
Datasheet

Compatt Mk4 MF Directional (Discontinued)

Description

The Computing and Telemeter Transponder (Compatt) is a microcomputer controlled subsea transponder used for acoustic navigation and positioning. The Medium Frequency (MF, 18-36 kHz) system is suited to a wide range of tasks such as underwater measurement, remote control and monitoring.

The Type 7806 Mk4 Compatt is one of the Medium Frequency versions of Sonardyne's fourth generation family of transponders built to complement the existing range of Long Baseline products.

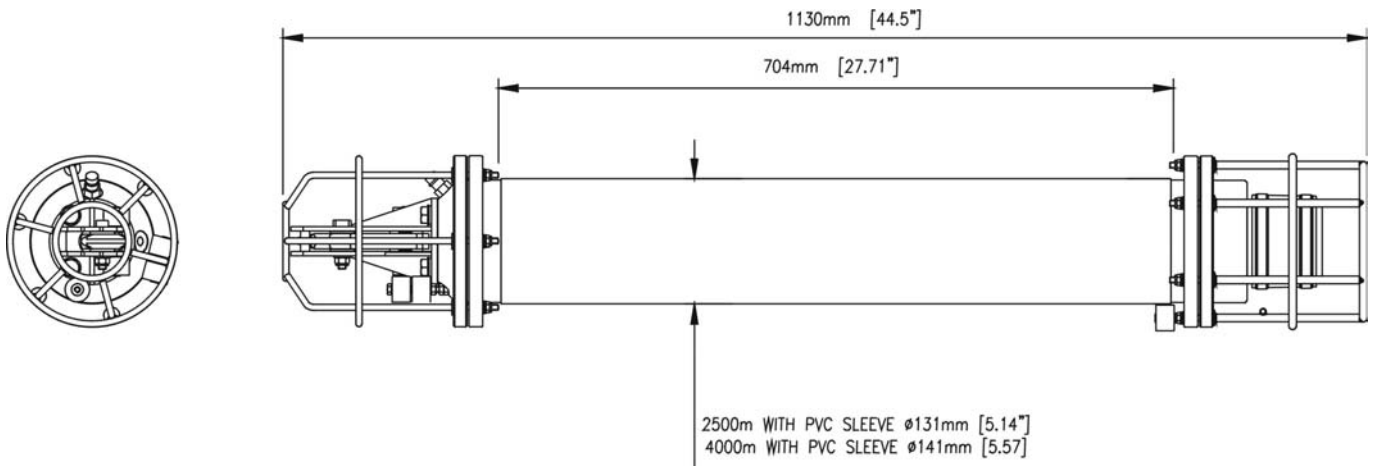
The Type 7806 has a Semi-Directional transducer directing a high source level upwards to overcome high noise levels on surface vessels, especially vessels using thrusters for Dynamic Positioning. The transducer maintains a good source level and sensitivity in the horizontal direction to ensure reliable inter-Compatt ranging for array calibration. The Type 7806 is a direct replacement for the earlier Type 7805 Compatt, but has improved acoustic performance across the whole MF frequency band.

Key Features

- Sequential mode operation with 15 individual channel frequencies
 - 12 channel receiver for high speed positional updates
 - Allows up to 945 individually addressable Compatt to be used in close proximity
 - HPR option allows Compatt to be used with Simrad HPR systems
 - Programmable address code
 - Conventional Enable and Disable commands for normal transponder operation
 - Advanced telemetry facility replies to all commands with Compatt address, command executed and error-checking
- Direct measurement of baselines between Compatt improves array calibration accuracy
 - Baseline measurement to 15 cm
 - Measurement of temp. and depth permits accurate evaluation of seabed sound velocity
 - Battery checks and time/date facility record remaining battery capacity and time since last charge
 - Cycle mode permits up to eight preset commands to be executed on receipt of one command
 - Auto-disable at 90% of battery packs usage

Specifications

Compatt Mk4 MF Directional (Discontinued)



| Feature | Type 7806 | | | |
|---|---|------------------------------|---|---------------------------|
| Depth Rating | 2,500 or 4,000 Metres | | | |
| Operating Frequency | MF (19-36kHz) | | | |
| Transducer Beam Shape | Semi-Directional | | | |
| Typical Accuracy | Better than 15cm (static) | | | |
| Battery Type | Ni-Cad (single voltage) | Alkaline (single voltage) | Lithium (single voltage) | Lithium (dual voltage) |
| Acoustic Output Power (dB re 1µPa @ 1 metre) | 202dB | 202dB | 202dB | 199dB |
| Listening Life only (Enabled) | 89 days | 1071 days | 1786 days | 2500 days |
| Listening Life only (Disabled) | 96 days | 1304 days | 2174 days | 2500 days |
| Navigation Replies (High Power) | 0.4 X 10 | 1.3 X10 | 1.5 X 10 | 3.3 X 10 |
| Navigation Replies (low Power) | 1.5 X 10 | 5.3 X 10 | 6.0 X 10 | 13.4 X 10 |
| Data Telemetry (high power) | 10 X 10 ³ | 36 X 10 ³ | 79 X 10 ³ | 90 X 10 ³ |
| Data Telemetry (low power) | 41 X 10 ³ | 144 X 10 ³ | 317 X 10 ³ | 360 X 10 ³ |
| Acoustic Receiver Threshold | 70-115dB re 1µPa (Programmable) | | | |
| Timing Resolution | 1.6µs | | | |
| Options | Sensor | Depth | Strain Gauge pressure transducer ±0.2% (350M, 1350M, 2500M or 5000M range) or Digiquartz Quartz Crystal Pressure Transducer. (1350M, 2050M or 4100M range ±0.02%) | |
| | | Temperature | Platinum Resistance ± 0.1°C | |
| | | Conductivity | Change in flux-linkage Sensor ± 0.25ppt | |
| | | Dual Axis Inclinator | Schaevitz LSOP Inclinator ± 14.5° range, (Accuracy ± 0.1°, Resolution ± 0.01°) | |
| | | Battery | Lithium, Alkaline or Ni-Cap | |
| | | | External Sensor Monitoring | |
| | | | Acoustic Release End Cap | |
| | | | Remote Sensor Input available | |
| Weight in Air | 24.1kg (2,500m Version), 26.1kg (4,000 Version) | | | |
| Weight in Water | 11.2kg (2,500m Version), 13.2kg (4,000 Version) | | | |