

# R309



## Low-Frequency Deep-Water Performance

Airmar's Broadband R309 is different from its twin brother the R209, because it operates at a lower frequency range between **25 kHz to 45 kHz**. (The high-frequency range of **130 kHz to 210 kHz** is the same in both models.) The R309's frequency agility allows you to change its beamwidth and depth capabilities. The narrow high-frequency beam will display extreme bottom detail and fish holding tight to structure. The wider low-frequency beam will not only give deep-water bottom detail, but will also show you more of what is around your vessel—including bait which may attract game fish.

This powerhouse is best suited for offshore sport and commercial fishing vessels—giving 2 kW to 3 kW echosounders extreme deep-water bottom detail and target discrimination. Survey vessels can also use the R309 for bottom profiling and sea-mount tracking.

## Thru-Hull External-Mount 2 - 3 kW HD Digital

### Fishing Applications

- Offshore and long-range blue-water fishing
- Commercial fishing
- Deep-water canyon and sea-mount tracking

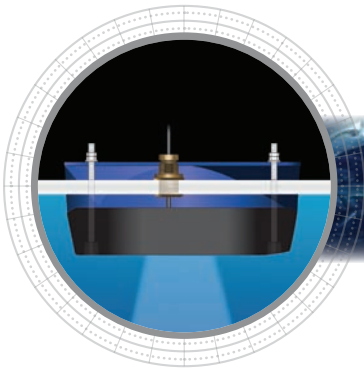
### Features

- The top performer in Airmar's professional line of fishfinder transducers
- Only 3 kW thru-hull transducer on the market that can operate at 28 kHz, 38 kHz, or 45 kHz
- Recommended for commercial and sportfishing boats above 12 m (40')
- Depth and fast-response water-temperature sensor
- Urethane housing
- Includes fairing and stainless steel stuffing tube





*Sensing Technology*

[www.airmar.com](http://www.airmar.com)



## Technical Information

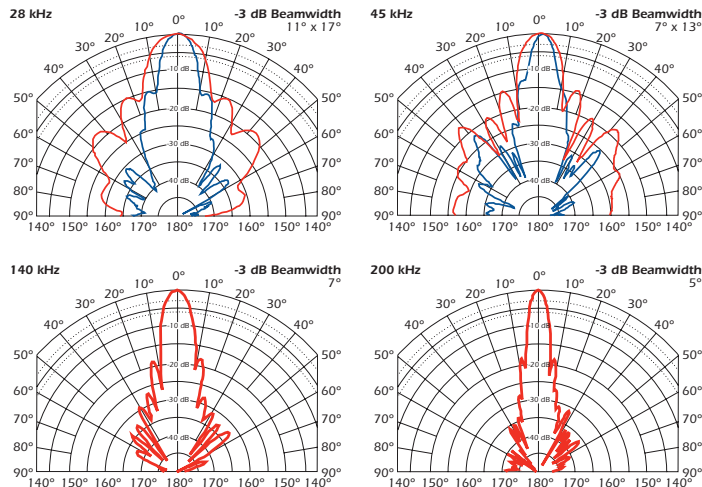
### 25-45 kHz-A / 130-210 kHz-BRIq

<b>Number of Elements and Configuration</b>			
<b>Beamwidth (@ -3 dB)</b>	Adjustable	Adjustable	
<b>RMS Power (W)</b>	3 kW	2 kW	
<b>TVR</b>	169 dB @ 50 kHz	172 dB @ 200 kHz	
<b>RVR</b>	-167 dB @ 50 kHz	-184 dB @ 200 kHz	
<b>FOM</b>	-5 dB @ 50 kHz	-12 dB @ 200 kHz	
<b>Q</b>	3 @ 50 kHz	3 @ 200 kHz	
<b>Impedance</b>	187 Ω @ 38 kHz	185 Ω @ 50 kHz	208 Ω @ 200 kHz
	169 Ω @ 140 kHz	250 Ω @ 50 kHz	314 Ω @ 200 kHz

### MAXIMUM DEPTH RANGE

Low-Frequency	High-Frequency
914 m to 1,372 m (3,000' to 4,500')	235 m to 353 m (800' to 1,200')

### Directivity Pattern



### SPECIFICATIONS

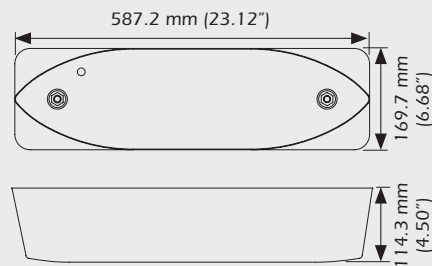
**Weight:** 23.8 kg (52.4 lb)

**Hull Deadrise:** 0° to 25°

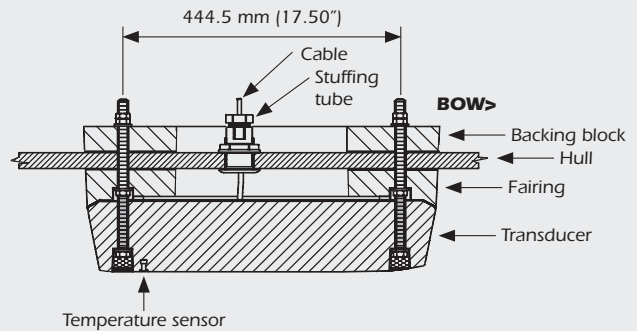
**Acoustic Window:** Epoxy/urethane

### DIMENSIONS

#### Transducer



#### Installing the Transducer



### Figure of Merit

The graphs show that the R309 can run optimally at a wide range of frequencies.

