

## **HMS-ATTR-4.5K Underwater Transducer**

### Ultra-rugged, High-Power, Low-Frequency

The HMS-ATTR-4.5K is a very rugged, high power, underwater transducer specifically designed for marine sub-bottom profilers and echo-sounders in the 2 to 7 kHz frequency range. The transducer is designed for operation in a variety of array configurations to support shallow water surveys to deep water hull mounted arrays capable of operation in survey depths up to 10Km. Vessel installations will vary based on the survey requirements and vessel configuration so please contact Falmouth Scientific with your specific needs. Single transducers can support a 600W power level at a 30% duty cycle or 200W continuous while when configured as arrays the power levels for the array can be several Kilowatts though this will be cavitation limited depending on the installation.

The HMS-ATTR-4.5K transducer is a tonpilz piston source approximately 1/2 wavelength in diameter at the center of its operating frequency range and is designed with an industry standard mounting hole pattern through 4-corner integral mounts which allows support for both new and existing vessel array configurations. The transducers can be arranged in a multi-element array to support a wide variety of beam patterns and source level to suite most survey applications. Array configurations and preamp control module specification can be seen on next page.



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**HMS-ATTR45 TVR** 

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FREQUENCY (Hz)

#### **CHARACTERISTICS**

Power Rating

Transmitting Response per Volt Receiving Response per Volt Nominal Impedance Directivity Maximum Operating Depth Weight (approximate) 600 Watts 30% duty cycle, 200 Watts CW 152 dB re 1uPa/1V@1m -165 dB re 1uPa/1V@1m 250 ohms @ 3.5KHz 80 0 conical at -3 dB 1000m 25 lbs

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Specification Subject to Change Without Notice

-180 -185

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