

Datasheet

Deep Marker Transponder



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.

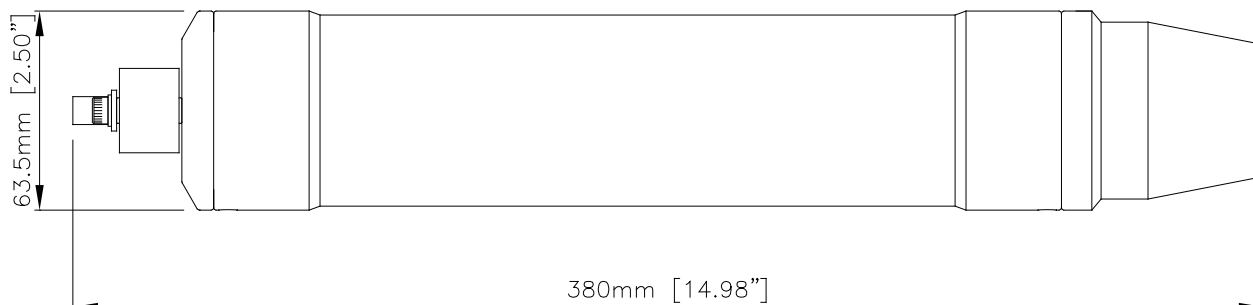
The compact design of the transponders enable normal or emergency relocation of points of interest, underwater distance measurement and small target and diver tracking.

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 m
- 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

Specifications

Deep Marker Transponder



Feature		Type 7835-000-02	Type 7835-000-05
Depth Rating		4,000 m	12,000 m
Transmit Source Level (dB re 1 μ Pa @ 1 m)		>183 dB	>183 dB
Reply Frequency		Programmable 1-9	Programmable 1-9
Operating Frequency		HF (35-55 kHz)	HF (35-55 kHz)
Receive Sensitivity (dB re 1 μ Pa)		<100 dB	<100 dB
Switch On		Continuously operating	Continuously operating
Quiescent Life	Alkaline	2 years	n/a
	Lithium	n/a	3 years
	Long-Life Lithium	4.5 years	n/a
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