M72-300 C-Bass

The M72-300 is a member of the M72 “C-Bass” family of very low frequency electrodynamic sound projectors. These projectors are less expensive, lighter, smaller, more efficient, and have a broader bandwidth than their peers. This versatile source is suitable to be used for over-the-side trials, routine calibrations, long-duration moorings, or integration into any size of customer system.

Applications include VLF calibration source, beacon for navigation or timing, target emulation, VLF communication systems, VLF acoustic science, and more.

Characteristics

Acoustic

- Produces moderate power with over a decade of useful response above and below resonance. This coherent source is capable of transmitting arbitrary waveforms, including:
  - Single and combined tones.
  - Frequency modulated sweeps.
  - Communication signals.
  - White or shaped noise.

Directivity

- Omni-directional; can be used individually or in arrays to produce high-power sources with or without directivity.

Operating depth

- 50 m.
- 250 m with passive pressure compensation system.
- > 250 m with active pressure compensation system.

Amplifier

- Can be operated using commercial audio amplifier.

Form factor and mounting

- Dimensions: 99 mm thick x 216 mm Ø
- Mass in air: 7.7 kg
- Connector: SubConn ILB3M; DLSB-F locking sleeve
- Array of tapped holes available for mounting to customer equipment.

1 The M72-300’s resonance will increase slightly at deeper depths.
GeoSpectrum Technologies Inc.
Customizing Detection

Sound Pressure Level Limits

- Continuous SPL, 7 A max
- Pulsed SPL, max 15 A, 5% duty cycle, 15s pulse

Transmitting Voltage Response (20m depth)

Impedance

Frequency (Hz)

Impedance (Ohms)

10 100 1000

10 100 1000