

442.0<sup>f</sup><sub>t</sub>  
85.21<sup>o</sup><sub>F</sub>  
7.76<sup>k</sup><sub>t</sub>  
24.6<sup>v</sup>

— 300ft +

POCKET/KEEL MOUNT

50 kHz



Gain  
60%



PM411LWM screenshot courtesy of Garmin

# Pocket/Keel Mount Chirp Transducers

As Chirp technology remains at the forefront of echo sounder development, Airmar continues to add transducers for every installation type.

**When performance matters most, we've got you covered.**

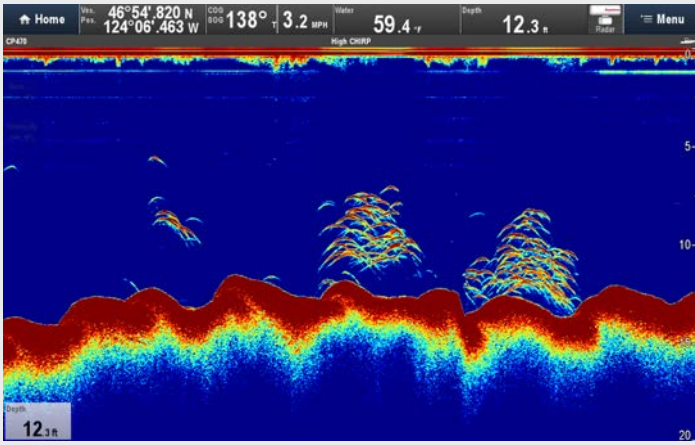
## The Benefits of Airmar's Chirp-ready Transducers

- One broadband transducer covers up to 117 kHz of bandwidth – greater opportunities to detect fish in the water column
- Superior resolution – precise separation between baitfish and gamefish represented on the display with crisp images
- Enhanced bottom fishing – resolve targets close to the bottom or near structure/wrecks
- Amazing detail – recognize haloclines and thermoclines
- Improved signal to noise ratio – find fish and track bottom at high boat speeds

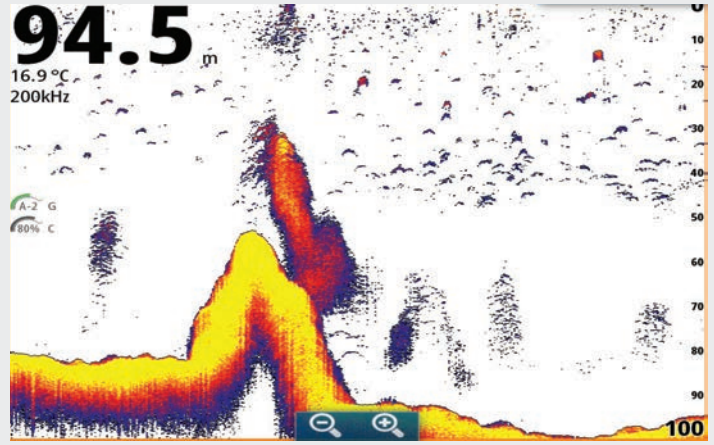


**AIRMAR® ...IT'S WHAT'S UNDER YOUR BOAT.**

 **AIRMAR®**  
TECHNOLOGY CORPORATION



Courtesy of Raymarine



Courtesy of Navico



## Benefits of Pocket Mount Transducers

A popular choice for boat builders, pocket mount transducers are installed within a small custom pocket in your vessel's hull or keel, flush to the surface. Though retrofit installation is possible, these transducers are most commonly used in vessels with a suitable pre-cut pocket.

### Advantages

- All the benefits of a thru-hull without the need for a high-performance fairing
- Can accommodate any deadrise angle
- Can be used with all propulsion types

Pocket mounted transducers provide reliable and accurate sonar performance, with some impact to boat speed and fuel efficiency. As a common alternative, thru-hull transducers with a fairing block deliver comparable sonar performance and vessel impact.

*The best fishing stories begin with the right transducer.*

## Why does frequency matter?

Selecting the best frequency for your specific application is very important. The good news is that once you know what frequency will work best for the type of fishing you do, there's an AIRMAR transducer designed to maximize the performance of your sounder.

AIRMAR Chirp transducers are available in various frequency combinations:

- Dual Band:
  - Low/High (LH)
  - Low/Medium (LM)
  - Low/High Wide (LHW)
  - Low Wide/Medium (LWM)
- Single Band:
  - Low
  - Medium
  - High
  - High wide

### Low Frequency = Greater Depth (ex. 42-65 kHz)

- Sound waves will not present as clear a picture of the bottom on the display, but will sound down in very deep areas where high frequency sound waves cannot reach
- Provides greater depth range, wider beamwidth, and ultimately more coverage under the boat
- Chirp signal processing technology used with Airmar broadband, Chirp-ready transducers provides more detail at greater depths and is less susceptible to noise
- Great for operating at high boat speeds

### High Frequency = Greater Detail (ex. 130-210 kHz)

- More sensitive to small targets and will send back detailed information which will display as crisp, high-resolution images on the echosounder screen
- Best for shallower water and popular with anglers fishing at depths less than 1500 feet

### Medium Frequency = The Best of Both Worlds (ex. 80-130 kHz)

- Provides the ability to sound deeper than the high frequency, along with better resolution than the low frequency
- Wider beam than the high frequency, achieving more coverage under the boat and greater opportunity to find fish
- Clear images at higher boat speeds

# Pocket/Keel Mount

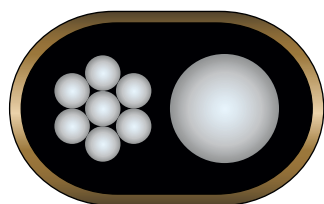
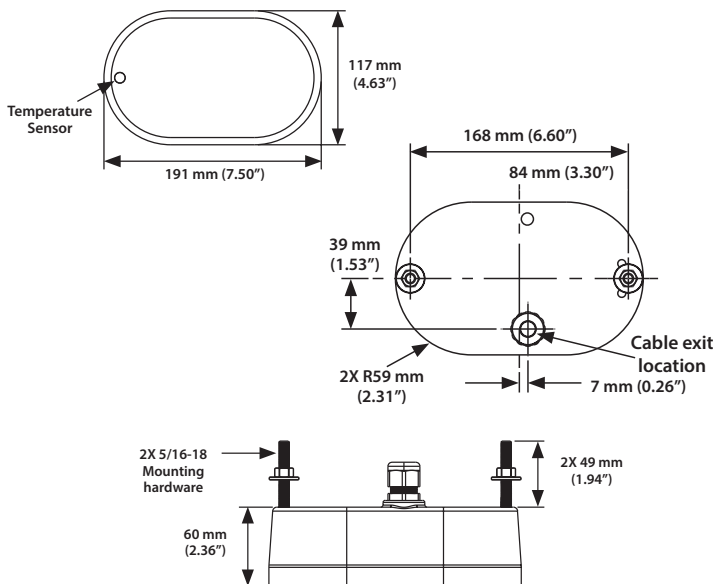
## 1 kW

### Features:

- Depth & fast-response water-temperature sensor
- Hull Type: Fiberglass and metal stepped, planing or displacement hull types
- Hull Deadrise: Can accommodate any deadrise angle
- Engine Type: Can be used with all propulsion types



### DIMENSIONS



8-Internal  
Broadband Ceramic  
Assemblies

## PM265LH

### Low & High Frequency

MSRP \$1,685.00

- Low—42 kHz to 65 kHz  
25° to 16° beamwidth  
Maximum depth 3000 ft
- High—130 kHz to 210 kHz  
10° to 6° beamwidth  
Maximum depth 1000 ft
- 103 kHz of total bandwidth from one transducer

## PM265LM

### Low & Medium Frequency

MSRP \$1,995.00

- Low—42 kHz to 65 kHz  
25° to 16° beamwidth  
Maximum depth 3000 ft
- Medium—85 kHz to 135 kHz  
16° to 11° beamwidth  
Maximum depth 1500 ft
- 73 kHz of total bandwidth from one transducer

### WIDE BEAM

## PM275LHW

### Low & High Wide Frequency

MSRP \$2,170.00

- Low—42 kHz to 65 kHz  
25° to 16° beamwidth  
Maximum depth 3000 ft
- High—150 kHz to 250 kHz  
25° constant beamwidth  
Maximum depth 500 ft
- 123 kHz of total bandwidth from one transducer

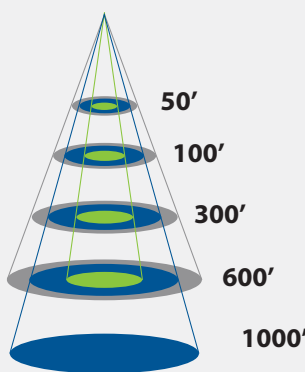
### Bottom Coverage

### Relative to Frequency and Depth

Depth	Beam Coverage at High Frequency		
	PM265LH 130 kHz-210 kHz	PM265LM 85 kHz-135 kHz	PM275LHW 150 kHz-250 kHz
50 ft	10 ft	16 ft	24 ft
100 ft	20 ft	28 ft	46 ft
300 ft	58 ft	84 ft	132 ft
600 ft	104 ft	168 ft	266 ft
1000 ft	Too Deep	282 ft	Too Deep

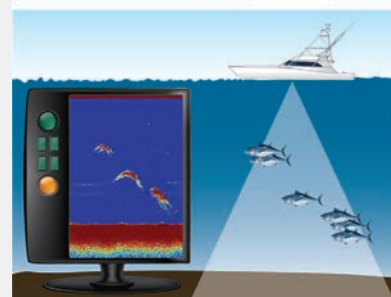
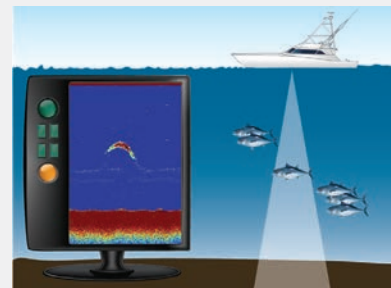
This chart compares the high and medium ceramic elements inside the transducer, showing the difference in bottom coverage under the boat.

The low frequency in each of these transducer models is the same (42 kHz-65 kHz). The maximum depth range sounds to 3,000 ft.



- PM265LH – High Frequency  
130 kHz-210 kHz
- PM265LM – Medium Frequency  
85 kHz-135 kHz
- PM275LHW – Wide beam  
Frequency  
150 kHz-250 kHz

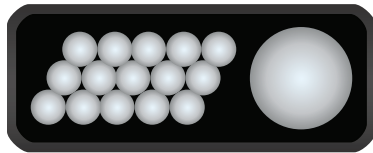
The fish must be in the beam to be represented on the display.



# Pocket/Keel Mount 2 kW

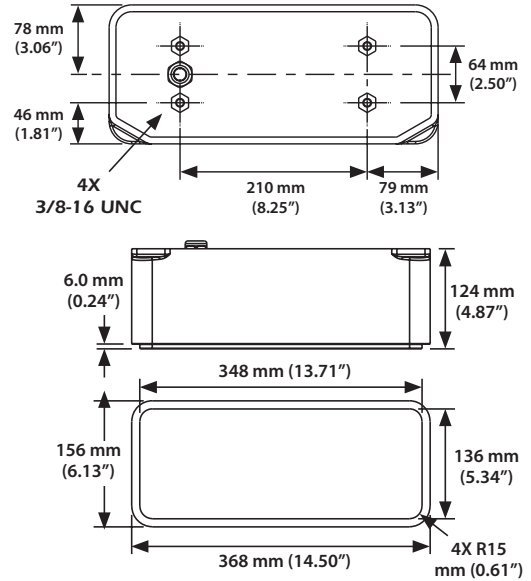
## Features:

- Depth & fast-response water-temperature sensor
- Hull Type: Fiberglass and metal stepped, planing or displacement hull types
- Hull Deadrise: Can accommodate any deadrise angle
- Engine Type: Can be used with all propulsion types



16-Internal  
Broadband Ceramic  
Assemblies

## DIMENSIONS



## PM111LH

### Low & High Frequency

MSRP \$3,085.00

- Low—38 kHz to 75 kHz  
19° to 10° port/star  
10° to 5° fore-aft beam  
Max. depth 6000 ft
- High—130 kHz to 210 kHz  
8° to 4° beamwidth  
Max. depth 1500 ft
- 117 kHz of total bandwidth from one transducer

## PM111LM

### Low & Medium Frequency

MSRP \$3,410.00

- Low—38 kHz to 75 kHz  
19° to 10° port/star  
10° to 5° fore-aft beam  
Max. depth 6000 ft
- Medium—80 kHz to 130 kHz  
13° to 8° beam  
Max. depth 3000 ft
- 87 kHz of total bandwidth from one transducer

## PM111LHW

### Low & High Wide Frequency

MSRP \$3,670.00

- Low—38 kHz to 75 kHz  
19° to 10° port/star  
10° to 5° fore-aft beam  
Max. depth 6000 ft
- High—150 kHz to 250 kHz  
25° constant beam  
Max. depth 500 ft
- 137 kHz of total bandwidth from one transducer

ULTRA  
WIDE

## PM411LWM

### Low & Medium Frequency

MSRP \$5,545.00

- Low—40 kHz to 60 kHz  
40° constant beam  
Max. depth 4000 ft
- Medium—80 kHz to 130 kHz  
13° to 8° beam  
Max. depth 3000 ft
- 70 kHz of total bandwidth from one transducer

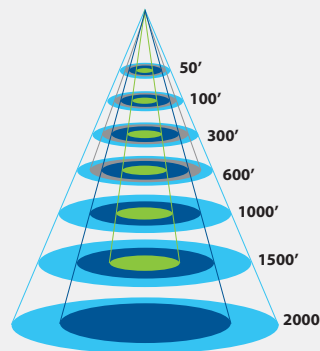
## Bottom Coverage

### Relative to Frequency and Depth

Depth	Beam Coverage at High Frequency			
	PM111LH 130 kHz- 210 kHz	PM111LM 80 kHz- 130 kHz	PM111LHW 150 kHz- 250 kHz	PM411LWM 40 kHz- 60 kHz
50 ft	6 ft	12 ft	22 ft	36 ft
100 ft	14 ft	22 ft	46 ft	70 ft
300 ft	42 ft	68 ft	134 ft	220 ft
600 ft	84 ft	136 ft	266 ft	438 ft
1000 ft	140 ft	228 ft	Too Deep	730 ft
1500 ft	210 ft	342 ft	Too Deep	1090 ft
2000 ft	Too Deep	456 ft	Too Deep	1456 ft

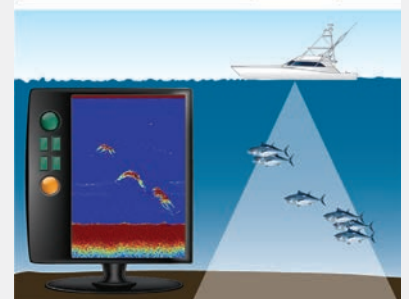
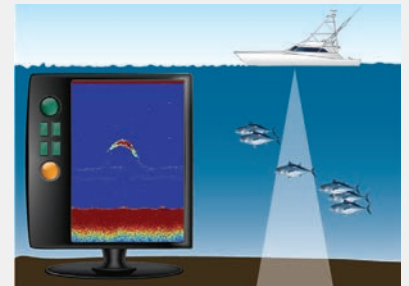
This chart compares the high and medium ceramic elements inside the transducer, showing the difference in bottom coverage under the boat.

Low frequency in each of these transducers models is the same (38-75 kHz) except the PM411LWM. This low frequency can range to 4,000 ft.



- PM111LH – High Frequency  
130 kHz-210 kHz
- PM111LM – Medium Frequency  
80 kHz-130 kHz
- PM111LHW – Wide beam  
Frequency  
150 kHz-250 kHz
- PM411LWM – Ultra Wide  
Frequency  
40 kHz-60 kHz

The fish must be in the beam to be represented on the display.

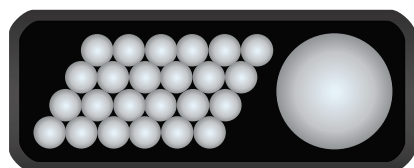


# Pocket/Keel Mount

## 2-3 kW

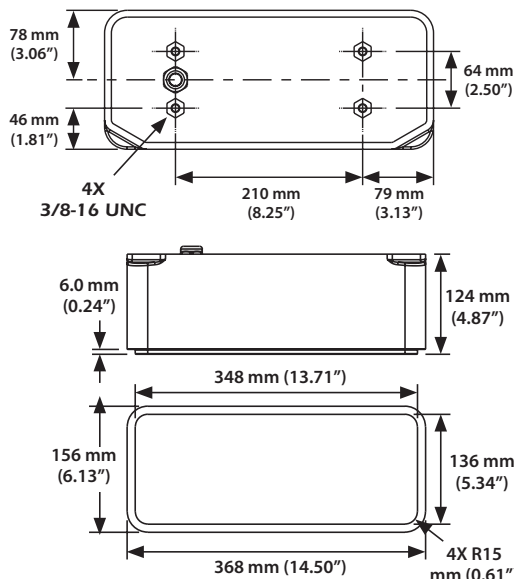
### Features:

- Depth & fast-response water-temperature sensor
- Hull Type: Fiberglass and metal stepped, planing or displacement hull types
- Hull Deadrise: Can accommodate any deadrise angle
- Engine Type: Can be used with all propulsion types



25-Internal  
Broadband Ceramic  
Assemblies

### DIMENSIONS



## CM599LH

### Low & High Frequency

MSRP \$4,145.00

- Low—28 kHz to 60 kHz  
23° to 9° port-starboard  
11° to 5° fore-aft beamwidth  
Maximum depth 10000 ft
- High—130 kHz to 210 kHz  
8° to 4° beamwidth  
Maximum depth 1000 ft
- 112 kHz of total bandwidth from one transducer

## CM599LM

### Low & Medium Frequency

MSRP \$4,470.00

- Low—28 kHz to 60 kHz  
23° to 9° port-starboard  
11° to 5° fore-aft beamwidth  
Maximum depth 10000 ft
- Medium—80 kHz to 130 kHz  
13° to 8° beamwidth  
Maximum depth 3000 ft
- 82 kHz of total bandwidth from one transducer

### WIDE BEAM

## CM599LHW

### Low & High Wide Frequency

MSRP \$4,725.00

- Low—28 kHz to 60 kHz  
23° to 9° port-starboard  
11° to 5° fore-aft beamwidth  
Maximum depth 10000 ft
- High—150 kHz to 250 kHz  
25° constant beamwidth  
Maximum depth 500 ft
- 132 kHz of total bandwidth from one transducer

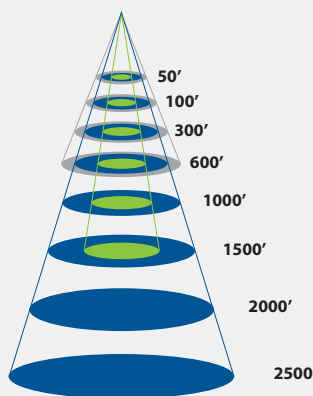
### Bottom Coverage

### Relative to Frequency and Depth

Depth	Beam Coverage at High Frequency		
	CM599LH 130 kHz-210 kHz	CM599LM 80 kHz-130 kHz	CM599LHW 150 kHz-250 kHz
50 ft	6 ft	12 ft	22 ft
100 ft	14 ft	22 ft	42 ft
300 ft	42 ft	70 ft	134 ft
600 ft	84 ft	136 ft	264 ft
1000 ft	140 ft	228 ft	Too Deep
1500 ft	Too Deep	342 ft	Too Deep
2000 ft	Too Deep	456 ft	Too Deep

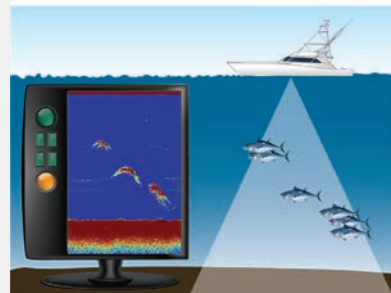
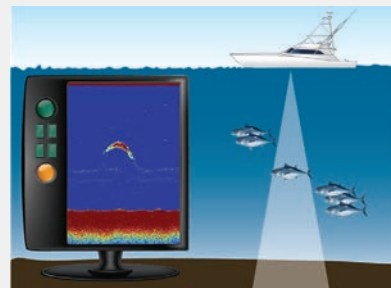
This chart compares the high and medium ceramic elements inside the transducer, showing the difference in bottom coverage under the boat.

Low frequency in each of these transducer models is the same (28 kHz - 60 kHz).  
The maximum depth range sounds to 10,000 ft.



- CM599LH – High Frequency  
130 kHz-210 kHz
- CM599LM – Medium Frequency  
80 kHz-130 kHz
- CM599LHW – Wide beam  
Frequency  
150 kHz-250 kHz

The fish must be in the beam to be represented on the display.



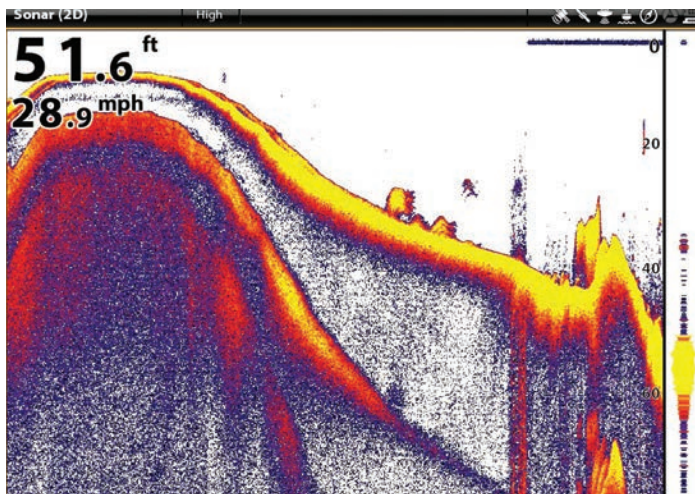
## The Chirp Advantage

Traditional sounders operate at only two discrete frequencies – typically 50 kHz and 200 kHz. This results in limited depth range, resolution, and ultimately what targets can be detected in the water column.

In contrast, Airmar’s game-changing CHIRP-ready transducers provide over 70+ kHz of bandwidth. Transmitting over a wide frequency band results in a greater opportunity to detect what is in the water column. As a result, all targets detected in the entire bandwidth will be seen on the display—even those fish holding close to the bottom—ultimately improving target detection, detail, and range resolution.

Most CHIRP transducers vary their beam width as they sweep through their frequency range (low, medium, and high). At the lowest frequency the beam is the widest and it narrows as the frequency increases.

Airmar’s new wide beam CHIRP transducers are the exception to this rule and have a fixed beam width of either 25° or 40° across the frequency band. This translates into even more coverage under the boat, revealing more fish in the water column than ever before.



Courtesy of Humminbird



## Additional Mounting Options



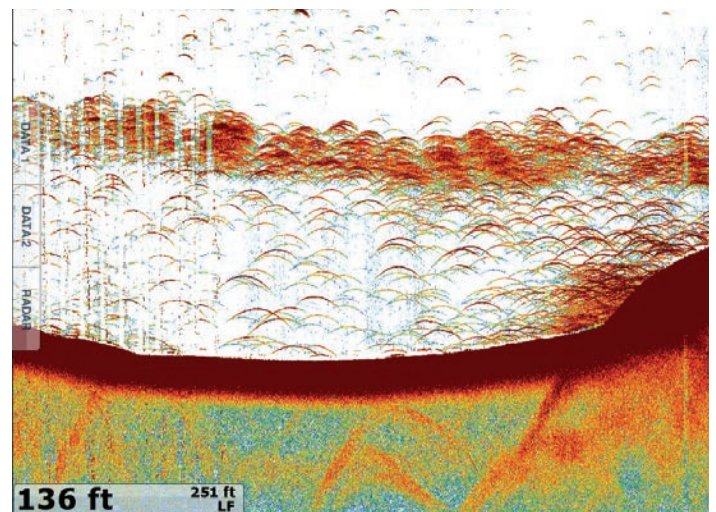
Choosing your mounting option depends on the design of the hull as well as the material it’s manufactured with, the boats intended use, and the desired level of performance.

## Need Help Choosing the Right Transducer?

Download the free, award-winning iNstall app! It’s a great tool that takes the guesswork out of selecting the right transducer for your application. Based on frequency, mounting, housing, and cable options, iNstall will reveal the available option(s) and give you instant access to their specifications. Designed for iPhone, iPad and iPod smart phones and tablets running iOS 6.1 and newer.



iNstall



Courtesy of Furuno

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

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