
Datasheet

Programmable Acoustic Navigator (PAN)



Description

Sonardyne's Type 7145 Programmable Acoustic Navigator (PAN) is a microcomputer-controlled unit dedicated to the transmission, reception and decoding of acoustic signals.

It is part of Sonardyne's integrated family of underwater acoustic navigation and telemetry equipment. The system is applicable to a wide range of tasks in underwater engineering measurement, remote control and monitoring.

The Medium Frequency (MF) version operates in the frequency band 18 to 36 kHz. This provides the best compromise between long range, accurate positioning and operation in high level of noise. When operating in the Low Frequency (LF) band, transponder ranges of over 10 km are obtainable. When working with Extra High Frequency (EHF) Compatts, accuracies of 30 mm or better can be achieved.

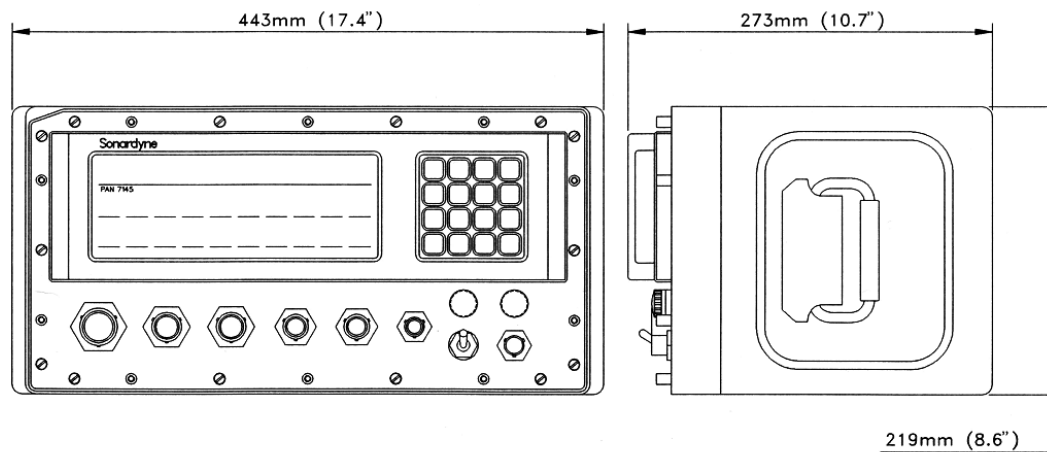
PAN is available in all frequency bands (LF, MF, EHF) and is field convertible by substitution of circuit cards.

Key Features

- Command of template positioning systems and spool-piece measuring equipment
 - The PAN can be controlled by a computer terminal or master computer via an RS232C serial data link or the popular IEEE 488 instrumentation bus.
 - Internal rechargeable batteries allow operation away from mains supplies
 - Two transducer ports which are software-selectable
 - LF, MF or EHF versions
 - Portable or rack mounted models available
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Specifications

Portable Acoustic Navigation (PAN)



Feature	MF Version	EHF Version	LF Version
Operating Frequency	MF (18–36kHz)	EHF (50–110kHz)	LF (7.5–15kHz)
Transmit Source Level (dB re 1µPa @1m)	192dB	186dB	192dB
Receive Sensitivity (dB re 1µPa)	85dB	100dB	80dB
Power Supply	230V Mains or Internal Ni-Cad	230V Mains or Internal Ni-Cad	230V Mains or Internal Ni-Cad
Pulse Length	4ms	1ms	8ms
Timing Resolution	16ms	16ms	16ms
No. Independent Navigation Channels	2	2	2
Data Telemetry Baud Rate	16 (Only 10 Fitted)	12 (Only 10 Fitted)	10
Data Telemetry Baud Rate (Template Positioning System MF)	25, 50, 100	25, 50, 100, 250	16, 25, 50
Transducer Options	Hull Mounted, Dunker, Towfish, Flowerpot	Dunker, Towfish, Flowerpot	Dunker, Towfish
Dimensions (Portable) (LxWxH)	279mm x 444mm x 20mm	279mm x 444mm x 20mm	279mm X 444mm x 20mm
Dimensions (Rack mounted) (LxWxH)	292mm x 25mm x 5U	292mm x 25mm x 5U	292mm x 25mm x 5U
Weight	35kg	35kg	35kg