

# DATUM



DATUM is an acronym for Digital Acoustic Transponder & Underwater Modem. The CDL DATUM system uses state of the art spread spectrum and digital signal processing technology to offer a long range high speed device for use in ranging and data applications in deep water.

Purpose designed algorithms provide high reliability data communications with a bit error rate of  $10 \times 10^{-6}$  or better with very high immunity to noise, Doppler fading and multi-path effects.

Each unit is uniquely addressable and the system is networkable. Data can be sent or received from any DATUM in the network.

By using direct sequence spread spectrum/OFDM the power requirements for the system are kept far higher than most competitive systems and the DATUM provides class leading battery life.

The DATUM is available in ship/ROV mount version or with integrated battery pack. The DATUM+ provides internal CDL instrumentation for pitch, roll, temperature, depth and direct reading sound velocity.



## Features:

- High accuracy ranging
- High speed modem
- High reliability
- Vessel/ROV/Seabed mount
- Networkable
- Spread spectrum technology
- Low power
- Small size

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## Product Specification:

### Physical Sizes

Housing Diameter 140mm  
Transducer Head Diameter 80mm  
Total Height 140mm

Depth Rating 3,000m

Range 10km approx (Line of Sight)  
Digital Interface RS232  
Output Rate 480 bps  
Electrical Connection Burton 8 pin Connector

Operating Voltage 12-30VDC

Power Rating: Listen Mode: 1 watts approx @12VDC  
Transmit Mode: 3.5 watts approx @12VDC