Dual-Band Chirp-ready
The acoustic performance of AIRMAR’s broadband piezoceramic transducers include extremely low-ringing and excellent sensitivity, resulting in optimal system performance including sharp, crisp acoustic pulses for improved clarity, resolution, and measurement accuracy. The M563’s two broadband arrays deliver superior performance throughout low and high-frequency bands allowing operation at discrete frequencies, broadband CHIRP or coded waveforms. The unit is available with a low-band frequency and high band frequency options.

Options
- Impedance to customer specifications using matching transformer
- Available with low-band of 25 kHz to 45 kHz
- High-band options:
  - 80-130 kHz
  - 130-210 kHz
  - 160-260 kHz

External-Mount Dual-Band

Applications
- Shallow and coastal survey
- Scientific research

Features
- Two broadband arrays minimize ringing and allow sharp, crisp acoustic pulses and excellent clarity
- Narrow beams and low sidelobes provide clear bottom detail
- Matching transformers provide pure, resistive load
- Can be mounted on a towed body, directly to a wood, steel, or fiberglass hull (can also be mounted as an in-hull in a fiberglass hull for precise echosounding)
- Streamlined shape minimizes drag
- Seamless, SEALCAST™, urethane housing for long life underwater
- Exclusive Xducer ID™ technology
- High precision temperature probe

www.airmar.com
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### SPECIFICATIONS

**Weight:** 10 kg (22 lb)

**Acoustic Window:** Urethane

**Housing Material:** Cast urethane

**Cable Type:** C-44-02

Three shielded twisted pair (two 2-18 AWG and one 2-22 AWG) with foil and braided shield overall, black TPR jacket, 11 mm (7/16”) diameter

### DIRECTIVITY PATTERN—25-45 kHz-B

<table>
<thead>
<tr>
<th>Frequencies</th>
<th>Configuration</th>
<th>Beamwidth (@-3 dB)</th>
<th>RMS Power (W)</th>
<th>FOM (dB)</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 kHz - 45 kHz-B</td>
<td><img src="beamwidth.png" alt="Beamwidth" /></td>
<td>24° @ 25 kHz 19° @ 35 kHz 14° @ 45 kHz</td>
<td>1 kW -10dB</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>80 kHz - 130 kHz-B</td>
<td><img src="beamwidth.png" alt="Beamwidth" /></td>
<td>13° @ 80 kHz 10° @ 100 kHz 8° @ 130 kHz</td>
<td>2 kW -10dB</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>130 kHz - 210 kHz-B</td>
<td><img src="beamwidth.png" alt="Beamwidth" /></td>
<td>8° @ 130 kHz 5° @ 170 kHz 4° @ 210 kHz</td>
<td>2 kW -5dB</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>200 kHz - BFq</td>
<td><img src="beamwidth.png" alt="Beamwidth" /></td>
<td>5° @ 160 kHz 4° @ 200 kHz 4° @ 260 kHz</td>
<td>2 kW -5dB</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

### DIMENSIONS

![Dimensions Diagram](dimensions.png)