HMS-622 CHIRPceiver™

Dual Frequency CHIRP Sub-bottom Profiler

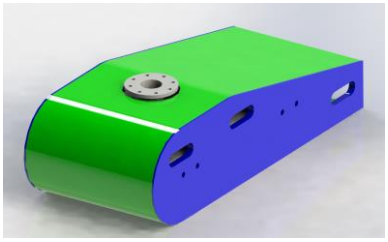
Sub-bottom profiling applications in diverse sediments require multiple frequency bands to support diverse survey requirements. The HMS-622 CHIRPceiver™ and transducer arrays and vehicles fill this wide range of survey needs. The frequency band supported by the HMS-622 include standard LF (1KHz-10KHz), and optional ULF (200Hz-2KHz) and HF (8KHz-23KHz). It can be easily configured for up to 50Khz with a standard 2 channel transceiver. CW frequencies can also be programmed within the respective band. The transducer and hydrophone arrays are configured to perform both the transmit and the receive functions of the system.

The HMS-622 CHIRPceiver uses a flexible Graphical User Interface connected via Ethernet that allows the user to set CHIRP or CW modes of operation, Start and Stop frequencies, and Pulse Lengths and Power Level for the output pulses. The receiver controls allow for Gain and Attenuation as well as Diagnostic modes. The user selectable direct A/D input allows the user to input data for the HMS-620 Bubble Gun or other analog seismic system. The HMS-622 CHIRPceiver will also support multi-ping modes for higher along track resolution when operating in water depths deeper than a given ping rate. All sonar data is logged in SEGY format using industry standard acquisition software.

FEATURES/BENEFITS

- CHIRP acoustic pulses in standard LF band (1KHz-10KHz), and optional ULF (200Hz-2KHz) and HF (8KHz-23KHz) bands provide bottom penetration through many sediment types
- Flexible transducer array options for a variety of vessel configurations
- Industry Standard Ethernet Interface for Data and Control
- Universal input power supply operates from 85 to 240 VAC
- Dual-Channel True 24-bit A/D Range
- Direct A/D Input Available for the FSI Bubble Gun™ or other Analog Seismic Systems
- Seabed Classification
- Industry standard SEGY output

LF and HF Tow Vehicle



ULF and HF Side Mount

SPECIFICATIONS

HMS-622 CHIRPceiver™ System

Ultra Low Frequency Channel (optional)

Transmitter and transducer:	QTY 2 AT-650 Transducers
Power output:	2.3 kw, 15% duty cycle at 650Hz for 204 dB re 1 µPa @ 1 m nominal, 4 kw maximum at reduced duty cycle
Frequency range:	Sweeps in the 200Hz to 2kHz band
Transducer radiation:	Omni

Low Frequency Channel (standard)

Transmitter and transducer:	Array sizes from 1 to 4 Low Frequency 3.5 KHz Transducers for Towed and Over the Side Systems and 4 to 35 for Hull Mounted Systems
Power output:	2.3 kw, 15% duty cycle at 3.5 kHz for 212 dB re 1 µPa @ 1 m nominal, 4 kw maximum at reduced duty cycle
Frequency range:	Sweeps in the 1kHz to 8kHz band
Transducer radiation:	45° Conical (for a 2x2 4-element array)

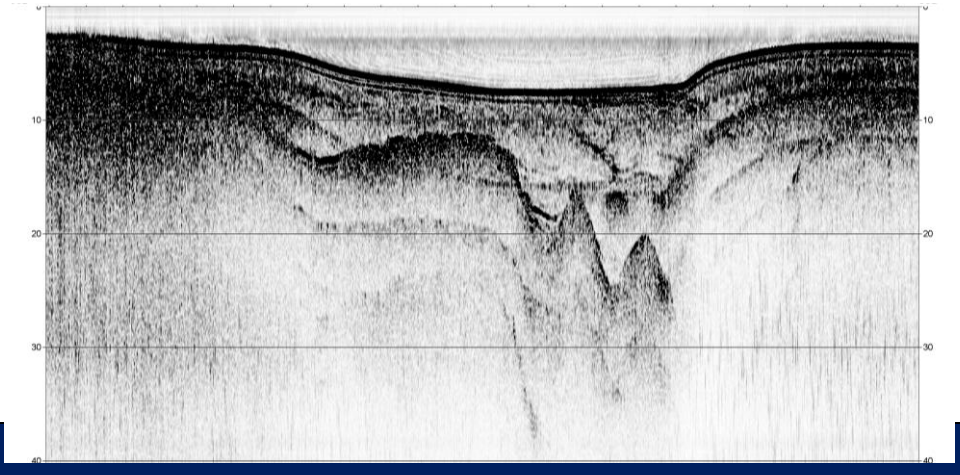
High Frequency Channel (optional)

Transmitter transducer:	One 7-element high frequency transducer
Power output:	1 kw, 15% duty cycle at 15 kHz for 214 dB re 1 µPa @ 1 m nominal, 4 kw maximum at reduced duty cycle
Frequency range:	Sweeps in the 8kHz to 23kHz band
Transducer radiation:	27° conical

HMS-622 Software Controls

Control:	**Software control through system Ethernet port**
Trigger:	Internal or External
Frequency:	ULF (200Hz-2KHz), LF (1KHz-10KHz), HF (8KHz-23KHz) CHIRP and CW
Pulse Length:	User Programmable for CHIRP and CW modes (15% duty cycle)
Transmit Power:	0-42 dB in 3 dB minimum increments
Preamplifier gain:	42 dB in 3 dB increments
Preamplifier attenuation:	-42 dB in 3 dB increments
A/D Input:	24bit up to 192KHz

Specifications Subject to Change Without Notice
10 April 2015



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