

# Geo-Sense Mini-Streamers

**ULTRA HIGH-RESOLUTION STREAMERS** 



High quality and versatile Single-Channel Streamer with arrays of 8 to 24+ elements.

## Description

## APPLICATION AND COMPATIBILITY

The Geo-Sense Mini-Streamers are a robust and versatile option for single-channel seismic operations from very shallow to deep water (the short 8-element array was successfully used in 4500 m water depths). They are specifically designed to capture the high frequency spectrum emitted by our sparker and boomer sources, but can also be used to capture the signal of LF sources, such as air guns and water guns and can be interfaced with any third party recording system.

## DESIGN

Geo-Sense Mini-Streamers have the standard 30 cm separation between elements and the 8 and 24 elements versions. However, The active length and number of elements can be configured to your requirements.

## **AQ-2000 HYDROPHONES**

The AQ-2000 allows a stable performance over a wide range of water depths. It has excellent acceleration-cancelling qualities and an exceptionally wide frequency bandwidth. The AQ-2000 can be installed into standard array configurations or integrated into custom-moulded packages. Every hydrophone is tested for sensitivity, capacitance and insulation to ensure the highest quality product for all very high resolution seismic operations.

# Operational Features

- $\rightarrow$  Can be employed in small and large vessel operation.
- $\rightarrow$  Can be handled by one person.
- $\rightarrow$  Water depths from 2 to 4500 m.

 $\rightarrow$  Compatible with third party sources and recording systems as long as the Geo-Sense Filter/Gain Interface is used.



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An at least 4 m long outrigger remains one of the most important requirements to deploy the streamer out of the turbulence of the prop wash (left: small vessel; right: large vessel operations).



pre amplifier.

# **Technical Specifications**

## **TOW CABLE**

Length	Standard 50 m to 100 m
Diameter:	11 mm
Туре:	3 × 2 × 24 AWG screened
twisted pair	
Insulation:	Polyurethane
Strain member:	Double reverse spiral Kevlar

## **ACTIVE SECTION & JACKET**

Number of elements: Spacing of elements: Length of active section:

Length of jacket:

**Jacket material:** 

**Buoyancy:** 

Array fluid:

Jacket size ID & OD:

8 , 16, 24 up to 48 0.3 m standard 2.4 m / 7.2 m (for 8 / 24 elements) 5.4 m / 11.2 m (approx.) 20.5 mm & 26.5 mm Unreinforced polyurethane Slightly positive Shell Sol T, Parafin oil or gel

## PHYSICAL SPECIFICATIONS

Materials:	Fluoroelastomer, high strength epoxy,	
	Hytrel®	
	insulated leads	
Weight in air:	14 grams	
Size:	4.56 cm long x 1.32 cm diameter	
Displacement:	6.24 cc	
Temperature:	Operating: -10°C to 50°C	
Storage:	-40°C to 60°C	
PRE AMPLIFIER		
Size:	60 × 16 mm	
Gain:	26 dB	
Ground reference: Single-ended		
Power:	9 -12 V DC (polarity protected)	
High-pass:	-3 dB: 3 Hz	
Low-pass:	-3 dB:13 kHz	
Output impedance: 60 Ω		

#### **GEO MARINE SURVEY SYSTEMS**

#### Sheffieldstraat 8, 3047 AP Rotterdam, The Netherlands

## **GET IN TOUCH**

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quipment specifications can change without notice.

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# **Technical Specifications**

A2-2000 HYDROPHONE ELECTRICAL SPECIFICATIONS	
Leads:	Two 28 AWG stranded conductors (red
	and black), Hytrel® insulation, 12.7 cm
	long each
Connector:	None
Polarity:	A positive increase in acoustic
	pressure generates a positive voltage
	on the red conductor
Capacitance:	4.5 nF +/- 25% at 20°C and 1 kHz
Resistance:	500 $M\Omega$ minimum across leads or to
	sea water at 20°C and 100% relative
	humidity, 50 V DC
Dissipation:	0.02 typical

# PERFORMANCE Sensitivity @ 100 Hz Free-field voltage: -201 dB re 1 V/µPa +/- 1.5 dB Sensitivity change Versus frequency: +/- 0.25 dB from 1 Hz to 1 kHz (+/-2.0 dB from 1 kHz to 10 kHz) Versus depth : < 0.5 dB to 1000 m Versus temperature: < 0.03 dB per 1°C change **Acceleration Sensitivity** Output is <1.5 mV/g due to acceleration in any of the three major axes at 20 Hz **Mechanical** Resonance typically 20 kHz in water Maximum operating depth of 2000 m Destruction depth of more than 7000 m



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We are always pushing for improvements, so equipment specifications can change without notice. Please keep in contact with support to stay in tune with the developments.