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# Datasheet

## Deep Marker Transponder

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### Description

Part of Sonardyne's Coastal Acoustic product range, the Type 7835 transponder have been designed for low cost applications where a compact design is an important operational factor but where deep water operation is required.

The transponders enable critical targets such as underwater structures, diving bells and instrumentation packages to be marked unambiguously and later relocated using Sonardyne's Homer-Pro and ROV-Homer range and direction systems.

The unit operates in the HF frequency band from 35-55kHz. External programming of interrogation address and reply frequencies are incorporated.

The transponders operate with Sonardyne's diver hand-held range and direction device Homer-Pro (Type 7797) and ROV-Homer (Type 7832) for use on Remotely Operated Vehicles (ROVs). The diver's/ROV's unit interrogates the transponder to be relocated (specified by the diver or ROV pilot) and from the reply, determines both the range and direction of the transponder.

The compact design of the transponders enable normal or emergency relocation of points of interest, underwater distance measurement and small target and diver tracking.

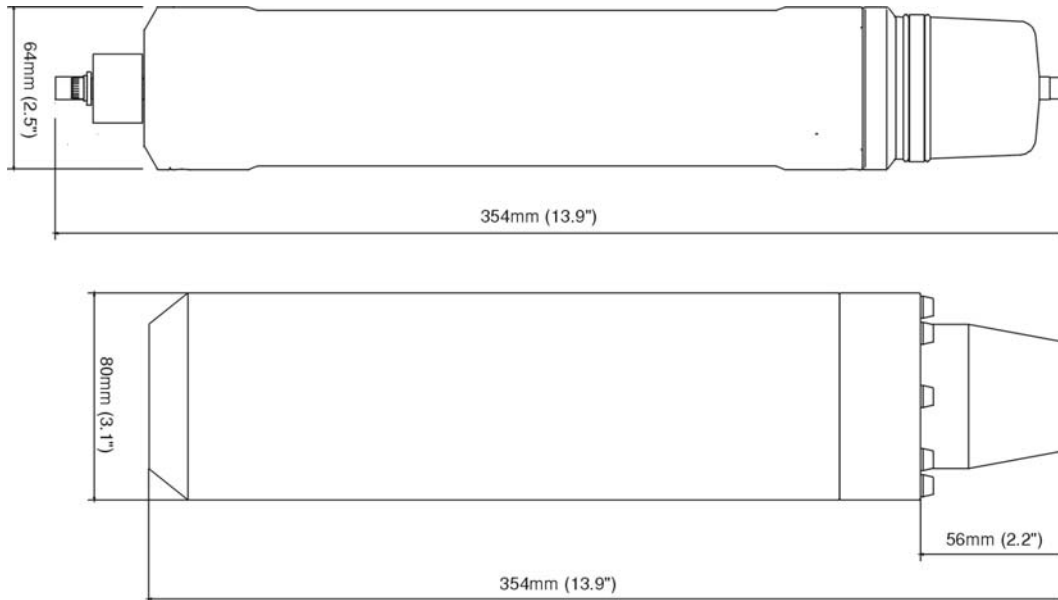
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### Key Features

- Use for relocating targets of special interest e.g. tools, diving bells, seabed instrument packages...
  - Choice of depth rating; 4,000 Metre or 12,000 Metre
  - Compact and rugged design
  - Up to 3,600 unique addresses
  - Compatible with Scout USBL, Prospector, ROV-Homer and Homer Pro relocation systems
  - HF frequency band from 35-55kHz
  - Long life battery packs give up to 4.5 years listening life
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# Specifications

## Deep Marker Transponder



Feature	Type 7835	Type 7835
Depth Rating	4,000 Metres	12,000 Metres
Transmit Source Level	>183dB re 1µPa @1m >183dB re 1µPa @1m	>183dB re 1µPa @1m >183dB re 1µPa @1m
Reply Frequency	Programmable 1-9	Programmable 1-9
Operating Frequency Range	HF (35-55kHz)	HF (35-55kHz)
Receive Sensitivity	<100dB re 1µPa	<100dB re 1µPa
Switch On	Continuously Operating	Continuously Operating
Quiescent Life	2 years Alkaline 3 years Standard Lithium 4.5 years Long-Life Lithium	2 years Alkaline 3 years Standard Lithium 4.5 years Long-Life Lithium
Interrogation Mode	Sequential	Sequential
Interrogation Address	Programmable 0-9 (1-401 Optional)	Programmable 0-9 (1-401 Optional)
Mechanical Construction	Anodised Aluminium Alloyed and Stainless Steel	Titanium Grade 5
Dimensions (LxDia)	353mm (13.9") x 64mm (2.5")	376mm (14.45") x 80mm (3.15")
Weight in Air	1.9kg	5.5kg
Weight in Water	1.2kg	3.8kg