

## Portable Low-Frequency Acoustic Seismic Profiler

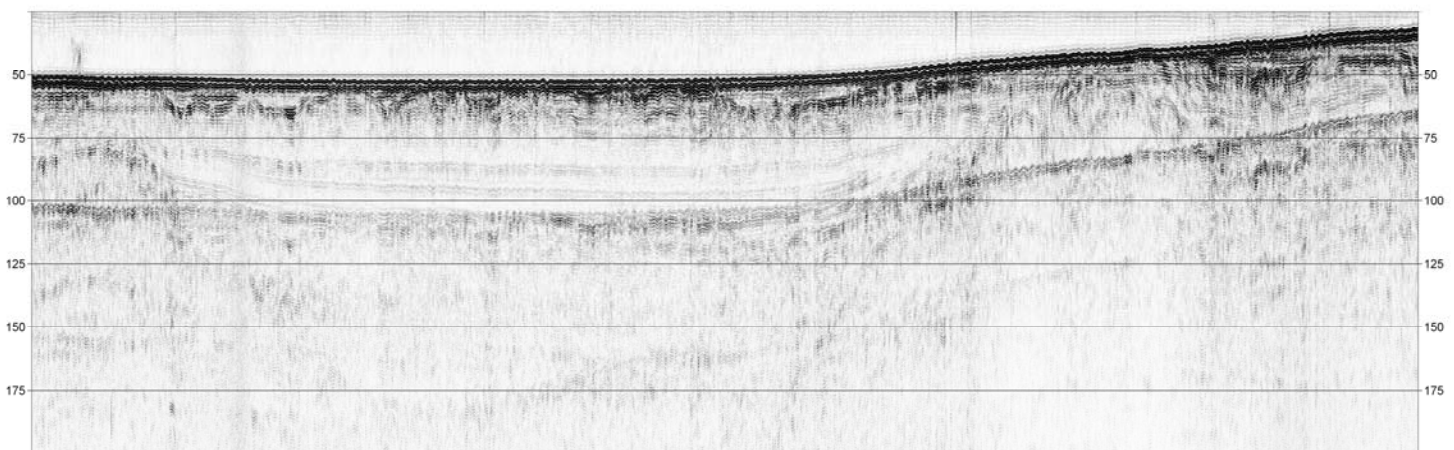
The HMS-620 Bubble Pulser uses low-frequency acoustic signals to provide superior signal penetration through coarse sand, gravel tills, and other difficult-to-penetrate sediments. Small component size and portability make this a valuable tool for any survey platform.

### FEATURES/BENEFITS

- Narrow-band 400 Hz acoustic pulse provides bottom penetration through many sediment types
- Rugged, lightweight transducer platform provides stable operation in adverse sea-state conditions
- Flexible portable transceiver unit optimizes system for a wide range of sediments
  - User-selectable trigger or external trigger
  - Low-noise pre-amp with high/low pass filters and gain control
- Portable power supply operates from 110 or 220 VAC
- Oil-filled hydrophone streamer cable incorporates a 7-meter multi-element active section
- 35-meter deactivation switch



*The HMS-620 Bubble Pulser System's size makes it ideal for small survey vessels.*



HMS-620 Bubble Pulser provided over 125 meters of penetration in this survey off of Block Island (scale in msec). Courtesy of University of Rhode Island Graduate School of Oceanography

# SPECIFICATIONS

## HMS-620 System Components

### Source Vehicle and Electromechanical Tow Cable

<b>Source Type:</b>	Electromagnetic
<b>Frequency:</b>	Narrow band, 400 Hz pulse
<b>Acoustic Source Level:</b>	Approximately 50 Joules (+200 dB ref 1 $\mu$ Pa @ 1 meter)
<b>Tow Vehicle:</b>	Stainless steel frame, buoyant surface-towed vehicle
<b>Tow Cable:</b>	50-meter abrasion resistant
<b>Dimensions:</b>	109.22 cm x 93.97 cm x 48.26 cm 43 in x 37 in x 26 in
<b>Weight in Air:</b>	Vehicle/Source – 43.5 kg (96 lbs) Tow Cable - 12.25 kg (27 lbs)

### Seismic Transceiver

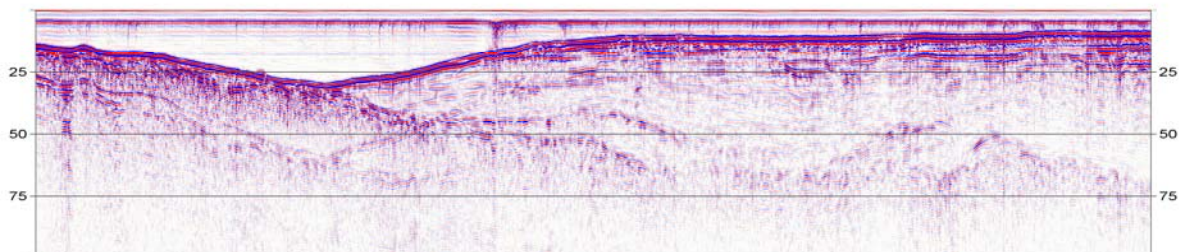
<b>Signal Input:</b>	Designed to operate with HMS-620 System Hydrophone Streamer Cable. 7-pin amphenol connector
<b>Gain:</b>	Adjustable in 3 dB steps 0 to 45 dB
<b>Filters:</b>	Adjustable high- and low-pass active
<b>Analog Interface:</b>	$\pm 10$ V Output

### Power Supply

<b>Trigger Input:</b>	External key or manual time-based selection
<b>Repetition Rate:</b>	1/8 second maximum
<b>Transducer Connector:</b>	4-pin amphenol to mate with HMS-620 Source Vehicle Towing cable
<b>Packaging:</b>	Portable splash-resistant case
<b>Dimensions:</b>	55.88 cm x 53.34 cm x 25.4 cm 22 in x 21 in x 10 in
<b>Weight:</b>	17.24 kg (38 lbs)

### Hydrophone Streamer Cable

<b>Length:</b>	Active section - 7 meters; single-channel, 24 elements; Leader - 50 meters
<b>Preamplifier:</b>	Integral preamp - 20 dB gain, designed to operate with HMS-620 Transceiver
<b>Power Input:</b>	Supplied by transceiver
<b>Weight in Air:</b>	13.6 kg (30 lbs)



Specifications Subject to Change without Notice  
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