



# PATHFINDER™

SOLID-STATE IMO TYPE APPROVED RADAR SYSTEM

## The Next Evolution in Offshore Situational Awareness

The revolutionary Pathfinder radar system is built on Raymarine's proven and award-winning solid-state radar technology and is type-approved for CAT 2 and CAT 3 SOLAS vessels. Ideal for vessels up to 10,000 tons, including superyacht, megayacht, and OSV/deep water vessels, Pathfinder uses Raymarine's proven solid-state technology to deliver exceptional resolution and detection capabilities even in the most challenging maritime conditions. Compliant with the International Maritime Organization (IMO) standards IEC 62288 and IEC 62388, this radar stands out for its reduced maintenance, enhanced longevity, and ease of operation.

## Installation

Half the weight of comparable radars with small-diameter interconnect cables that simplifies cable runs and reduces installation time.

## Crystal Clear Returns

Pathfinder is driven by a fan-less, six-foot, low-profile open array antenna, delivering exceptional clarity and an intuitive user interface.

## Built to Last

Each model incorporates Raymarine ruggedized marine display technology and is subjected to rigorous environmental testing, significantly increasing the longevity of the system.



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**Raymarine®**

## Specifications for Pathfinder Radar System

<b>RADAR</b>	
<b>ANTENNA</b>	<b>E70630</b>
Antenna Size	6ft
Antenna Type	Slotted Array
Polarization	Horizontal
Beamwidth (Vertical)	25°
Beamwidth (Horizontal)	1.32°
Rotation Speed (rpm)	12, 24, 36, 48, 60
Max Wind Speed	100 Kn
Weight	12 Kg
<b>TRANSCEIVER</b>	<b>E70621</b>
Max Range Scale	96 Nm
Rotation Speed (rpm)	12, 24, 36, 48, 60
Power Connection	1
Data Connection	1 (Raynet)
Transmitter Frequencies (Mhz)	9370, 9400, 9430
Receiver Characteristics	Linear
Receiver Noise	< 5 dB
Peak Power Output	110 W
Power Consumption (Typical)	95 W
Power Consumption (Standby)	30 W
Power Consumption (Max)	195 W
Weight	16 Kg
Orientation Modes	H-UP, STAB H-UP, C-UP, N-UP
Stabilization Modes	Ground, Sea
Motion Modes	True, Relative
Target Tracking	100 Targets (Auto or Manual)
AIS	180 Displayed 6000 Processed
Past Positions	Off, 1-30 mins
Vectors	Off, 1-30 mins
Trails	Off, 1-30 mins
Radar Maps	Unlimited, 6,000 points per map
Acquisition Zones	2
PI Lines	Unlimited
Range Scales (Range Rings) NM	0.25 (.13) 0.5 (.25) 0.75 (.25) 1.5 (.5) 3 (1) 6 (2) 12 (3) 24 (4) 48 (8) 96 (12)

## Specifications for Pathfinder Radar System

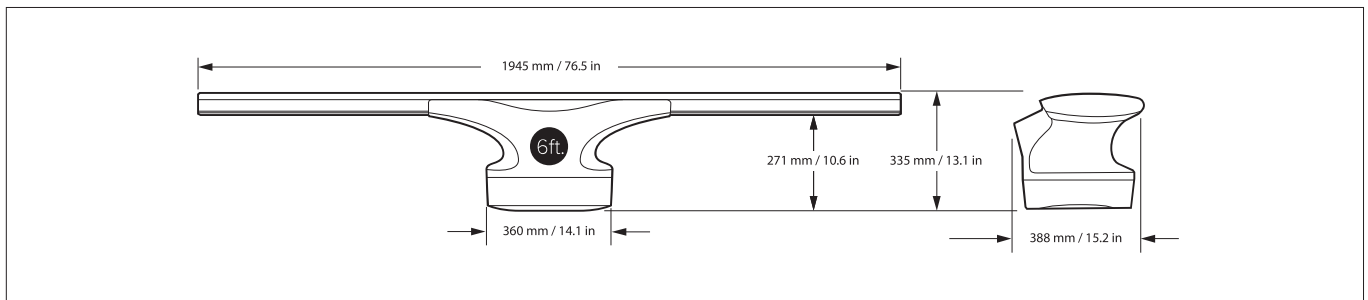
<b>DISPLAYS</b>				
<b>Pathfinder Radar Display</b>	<b>16"</b>	<b>19"</b>	<b>22"</b>	<b>24"</b>
Part Number	E70661-IMO	E70662-IMO	E70663-IMO	E70664-IMO
Screen Size	15.6"	18.5"	21.5"	24"
Resolution	1920 x 1080 pixels	1920 x 1080 pixels	1920 x 1080 pixels	1920 x 1200 WUXGA
Illumination	1300 nits	1200 nits	1275 nits	1300 nits
Viewing Distance (m)	0.6	0.7	0.8	0.9
Weight (kg)	5.9	7.6	9.9	11.3

<b>INTERFACING</b>	
<b>PATHFINDER RADAR DISPLAYS</b>	<b>ALL</b>
Ethernet Ports	3 PoE RayNet (10/100/1,000 Mbits/s)
IEC-61162-450 Enabled	Yes
Buzzer Output	2 Bare-ended wires
<b>PATHFINDER DCU</b>	<b>A80792</b>
Serial Port Inputs	8 Configurable Opto-isolated
Serial Port Outputs	6 Configurable ISO-Drive™ isolated
Alarm Output	1 Alarm output relay (N/O and N/C contacts) Activated on System Fail or Specific Alert ID
LAN	10/100BaseT, automatic polarity detection
<b>DATA SENTENCES</b>	<b>PATHFINDER RADAR SYSTEM</b>
Input	AAM, ACK, ACN, ALR, APB, BWC, BWR, DBT, DPT, DSC, DSE, DTM, GBS, GGA, GLC, GLL, GNS, GSA, GST, GSV, HBT, HDG, HDT, MDA, MSK, MSS, MTW, MWV, NSR, RMA, RMB, RMC, ROT, RRT, RTE, SRP, SSD, THS, TLB, TTD, TTM, VBW, VDM, VDO, VHW, VLW, VSD, VTG, WPL, XTE, ZDA
<b>DATA SENTENCES</b>	<b>PATHFINDER RADAR SYSTEM</b>
Output	AAM, ACK, ALC, ALF, ALR, APB, ARC, BWC, BWR, DBT, DPT, DTM, EVE, GBS, GGA, GLC, GLL, GNS, GSA, GST, GSV, HBT, HDG, HDT, MDA, MSK, MSS, MTW, MWV, OSD, RMA, RMB, RMC, RRT, RSD, RTE, SRP, TLB, TTD, TTM, VHW, VLW, VTG, WPL, XTE, ZDA

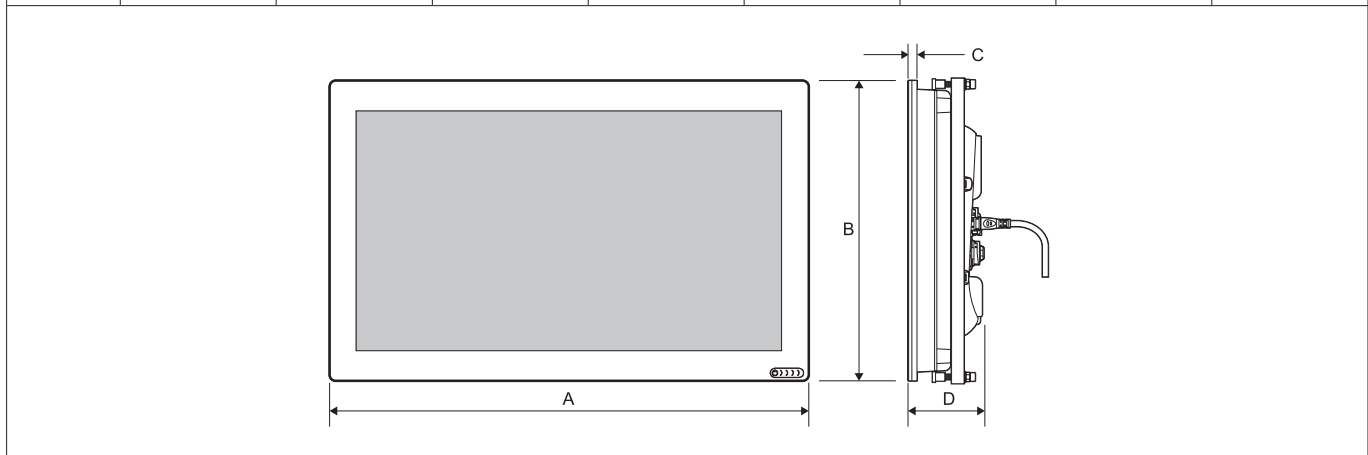
<b>POWER SUPPLY</b>		
<b>PATHFINDER DCU</b>	<b>V (DC)</b>	<b>AC</b>
Transceiver	12/24 (via VCM100)	110/230v via AC Power Kit
Pathfinder Radar Displays	12/24	110/230v via AC Power Kit
Pathfinder DCU	12/24	110/230v via AC Power Kit

## Specifications for Pathfinder Radar System

ENVIRONMENTAL	
<b>OPEN ARRAY</b>	<b>E70621</b>
Waterproof Rating	IPx6
Operating Temperature Range	-25°C to +55°C (-13°F to 131°F)
Humidity	Up to 93% at 40°C (104°F)
Maximum Wind Speed	100 kn
<b>PATHFINDER RADAR DISPLAYS</b>	<b>ALL</b>
Waterproof Rating	IPx6, IPx7
Operating Temperature Range	-25°C to +55°C (-13°F to 131°F)
Humidity	Up to 93% at 40°C (104°F)
<b>PATHFINDER DCU</b>	<b>A80792</b>
Waterproof Rating	IP40
Operating Temperature Range	-25°C to +70°C (-13°F to 158°F)
Humidity	Up to 95% at 55°C (131°F)



	PATHFINDER 16		PATHFINDER 19		PATHFINDER 22		PATHFINDER 24	
	mm	in	mm	in	mm	in	mm	in
<b>A</b>	394.9	15.54	462	18.1	534	21.02	578	22.76
<b>B</b>	248.22	9.77	289	11.3	326	12.83	387	15.23
<b>C</b>	9.0	0.35	9.0	0.35	9.0	0.35	9.0	0.35
<b>D</b>	73.96	2.91	73.96	2.91	79.75	3.14	76	3.0



**Raymarine UK Limited**  
 Marine House  
 Cartwright Drive  
 Fareham  
 PO15 5RJ  
 UK

**Raymarine**  
 110 Lowell Rd  
 Hudson  
 NH 03051  
 USA

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T: (+44) (0)1329 246 700

T: +1 603-324-7900