Actisense®
Award Winning NMEA Specialists

DST-2 DEPTH, SPEED & TEMPERATURE MODULE

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 plotters, radars, and on board laptop PCs.
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 100m or 330 feet under optimum conditions (proven with Airmar transducers).
The DST module's data interface is configured for NMEA 0183 and RS232, but can operate as a fully bidirectional RS485 interface for customised applications, such as a multiple depth sounder network.
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 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.

Analogue to NMEA 0183   Listeners

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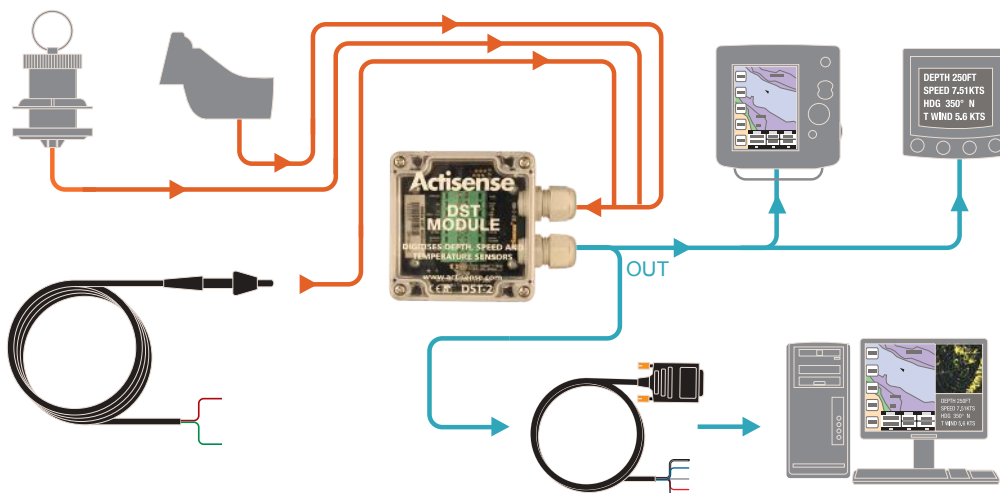
NMEA / RS485 Output system

• 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 once 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 0.5m, Maximum 100m

  Wide beam transducers, like the Airmar DT800 through-hull:

    0 – 10 knots: Minimum 0.5m, Maximum 150m

    10 – 40 knots: Minimum 0.5m, 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 KΩ at 25°C).

Depth frequencies

• Transducer drive frequency of 150 KHz, 170 KHz or 200 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

• Free firmware updates available on Actisense™ website

• Simple one button reprogramming utility

• Future-proof design

• Custom programming service is available to volume OEM customers

Software

• DST-2 Calibration software freely available on Actisense™ website. Allows setting of a Depth Offset, Speed calibration curve and Temperature offset

• NMEA Reader software freely available on Actisense™ website. Displays and logs NMEA 0183 data

• Simple 'Triducer Display' software freely available on Actisense™ website. Displays the DST-2's depth, speed, trip and temperature data in both digital and historical graph form

• Compatible with Windows™ 98/ME, NT/2000/XP and 7

Part numbers

• 150 KHz module: DST-2-150

• 170 KHz module: DST-2-170

• 200 KHz module: DST-2-200

Product Dimensions

70mm

Mounting hole positions

49.5mm

106mm

80mm

26mm

82mm

55mm
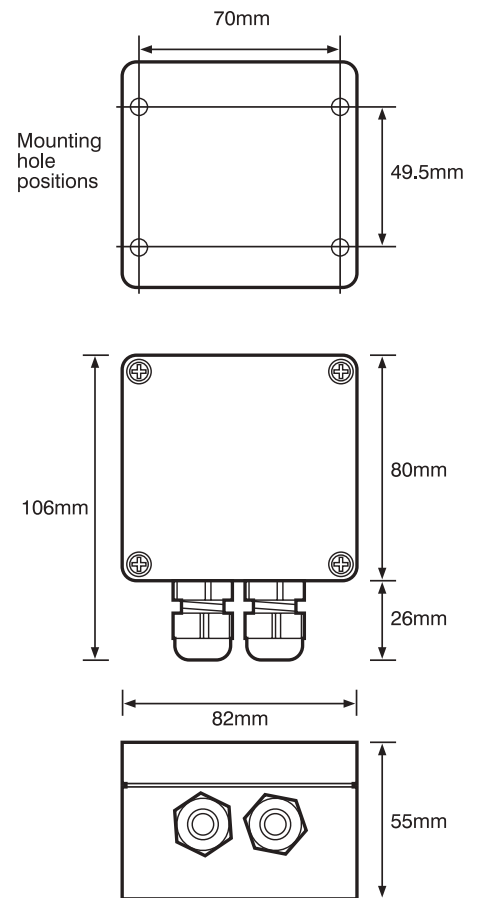
Benefits:

Digitises analogue signals into NMEA data

Use with any NMEA 0183 compatible device

Range of frequencies available

Flash upgradeable 'future-proof' design

Can be calibrated

Trip data available with speed transducers

All specifications are taken with reference to an ambient temperature of 25°C unless otherwise specified.

All specifications correct at time of print.