12.1" Color LCD Marine Radar

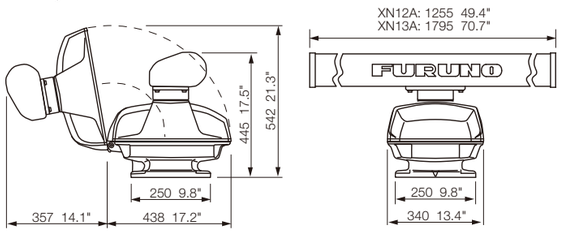
Model **8065/8125/8255**

SPECIFICATIONS	FR-8065 (6 kW)	FR-8125 (12 kW)	FR-8255 (25 kW)
GENERAL			
Maximum Range Scale	72 NM	72 NM	96 NM
Range discrimination	25 m		
Bearing discrimination	XN12A: 1.9° XN13A: 1.2°		
Minimum Detection Range	25 m		
ANTENNA			
Length	4 ft (XN12A) or 6 ft (XN13A)*		
Rotation Speed	24 rpm or 48 rpm*		
Wind Load	24 rpm: 100 kn 48 rpm: 70 kn		
Beamwidth (Horizontal)	XN12A: 1.9° XN13A: 1.35°		
Beamwidth (Vertical)	22°		
RF TRANSCEIVER			
Frequency	9410±30 MHz P0N- (X-band)		
Output Power	6 kW	12 kW	25 kW
DISPLAY			
Screen Size	12.1 inch color LCD		
Pixel Number	800 (V) x 600 (H) pixels (SVGA)		
POWER SUPPLY			
Power Supply	24 VDC		
Power Consumption	24 rpm: 86.4 W 48 rpm: 93.6 W	24 rpm: 93.6 W 48 rpm: 108 W	24 rpm: 127.2 W 48 rpm: 136.8 W
INTERFACE			
Input / Output	Input: NMEA0183 Ver. 1.5/2.0/3.0/4.0, AD-10 format Output: NMEA0183 Ver. 1.5/2.0/3.0/4.0		
ENVIRONMENT			
Temperature	Antenna Unit: -25 °C to +55 °C Display Unit: -15 °C to +55 °C		
Waterproofing	Antenna Unit: IP56 Display Unit: IP55 (front) IP22 (rear)		
EQUIPMENT LIST			
Standard	Display Unit, Antenna Unit, Power Supply Unit (for FR-8255 only), Installation materials and spare parts, Cable assy.		
Option	Auto Plotter Kit ARP-11, External Alarm Buzzer OP03-21, Cable assy., Flush Mount Kit OP03-228		

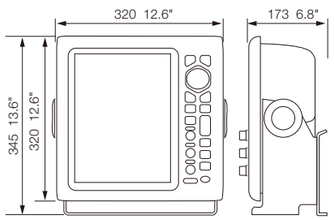
*Specify the antenna length and rotation speed when ordering.

DIMENSIONS

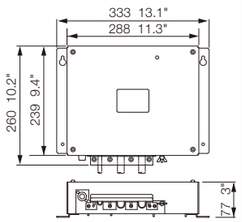
Antenna Unit
XN12A: 25 kg 55.1 lb
XN13A: 27 kg 59.5 lb



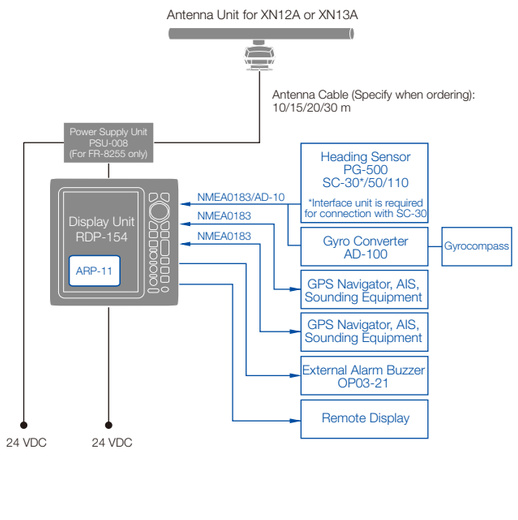
Display Unit RDP-154 5.8 kg 12.8 lb



Power Supply Unit PSU-008 2.7 kg 6 lb



INTERCONNECTION DIAGRAM



Beware of similar products

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
PLEASE READ THE MANUAL BEFORE USING THE UNIT

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www.furuno.com

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www.furunousa.com

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14075SS
Catalogue No. R-205b

FURUNO

12.1" Color LCD Marine Radar

Model **8065/8125/8255**
6 kW 12 kW 25 kW

AUTO Auto Tuning
AIS AIS
Target Tracking Target Tracking
Enhanced Sunlight Viewable Enhanced Sunlight Viewable
UHD Ultra High Definition

www.furuno.com

Equipped with state of the art signal processing and UHD™ digital radar technology!

The 12.1” color radar FR-8005 series features state of the art signal processing, which makes it easier to identify targets in heavy rain and poor visibility. The FR-8005 radar can discern between rain and surface reflections, providing the ability to find and track the movement of rain clouds as well as removing unnecessary echoes. For tracking the movement of other vessels at sea, “True Motion Trails” can be displayed as well as AIS/TT target-tracking with a zoom display function. When the vessel is in motion, the radar echoes move smoothly on the main display thanks to the “True View Mode”.

- **One-touch auto-adjust settings for Gain/Sea clutter/Rain clutter.**
- **48 rpm high-speed antenna rotation. Displays information clearly in narrow passages and on high-speed vessels.**
- **Wide viewing angle LCD for great visibility from any direction.**

Advanced Signal Processing

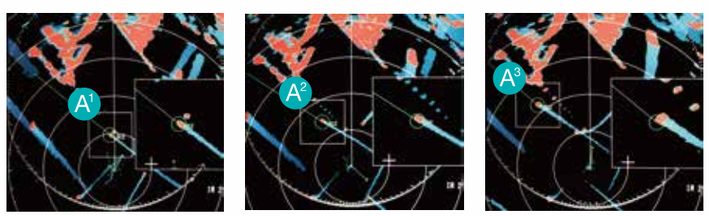
Even during rainfalls or severe weather conditions, radar echoes are clearly displayed, and unnecessary echoes can be removed instantly with ease. Compared with current radars (FR-8002 series) the technology for removing sea, rain and snow clutter has been greatly enhanced utilizing FURUNO’s state of the art knowledge in digital signal processing.

A/C Rain turned off, the marina is completely covered by the rain echo.

A/C Rain turned on, the marina appears clearly.

Target-Tracking Zoom Display Function

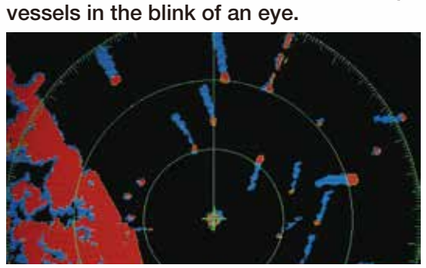
When using the Target mode, vessels close by and vessels on intersecting courses are automatically displayed zoomed in. These targets will remain displayed for as long as they pose any concern. Target Trails are also displayed, making it easy for the user to determine the movements of individual vessels.



※AIS transponder and ARP-11 are required to use the zoom display function

True Trail Mode

When using the True Trail Mode, moving objects will show up on the main screen with a colorful trail. These trails make it possible to see the movement of nearby vessels in the blink of an eye.



※ Heading data and positional data are required

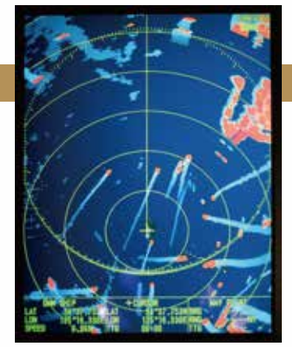
True View Mode

The radar echoes move smoothly on the main display thanks to the “True View Mode”. The True View Mode is based on the head-up mode. During the radar sweep, the echoes move according to the heading of your ship. Since the echoes move in real-time, the discrepancy between an observed target and what is displayed on the radar screen is greatly reduced.

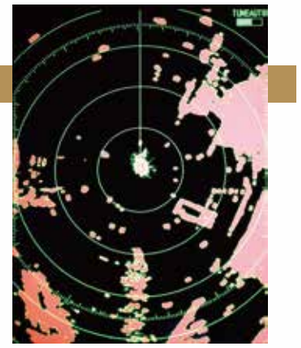
※Heading data is required to use the True View Mode

Full-Screen Mode and Off-Center Mode

Make use of the whole display surface with the Full-Screen mode, giving you more information when making important decisions. When combining Full-Screen mode with Off-Center mode any target or point of interest can be observed in detail. The overlay information can be turned off, to observe targets obstructed by the text as well as providing an unobstructed radar view.



Off-center mode

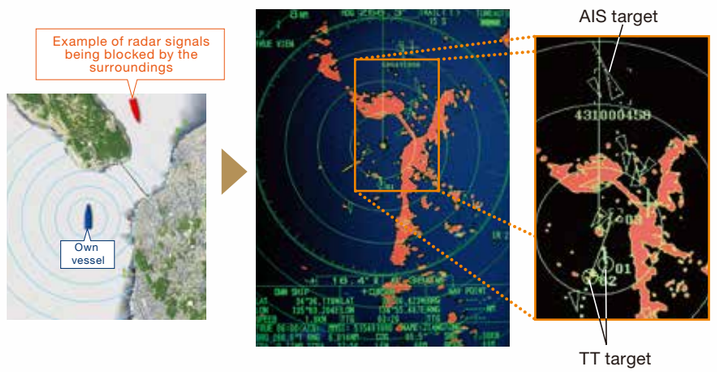


Without overlay information

Target tracking (TT)*1 and AIS display*2

The Target Tracking (TT) feature continously tracks and provides positional information for up to ten targets.

An AIS device-equipped FR-8005 series radar can track target heading, name, speed and direction of movement. With AIS it is possible to identify and track the movement of other vessels in heavy fog, during nighttime and otherwise difficult conditions. Another benefit is that with AIS you can identify obscured targets that the radar signals cannot reach, giving you more time to act. AIS can display up to 100 targets simultaneously, TT can display up to 10 different targets simultaneously.

*1 The optional ARP-11, heading data and speed data are required

*2 AIS receiver and heading data are required