

HydroSense 080/45

SPHERICAL PRE-AMPLIFIED HYDROPHONE



Typical Uses: Remote Marine Mammal & Environmental Monitoring, Noise measurements, Calibration standards



FEATURES

The HydroSense 080/45 hydrophone is a horizontally omni-directional, pre-amplified, spherical, hydrophone operational over a wide frequency band (10Hz to 100kHz). It is useful for making absolute sound measurements in remote environments or useful for making highly sensitive measurements.

The integral pre-amplifier provides 45dB of gain. The HydroSense series are highly reliable transducers; the pre-amplifier is contained in a sealed aluminium tube, which is then over-moulded with a protective, durable polyurethane coating.

ADVANTAGES

- Low-noise performance
- Durable and reliable construction
- Horizontally omni-directional
- Broad Band

ORDER NUMBER

CTG 0791-0001

Please specify any alternative cable, connector and/or calibration requirements with order

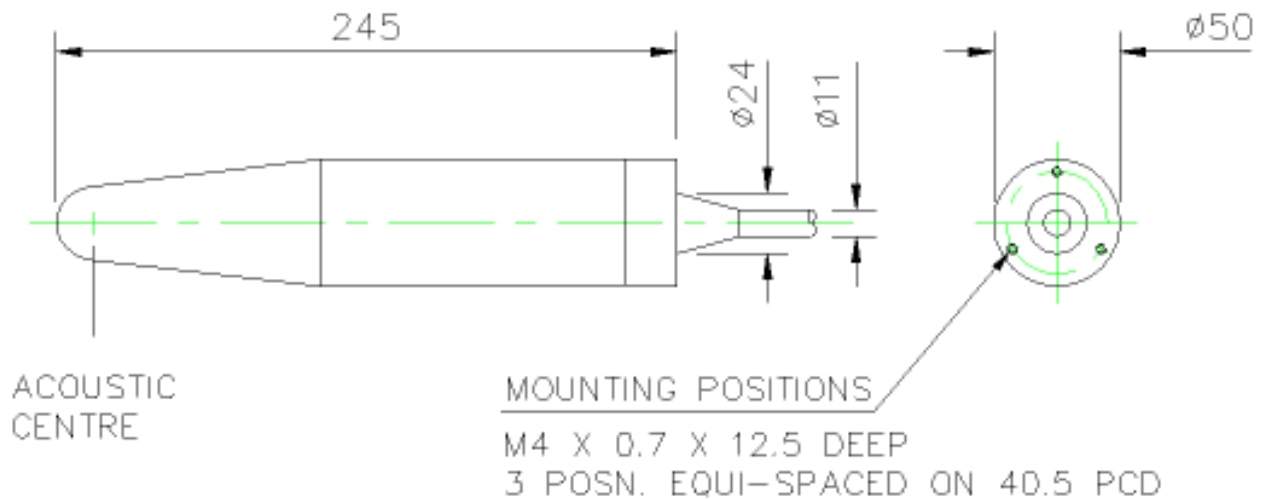
TECHNICAL SPECIFICATION

Nominal resonant frequency	80 kHz
Integral pre amplifier	Yes
Pre-amplifier type	Differential in / Differential out
Pre-amplifier gain	45 dB
Receive Sensitivity @ 75kHz	- 157 dB re 1V/ μ Pa with 100 Ω differential load
Recommended receive frequency range	10Hz – 100kHz
Linear frequency range	10Hz – 10kHz
Maximum acoustic input @75 kHz	+ 162 dB re 1 μ Pa
Power Supply	20 – 34 V dc
Max current consumption	45 mA
Maximum output voltage	1.8 Vrms
Low Frequency capacitance (@ 1kHz)	14nF
Horizontal beam pattern	Omni-directional +/- 3dB at 30kHz
Vertical beam pattern	>270°

MECHANICAL SPECIFICATION

Dimensions	Maximum outer diameter 50mm, Length 245mm
Transducer head weight in air	***
Transducer head weight in water	***
Maximum recommended operating depth	300 m
Survival depth	600 m
Operating temperature range	-5 to +35°C
Cable	5m triple screen twisted pair cable
Connector	Bare ends
Mounting	Dunking

MECHANICAL DRAWING

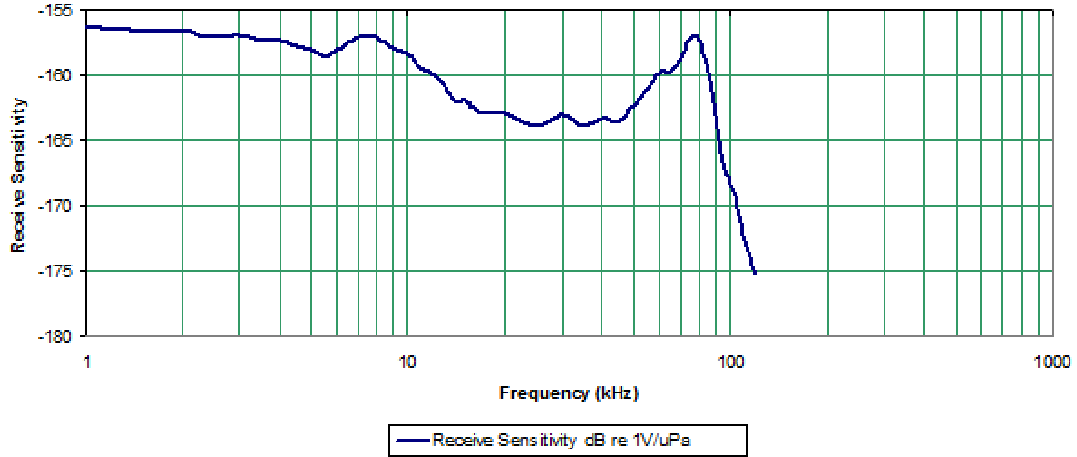


CONNECTOR LAYOUT

N/a

SENSITIVITY

HydroSense 080/45 Sensitivity



HORIZONTAL BEAM PATTERN

VERTICAL BEAM PATTERN

VARIATIONS

The DualSense 080 is also available as an 80kHz spherical hydrophone without an integral pre-amplifier.



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*** Please contact CTG for further information
In view of our policy of continual improvement, the designs and specifications of our products may vary from those described 2271-038-RS-A)