

HydroSense 115/19

SPHERICAL PRE-AMPLIFIED HYDROPHONE



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



FEATURES

The HydroSense 115/19 hydrophone is a horizontally omni-directional, pre-amplified, spherical, hydrophone operational over a wide frequency band (10Hz to 150kHz). It is useful for making absolute sound measurements in remote environments or useful for making highly sensitive measurements.

The integral pre-amplifier provides 19dB 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 1297-0001

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

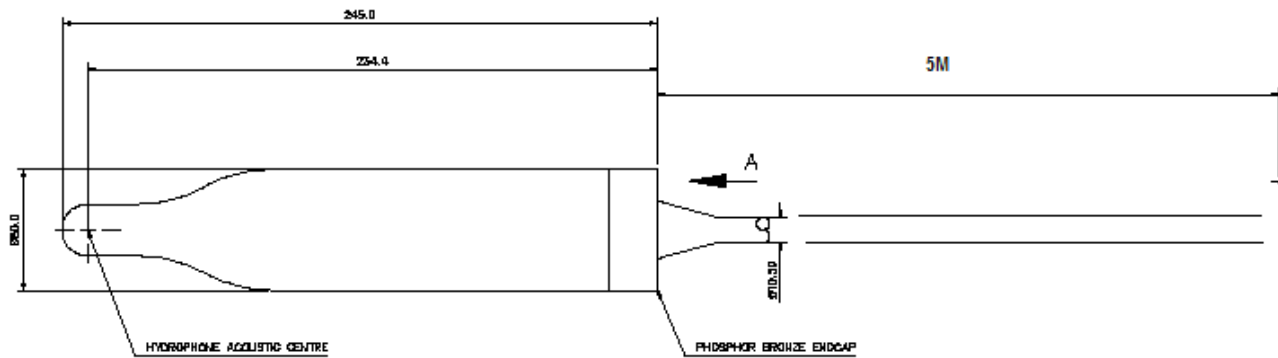
TECHNICAL SPECIFICATION

Nominal resonant frequency	115 kHz
Integral pre-amplifier	Yes
Pre-amplifier Type	Differential in / Differential out
Pre-amplifier Gain	19 dB
Receive Sensitivity @ 10kHz	-187 dB re 1V/ μ Pa into 100 Ω differential load
Recommended receive frequency range	10Hz – 150kHz
Linear frequency range	10Hz – 20kHz
Maximum acoustic input @10kHz	+ 196 dB re 1 μ Pa/V
Power Supply	18 – 36 V dc
Max current consumption	60mA (with 30V supply)
Maximum output voltage	3Vrms
Low Frequency capacitance (@ 1kHz)	14nF
Horizontal beam pattern	Omni-directional +/- 1dB 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 screened twisted pair cable
Connector	Bare ends
Mounting	Dunking

MECHANICAL DRAWING

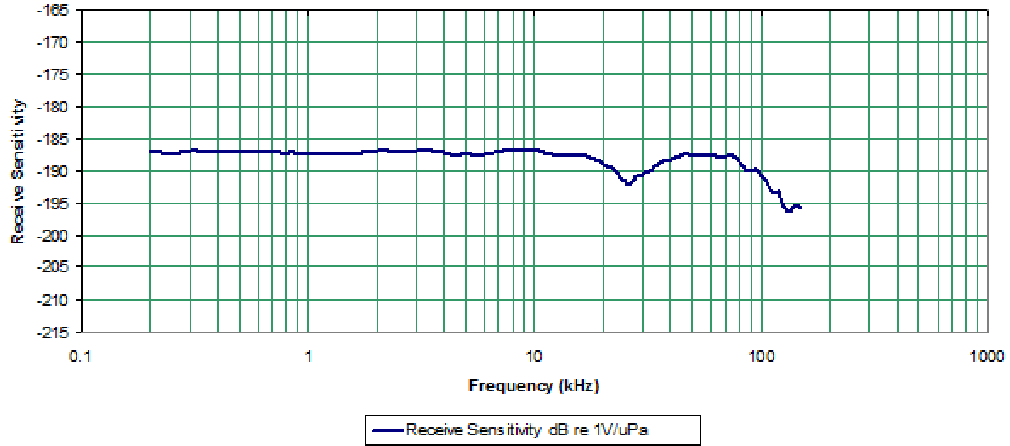


CONNECTOR LAYOUT

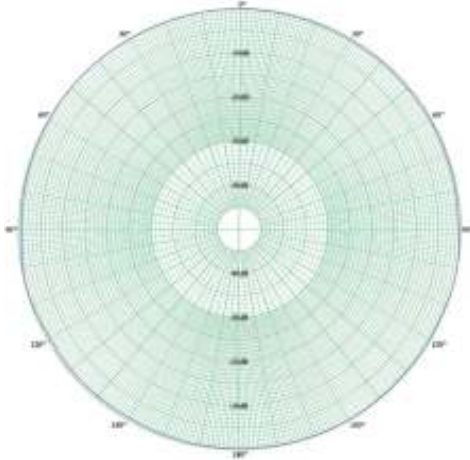
N/a

SENSITIVITY

HydroSense 115/19 Sensitivity



HORIZONTAL BEAM PATTERN @ 30kHz



VERTICAL BEAM PATTERN

VARIATIONS

The HydroSense 115/45 is a spherical pre-amplified hydrophone with 45dB of gain.
The DualSense 115 is a spherical reciprocal hydrophone without an integral pre-amplifier, resonant at 115kHz.



*** 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 2271-037-RS-A)

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