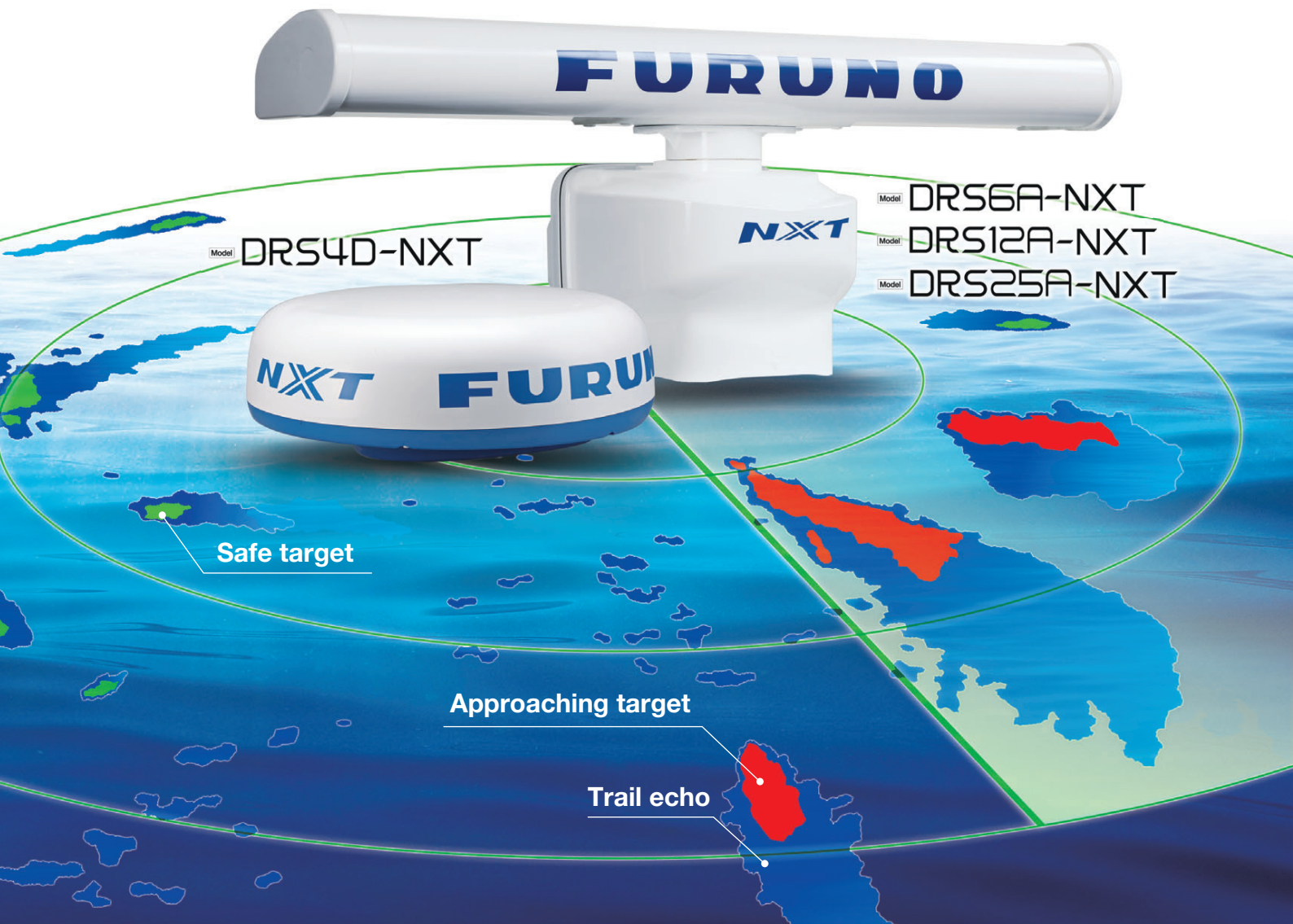


FURUNO

SOLID STATE DOPPLER RADAR

NXT SERIES



More details on
www.furuno.com



The **NXT** chapter in Radar

Model **DRS4D-NXT**
Radome type



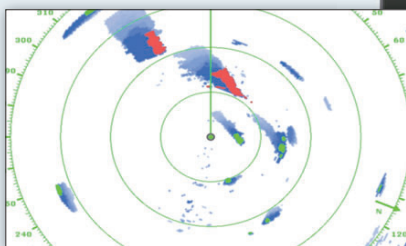
DOPPLER



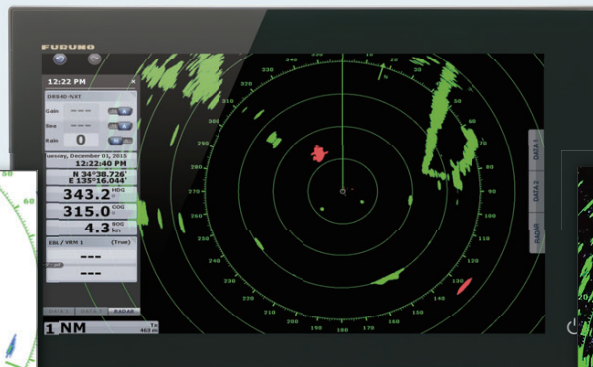
TARGET ANALYZER

Target Analyzer™ function utilizing Doppler technology spots hazardous targets instantly!

The NXT Radars are the first radars in the world to use FURUNO's exclusive Target Analyzer™ function. Targets that are approaching your vessel automatically change color to help you identify potentially dangerous targets. Green echoes are targets that stay stationary, or are moving away from you, while red echoes are hazardous targets that are moving towards your vessel. Echoes dynamically change colors as targets approach, or get farther away from your vessel. Target Analyzer™ improves situational awareness and can increase safety by showing you which targets to look out for. Additionally, when the rain mode is activated, rain echoes are shown in blue. This mode is particularly useful as it has the capability to detect targets masked by rain clutter.



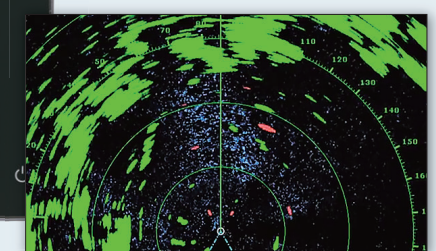
Target Analyzer™ clearly shows hazardous targets in bright red (Echo trail activated)



NavNet TZtouch2

Approaching targets are displayed in red

- Approaching targets
- Others
- Rain (Rain mode must be "on")



When the rain mode is "on" rain echoes are shown in blue

- ▶ **Solid-State pulse compression Doppler Radar**
No preheating time, low energy consumption (no use of a magnetron)
- ▶ **Revolutionary Target Analyzer™ function instantly identifies hazardous targets**
- ▶ **Fast Target Tracking™ and Auto Target Acquire function, up to 100 targets**
- ▶ **RezBoost™ beam sharpening to increase the resolution**
- ▶ **Effective horizontal beam***
Can reach a value of 0.7° with DRS6A-NXT (XN13A), and 2.0° with DRS4D-NXT (when using RezBoost™) *the lower the better
- ▶ **Bird Mode to find the best fishing grounds by tracking birds**
- ▶ **Simple installation, no need to open the radome (DRS4D-NXT only), external PSU is not required**
- ▶ **New smart-connector cable for retrofitting existing DRS cable installations (DRS4D-NXT only)**

technology!

Enhanced analytics and improved detection to keep your journey safe

FURUNO

NXT

Model DRS6A-NXT

Model DRS12A-NXT

Model DRS25A-NXT

Open array type

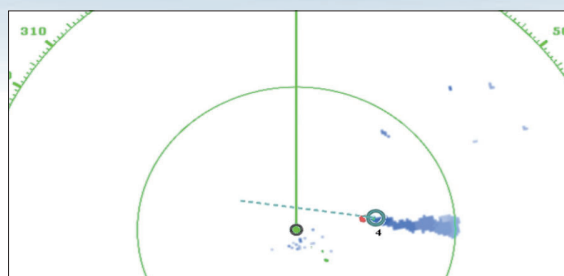
*3 antenna lengths : 3.5 ft (XN10A), 4 ft (XN12A), 6 ft (XN13A)

Fast Target Tracking™ and Auto Target Acquire function

With **Fast Target Tracking™** activated, it only takes a few seconds for a vector to be displayed once the target is selected, manually or automatically with the **Auto Target Acquire function**.

When the **Auto Target Acquire** function is **on**, approaching targets within 3NM range from own ship, which are potentially hazardous, are automatically acquired by Doppler calculation and will trigger an alarm*.

Together, Up to 100 targets can be acquired simultaneously, increasing considerably the safety and simplifying estimation of other vessel's course and speed.



Approaching vessel with target vector and trail

*TCPA setting required

RezBoost™ beam sharpening

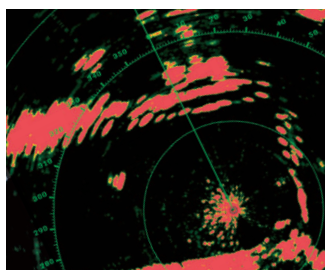


RezBoost

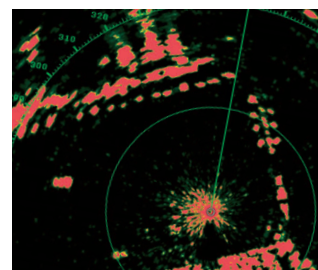
FURUNO's exclusive RezBoost™ technology has been incorporated into our Radar units for enhanced resolution and impressive performance.

With RezBoost™ set to MAX, the sharpness offers an incredibly detailed image with more targets and less clutter.

(the pictures show images captured by the DRS4D-NXT with Standard RezBoost™ and Max RezBoost™)

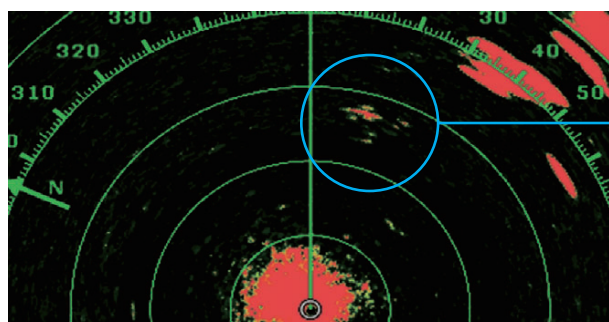


RezBoost™ standard (DRS4D-NXT)

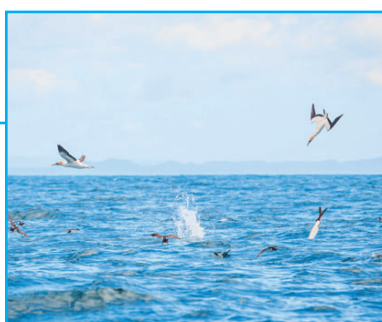


RezBoost™ Enhanced, MAX setting (DRS4D-NXT)

Bird Mode



Bird echoes



Actual scene

NXT Radars feature a new Bird Mode that helps you identify birds gathering around schools of fish at the sea surface. The Bird Mode adjusts the gain and sea settings automatically for optimal visibility.

SPECIFICATIONS OF

Model DRS25A-NXT, **Model** DRS12A-NXT, **Model** DRS6A-NXT, **Model** DRS4D-NXT

ANTENNA

DRS6A/DRS12A/DRS25-NXT
 Slotted waveguide array
 Vertical beam width 22°
 Horizontal beam width 2.3° (XN10A), 1.9° (XN12A), 1.4° (XN13A)
 Antenna rotation speed 24/36/48 rpm range coupled or 24 rpm fixed



DRS4D-NXT
 Radome (24°)
 Vertical beam width 25° (-3dB)
 Horizontal beam width 3.9° (-3dB) Adjustable between 2.0° and 3.9° (effective with RezBoost control)
 Antenna rotation speed 24/36/48 rpm range coupled or 24 rpm fixed (select)



RADAR FUNCTION

Output power 25 W (DRS4D-NXT), (DRS6A-NXT)
 100W (DRS12A-NXT) / 200W (DRS25A-NXT)
 Tx frequency 3 channel, auto/manual selectable

Channel	PON (MHz)	QON (MHz)
1	9380	9400
2	9400	9420
3	9420	9440

	DRS6A-NXT	DRS12A/DRS25A-NXT	DRS4D-NXT
Ranges Scales [NM]	0.0625-72	0.0625-96	0.0625-48
Pulse Length (PON) [us]	0.04-1.2	0.04-1.2	0.08-1.2
Pulse Length (QON) [us]	5-48	5-48	5-18
PRR [Hz]	700-2000	700-2000	1100
Tx frequency [MHz]	9380-9440		

Minimum range DRS6A/DRS12A/DRS25A-NXT: 10 m, DRS4D-NXT: 20 m
 Range resolution DRS6A/DRS12A/DRS25A-NXT: 10 m, DRS4D-NXT: 20 m
 Range accuracy 1% of range in use or 10 m, whichever is the greater
 Bearing accuracy ±1°

INTERFACE

Number of ports LAN: 1 port, Ethernet, 100Base-TX, RJ45
 Data sentences IEC61162-1/2
 Input GGA, GLL, GNS, HDG, HDM, HDT, RMA, RMC, THS, VHW, VTG

POWER SUPPLY

DRS6A/DRS12A/DRS25A-NXT: 12/24 VDC: 9.5/5.0 A max.
 DRS4D-NXT: 12-24 VDC: 2.5-1.3 A

ENVIRONMENT

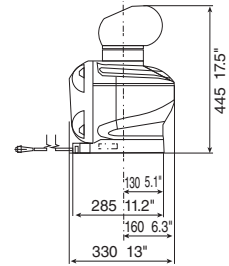
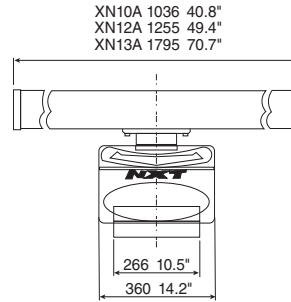
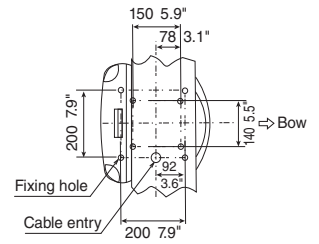
Ambient temperature -25 °C to +55 °C (storage: -30 °C to +70 °C)
 Relative humidity DRS6A/DRS12A/DRS25A-NXT: 95% or less at +40 °C
 DRS4D-NXT: 93% or less at +40 °C
 Degree of protection DRS6A/DRS12A/DRS25A-NXT: IP56
 DRS4D-NXT: IP26
 Vibration IEC 60945 Ed.4

EQUIPMENT LIST

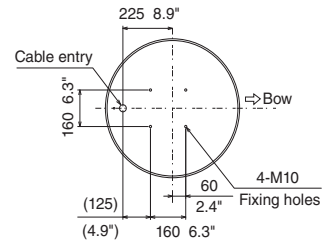
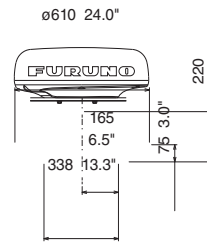
DRS6A-NXT/DRS12A-NXT/DRS25A-NXT
 Standard Scanner Unit (RSB-137-119), Radiator, Installation Materials, Spare Parts
 Option LAN cable 2/5/10 m, Joint Box (TL-CAT-012)
 DRS4D-NXT
 Standard Radar Sensor (RSB-135-115), Installation Materials, Spare Parts
 Option Radome Mount (OP03-208), (OP03-239) LAN cable 2/5/10 m, Joint Box (TL-CAT-012)

Antenna Unit

DRS6A/DRS12A/DRS25A-NXT
 3.5 ft Open Array NXT Radar 22 kg 48.5 lb
 4 ft Open Array NXT Radar 25 kg 55.1 lb
 6 ft Open Array NXT Radar 27 kg 59.5 lb



DRS4D-NXT
 7.3 kg 16.1 lb



Interconnection Diagram

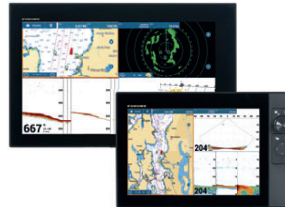


Radar Sensor

DRS6A/DRS12A/DRS25A-NXT DRS4D-NXT



NavNet TZtouch 3



NavNet TZtouch 2/1



Ethernet

DRS12A-/DRS25A-NXT compatible software version: 6.0.1/6.21 or later (TZT/TZT2)
 DRS6A-NXT compatible software version: 5.0.1 or later (TZT/TZT2)
 DRS4D-NXT compatible software version: 4.2.1 (TZT), 3.0.1 (TZT2) or later

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1-C-20043LB
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