
Datasheet

Deep Marker Transponder



Description

The Type 7835 Deep Marker Transponder has 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 35–55 kHz. 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.

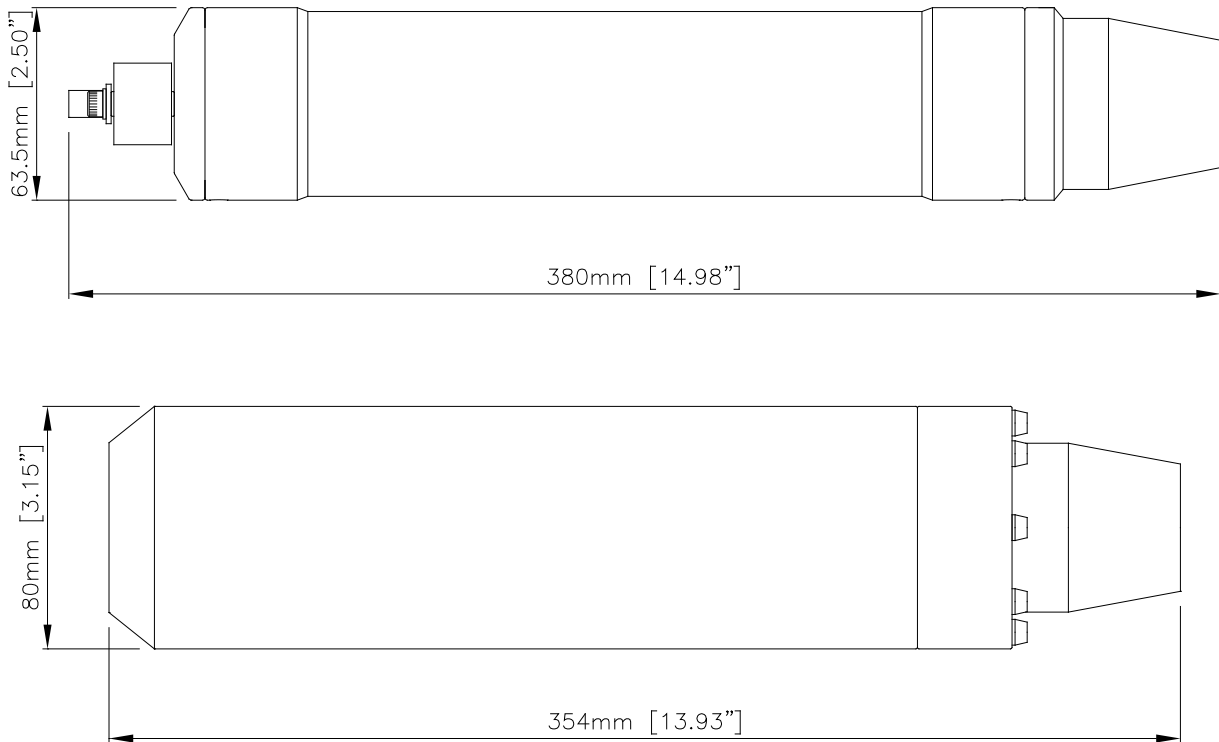
The compact design of the transponders enable normal or emergency relocation of points of interest, underwater distance measurement and small target and diver tracking.

Key Features

- Use for relocating targets of special interest e.g. tools, diving bells, seabed instrument packages...
 - Choice of depth rating; 4,000 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 35–55 kHz
 - Long life battery packs give up to 4.5 years listening life
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Specifications

Deep Marker Transponder



| Feature | Type 7835-000-02 | Type 7835-000-05 |
|--------------------------------|---|---|
| Depth Rating | 4,000 metres | 12,000 metres |
| Transmit Source Level | >183 dB re 1µPa @1 m | >183 dB re 1µPa @1m |
| Reply Frequency | Programmable 1-9 | Programmable 1-9 |
| Operating Frequency Range | HF (35-55 kHz) | HF (35-55 kHz) |
| Receive Sensitivity | <100 dB re 1 µPa | <100 dB re 1 µPa |
| 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 and stainless steel | Titanium grade 5 |
| Dimensions (Length x Diameter) | 380 x 63.5 mm (15.0 x 2.5") | 354 x 80 mm (13.9 x 3.2") |
| Weight in Air/Water | 1.9/1.2 kg | 5.5/3.8 kg |