years

## Built-in Firmware / Software

- Free software updates available on Actisense™ website
- Simple one button reprogramming utility
- Future-proof design
- Custom programming service is available

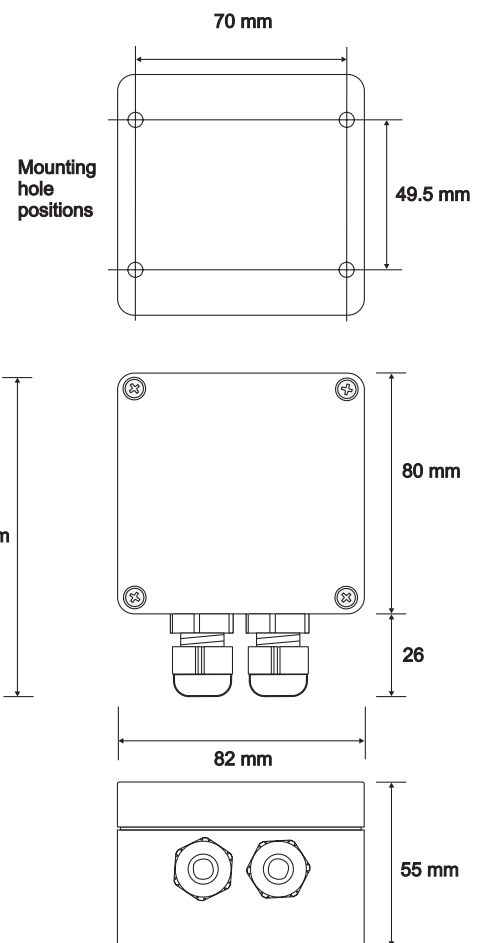
## Triducer Display Software

- Freely available on Actisense™ website
- Windows™ PC software (98/ME and NT/2000/XP)
- Displays the depth, speed, trip and temperature data received from the DST module in both digital and historical graph form



## Part numbers

- 150 KHz module: DST-1-B-150
- 200 KHz module: DST-1-B-200
- 235 KHz module: DST-1-B-235



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Active Research Limited • Unit 5 • Wessex Trade Centre • Ringwood Road • Poole • Dorset • UK • BH12 3PF  
t: +44 (0)1202 746682 • f: +44 (0)1202 746683

Email: [sales@actisense.com](mailto:sales@actisense.com) [www.actisense.com](http://www.actisense.com)