

NEW

E SERIES

High Performance

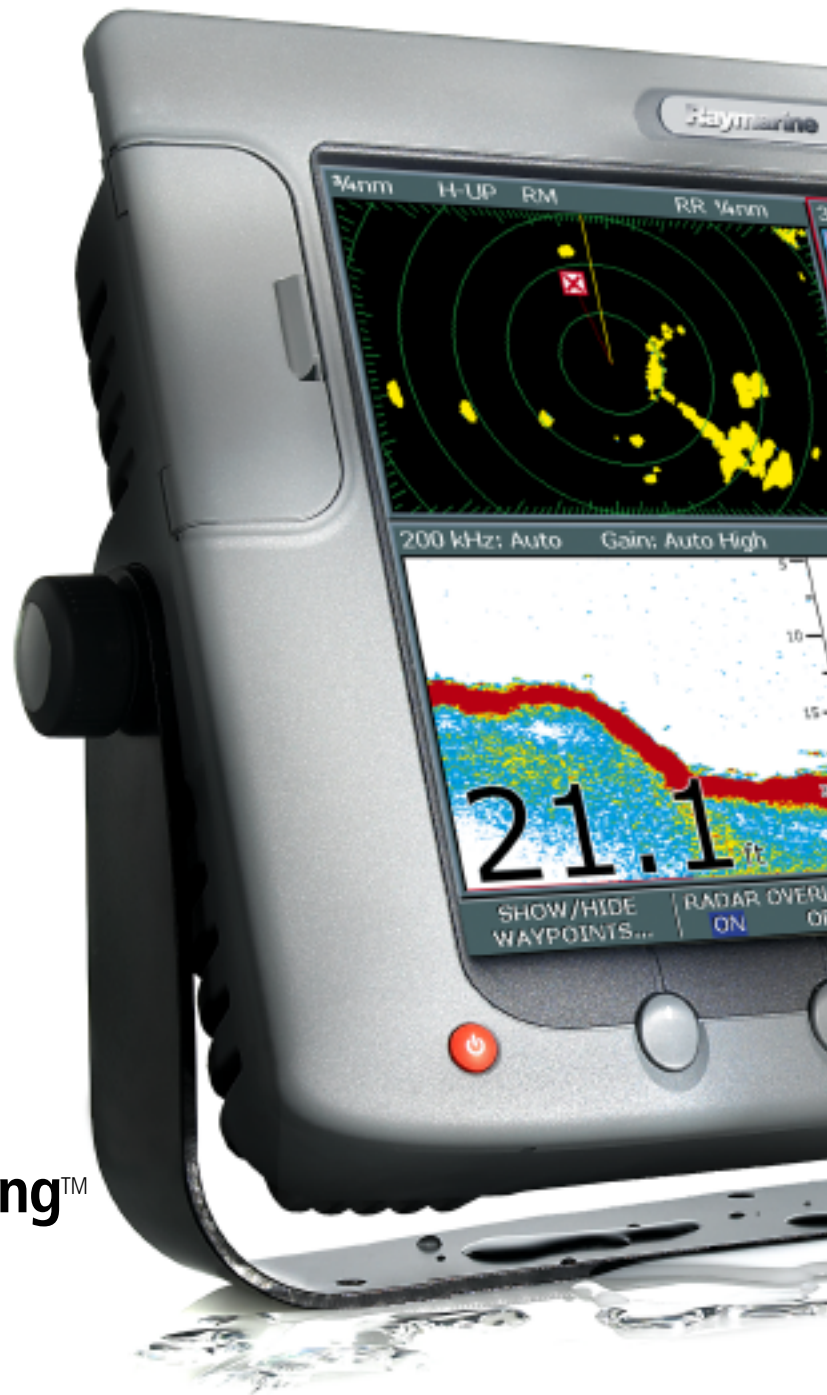
Multifunction Navigation Displays

- E80 8.4" Display
- E120 12.1" Display

Raymarine®



SeaTalk^{hs}
High Speed Network



See Where Navigation Is Going™

3-4 Multifunction Navigation

Raymarine's most powerful multifunction navigation displays.

5-6 SeaTalk^{hs} Networking

Super fast 100 Megabit networking.

7-8 Video / Instrument Integration

Display remote video sources and network with instruments and engine systems.



E120 12.1" Display



E80 8.4" Display

9-10 **Chartplotter**

Information rich Navionics vector cartography combined with satellite differential GPS.

11-12 **Digital Fishfinder**

Patented digital sonar technology for precise targeting of fish and bottom structure.

13-14 **Radar**

Raymarine radar technology delivers unmatched performance and ease-of-use.

All in One



High Performance Multifunction Displays

Our most powerful multifunction displays, Raymarine E-Series delivers chartplotter, fishfinder, radar, and video in an easy to use networked navigation system. Featuring

ultra bright displays, a customizable navigation interface, and super fast networking, E-Series sets the new standard for integrated marine electronics.



Powerful Graphics

A built in graphics coprocessor delivers maximum display performance and brilliant video.

Ultra Bright Color

Prismatic light enhancing display technology combined with high bright backlighting provides crisp, ultra bright color even in tropical sunlight.

Multifunction

Create custom navigation pages arranged in either full screen or multiple window combinations.



ULTRA BRIGHT

SeaTalk^{hs}SeaTalk^{hs}SeaTalk^{hs}SeaTalk^{hs} Networking SwitchSeaTalk^{hs}

SeaTalk^{hs}
High Speed Network

SeaTalk^{hs} Networking

Instantly transfer radar, chartplotter, fishfinder and navigation functions between E-Series displays with SeaTalk^{hs}.

SeaTalk^{hs} Network Switch

For extended systems the SeaTalk^{hs} Network switch enables connection of up to 8 network devices. This rugged network switch is marine engineered for reliable performance. Simply plug it in. This smart auto-sensing switch delivers full duplex network switching at 100 megabits per second, ensuring fast and reliable onboard networking.

SeaTalk^{hs} Features

- Network E-Series displays in dual or multi display combinations
- Simple setup, SeaTalk^{hs} is plug and play
- 100 Megabit data transfer speed

- Full data transfer and control
- No IP protocols or IT professional required
- Raymarine SeaTalk^{hs} high speed switch enables connection of up to 8 devices on the network

Video Input



Monitor Onboard Cameras or Entertainment

Radar



Open Array or Radome Antenna

SeaTalk



Raystar GPS and SeaTalk® Instruments

SeaTalk^{hs}



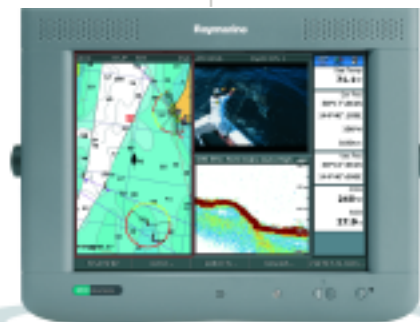
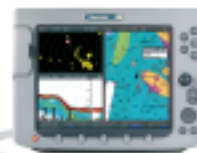
DSM300 Digital Sounder Module



SeaTalk^{hs} Crossover Coupler

For networking only two devices choose the SeaTalk^{hs} crossover coupler

M1500 15" Marine Monitor



15" Remote Monitor and Keyboard Kit

Combine with any E-Series display to create extra large 15" remote station. The direct sunlight viewable M1500 monitor and remote keyboard are fully waterproof and offer complete E-Series display control.



Video Output

View navigation data on big screen TVs, PC monitors or Raymarine's rugged M1500 marine monitor.

Integrated Video

Choose between 4 video inputs for monitoring onboard cameras or viewing onboard entertainment.

Video

- Choose 4 composite or 2 S-Video inputs
- Full screen or video in a window
- The video window can be set to automatically cycle through each video input at custom intervals
- Video input possibilities: Underwater and docking cameras, engine room monitoring, DVD, game consoles and satellite TV



Engine and Instrument Data

Keep track of engine performance with E-Series virtual engine instruments. Using NMEA 2000 protocol, E-Series displays can network with electronic engine instrument systems.



Instrument Integration

E-Series displays support Raymarine SeaTalk and SeaTalk² protocols for seamless integration with Raymarine's instruments and autopilot systems.

Instrument and Engine Data

- Data includes, tachometer, voltage, oil pressure, fuel level, fuel consumption and coolant temp
- Support for both single and dual engines
- Choose from 5 engine data display combinations

- NMEA 0183 and NMEA 2000* support
- Using the page and window customization controls, instrument data can be repeated in either full screen or within a window

* NMEA 2000 Certification Pending



Chartplotter

- Head Up/North Up/Course Up chart
- Relative, True Motion and AutoZoom
- Screen offset for a maximum "look ahead view"
- 1250 waypoints with 16-character names

- 125 routes with 50 waypoints per route
- 10 track memories with 1000 pts/track
- SmartRoute™ converts tracks into waypoints organized in a route

Coming Mid 2005 Navionics Platinum Multi-Dimensional Chartplotting



- Navigate with 3D charts, depicting bottom contours and terrain topography
- Transparently overlay aerial photo charts on top of data rich vector cartography

- View panoramic photos of popular harbors and approaches
- Enhanced ports and services guide. Use the cursor to find anything, from fuel and bait to shopping, food or entertainment.



Raystar125



Ray240

Chartplotting Technology

Satellite Differential GPS

Enjoy the extreme accuracy of WAAS SDGPS using the Raystar 125 sensor.

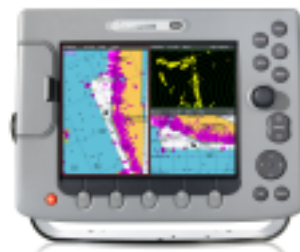
DSC VHF Position Reports

Display position reports on the chartplotter screen from DSC VHF equipped vessels.



Navionics Charts

Information rich Navionics charts on Compact Flash. SeaTalk[®] Network instantly transfers cartography between networked displays.



Radar Integration

Navigate with charts and live radar targets using radar chart overlay.



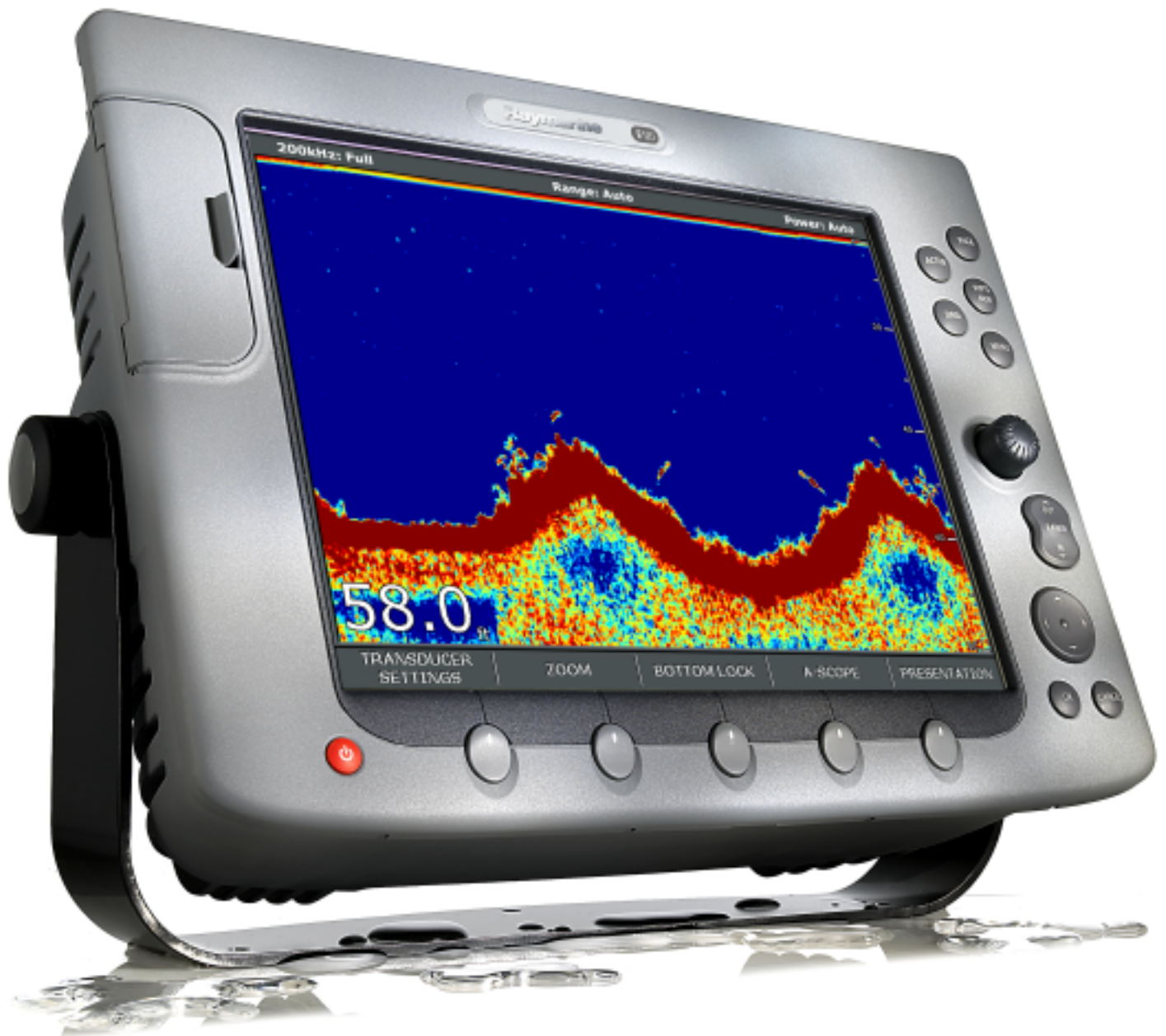
Total Chart Control

Navigate in Head Up, Course Up, North Up using two chart windows at different range scales.

Graphics Coprocessor

Ultra fast screen redraw thanks to an on board graphics coprocessor.

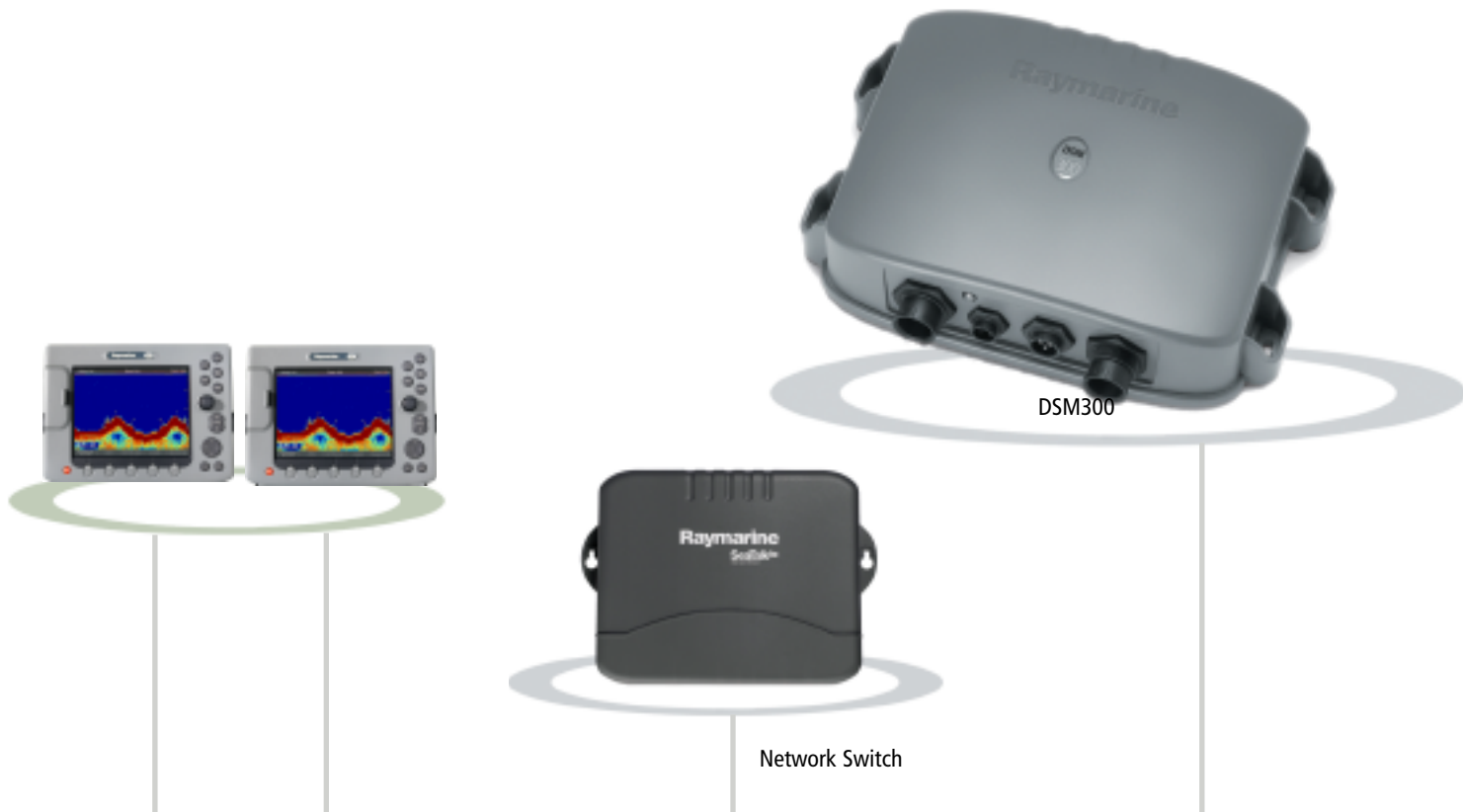




Digital Fishfinder

- Auto adaptive digital transmitter / receiver
- Color enhanced high resolution display
- Dual frequency 200/50 KHz operation
- A-scope real time sonar display

- Bottom lock mode
 - 2X, 4X, 6X zoom magnification
 - Maximum depth of 5000 ft. (1700 meters)
- Note: Actual depth performance may vary due to water, seabed and vessel characteristics



Digital Fishfinder Networking

SeaTalk^{hs} Network Switch

Expands the DSM300 digital sounder functions to multiple E-Series displays.

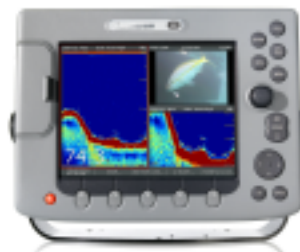
Digital Sounder Module

SeaTalk^{hs} network compatible sounder module delivers high definition digital fishfinding to every display on the network.



See Clearly

Digital receiver technology virtually eliminates clutter and automatically targets individual fish with amazing precision and detail.



Hands Off Operation

Our patented digital receiver technology provides auto adaptive control of sensitivity, ping rate and transmit power.



600 or 1000 W

Select from a full range of high and ultra high performance transducers

Visit www.raymarine.com to explore all transducer options for the DSM300.



Radar

- Auto GST™ automatic control of gain, sea clutter and tune
- Radar waypoint navigation and multiple waypoint overlay
- 1/8th to 72nm max range (Performance limited by the scanner type and position)
- Head up, Course up and North up modes
- Relative or True Motion modes



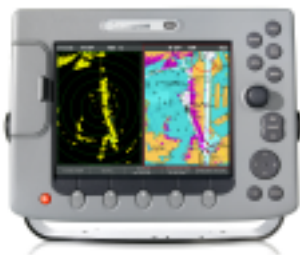
Radar Technology

Radome or Open Array

Choose between 2 or 4kW radomes or 4 and 10kW open arrays.

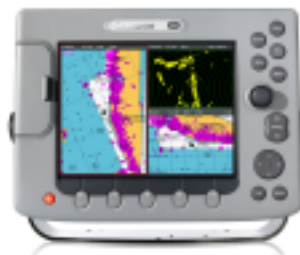
Unparalleled Performance

Raymarine radar scanners surpass conventional radars thanks to an advanced microprocessor controlled transmitter/receiver and ultra efficient low noise receiver technology.



Radar Navigation

Overlay multiple waypoints on the radar and create waypoints directly on the radar display.



Radar/Chart Overlay

Simplify radar navigation by comparing and reconciling overlaid radar targets with chart objects.



MARPA Target Tracking

MARPA (Mini Automatic Target Tracking) monitors vital target data and warns of a potential collision course.



E80 SPECIFICATIONS

POWER

Nominal Voltage (volts DC)	12v, 24v, systems
Absolute Voltage Range (volts DC)	10.7 - 32 volts
Power Consumption (typical) watts	20W

PHYSICAL

Overall Dimensions (W x H x D)	11.14" x 8.27" x 5.27" (283 x 210 x 133mm)
Product Weight lbs (kg)	9.2 lbs. (4.18kg)

Mounting Methods

Operating Temperature Range

Enclosure

Humidity

INTERFACES

INPUTS

* NMEA2000 Certification Pending

ORDERING INFORMATION

Part Number	Description
SeaTalk® Network Components	
E55058	SeaTalk® High Speed 8 Port Network Switch (for networking more than 2 devices)
E55060	SeaTalk® Crossover Coupler (for connecting two devices with no network switch)
Cables	
E55049	SeaTalk® Network Cable 1.5M
E55050	SeaTalk® Network Cable 5M
E55051	SeaTalk® Network Cable 10M
E55052	SeaTalk® Network Cable 20M
Video Accessories	
E55062	Video in (S-Video)
E55055	Video Out Cable 10M
E55056	Video Out Cable 20M
E02009	M1500 15" Marine Monitor
NMEA Accessories	
E55059	NMEA 0183 Multiplexer



E120 SPECIFICATIONS

POWER

Nominal Voltage (volts DC)	12v, 24v, systems
Absolute Voltage Range (volts DC)	10.7 - 32 volts
Power Consumption (typical) watts	30W

PHYSICAL

Overall Dimensions (W x H x D)	14" x 10.4" x 5.51" (356 x 264 x 140mm)
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Product Weight kg (lbs)

Bracket or panel (mounting hardware included)

Waterproof to CFR46 standards

Up to 95% at 35°C non-condensing

Raymarine SeaTalk® Network Port*

Raymarine SeaTalk®

Raymarine SeaTalk®/NMEA 2000 Port

Raymarine Digital SounderModule Input

Raymarine Pathfinder Radar Input

4 Video Inputs (NTSC/PAL)

BNC Connector S-VIDEO Input (Optional)

1 Video Output (VGA Connector)

1 NMEA 0183 input / 1 NMEA 0183 output



ORDERING INFORMATION

DISPLAYS

Part Number	Description
E02011	E120 High Performance Navigation Display
E02013	E80 High Performance Navigation Display

Remote Monitors And Keyboard

E02009	M1500 15" Marine Monitor
T82005	E-SERIES 15" Remote Monitor and Keyboard Station Kit
E55061	Full function Remote Keyboard (Seataik®)

GPS Options

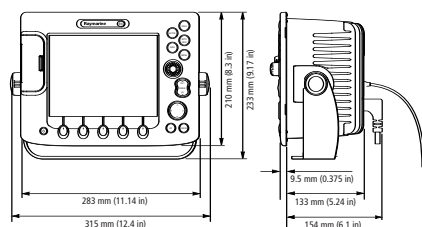
E32042	Raystar125 GPS Sensor
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Digital Sounder Module

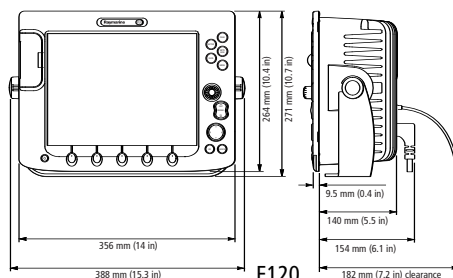
E63069	DSM300 Digital Sounder Visit www.raymarine.com for a complete list of transducer options for the DSM300
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Radar Options

Radomes	
M92650-S	2D 2kW 18" Radome
M92652-S	4D 4kW 24" Radome
Open Arrays	
T52001-S	5S 4kW 4' array
T52013-S	7S 4kW 6' array
T52012-S	9S 10kW 4' array (24 VDC only)
T52014-S	11S 10kW Antenna 6' array (24 VDC only)



E80



E120

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Raymarine®

Raymarine, the world leader in marine electronics, is dedicated to the design and manufacture of the most comprehensive range of electronic equipment for the recreational boating and light commercial marine markets. Designed for high performance and ease of use, our award-winning products are available through our global network of dealers and distributors. Product specifications subject to change without notice.