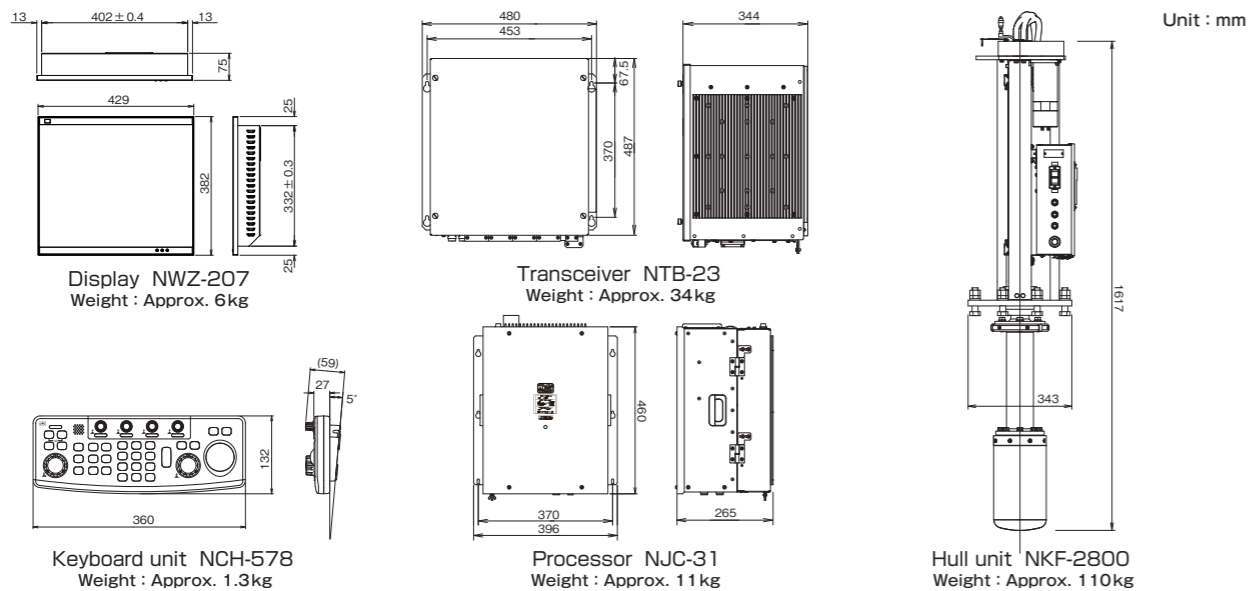


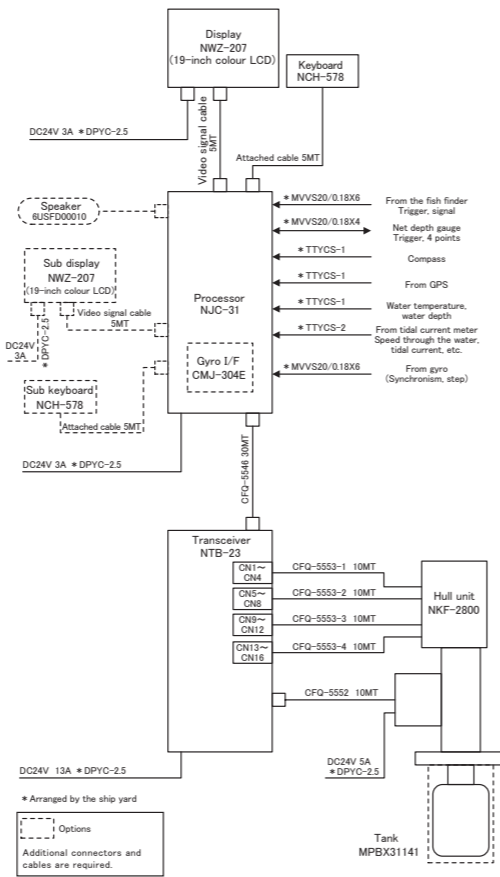
## Specifications

Display	
LCD size	19-inch color LCD SXGA
Pixel count	1280 x 1024 pixels
Display motion	Head up, North up
Display mode	Full screen, normal screen, Off center = approx. 1.5 x normal range (max. less than 5000m)
Split screen mode	Audio split screen, fish finder split screen
Information display	Ship information (latitude and longitude, speed relative to ground, speed relative to water, date and time) Water temperature and water depth information (graph) Current display (5 layers, graph, values) Net depth meter (4 points, graph, values) Fish school information (histogram) Event information (5 points, direction, distance)
Added features	5 types of fish image settings, interference elimination, clutter, signal processing, automatic elevation controls, fish school alarm, and auto follow for fish schools
Range	16 preset ranges Select from 24 types from 100 m to 2000 m 4 types of preset ranges (changeable)
Audio output	800 Hz/2W, load resistance 4Ω, manual rotation/automatic oscillating sound
Transmission	
Transmission mode	OMNI (full-perimeter transmission): pulse width modulation (PWM) D previously amplified
Transmission frequency	62 kHz
Pulse width of transmission	0.4 ms to 36 ms (range link / function for manual change available)
Transmission power reduction	11 levels (switch manually)
Reception	
Reception mode	Straight amplifier, full digital beam form
Other functions	RCG, AGC, TVG
Stabilization	Full circumference ±20° vertical oscillation and horizontal oscillation (Depression angle range: -5° to 30°)
Tilt range	-5° to 60°
Hoisting device	
Stroke	600 mm
Time for vertical operations	Under 20 second
Resistance to the speed of the ship	Maximum 18 kn (16kn during vertical operations) Function for auto retraction triggered by speed of the ship included
Power supply	DC 21.6 to 31.2 V
Power consumption	Average 0.5 kW, maximum 30 A (when beginning to hoist)

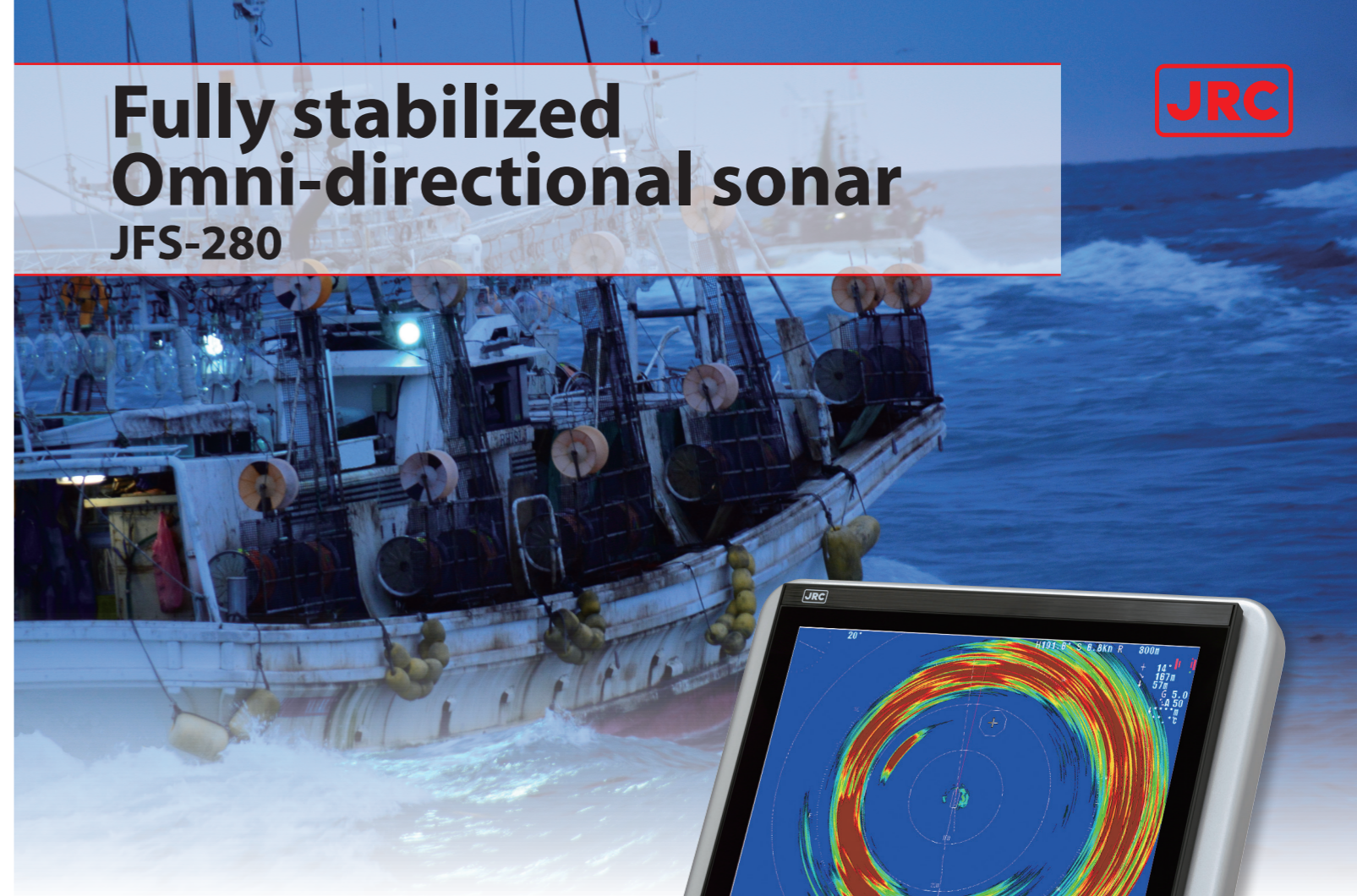
## Dimensional outline drawing



## System drawing



# Fully stabilized Omni-directional sonar JFS-280



**Stabilizer function never misses targeted fish school in stormy seas**

- Higher output and longer pulse
- Stainless steel dome transducer
- Quick variable beam angle
- Easy to use keyboard
- SXGA pixel resolution (1280 x 1024)

• Specifications may be subject to change without notice.

For further information, contact:

**JRC** Japan Radio Co., Ltd.  
Since 1915

## Features

# High performance sonar capable of detecting any type of fish

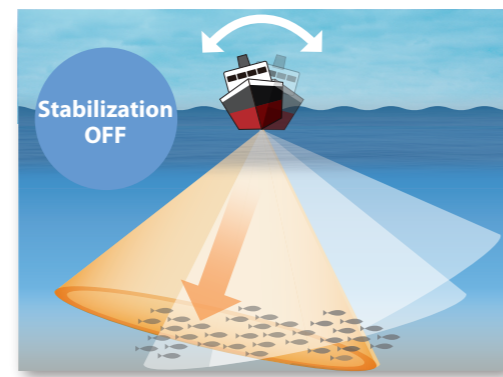


### Enhanced fish tracking performance by the stabilizer function

The high-precision stabilizer function installed in this compact sonar ensures tracking of a target fish school even in rough seas.



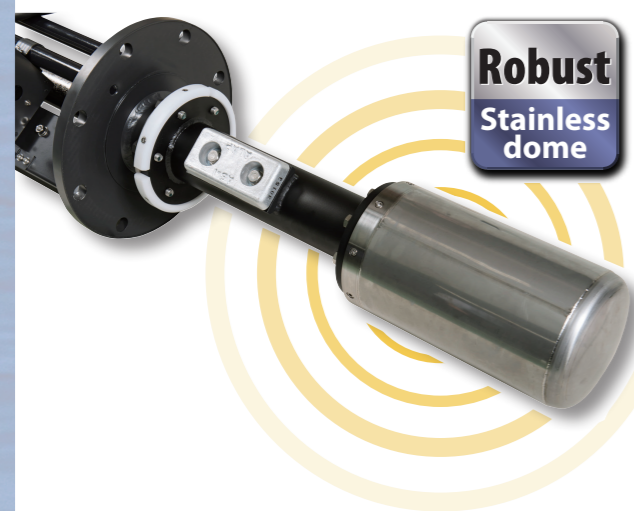
Stable beams keeping targets on track



Beams unstable due to ship motions

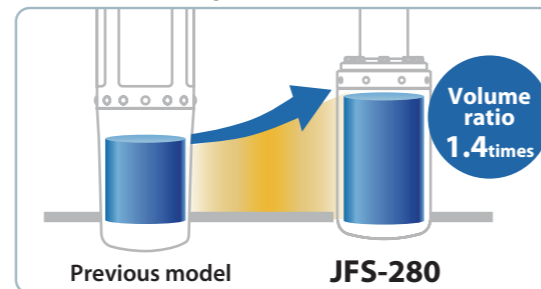
### Newly designed transducer with significantly expanded detection range

High beam output and long pulse by increasing the size (1.4 times of its predecessor)



**Robust  
Stainless  
dome**

#### Comparison of sizes



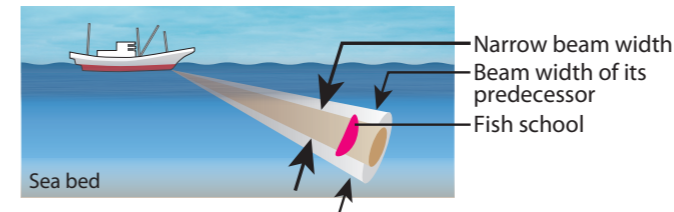
	Previous model	JFS-280
Pulse width	10 ms	▶ 36 ms
Range scale	50~1600 m	▶ 100~2000 m

- Stainless steel dome transducer with a strong anti-corrosion feature, contributing to a reduction of maintenance cost
- Safety design that automatically stores the transducer when the vessel speed exceeds the specified level
- Hoisting unit designed to shut down the power immediately at abnormality

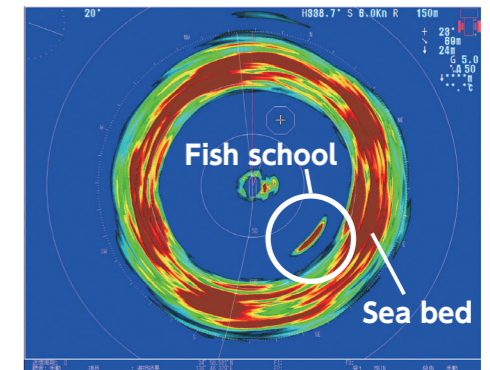
## Operation

### Enhanced visibility by the narrow-angle beams

Quick beam angle change function to detect fish schools easily  
Narrow angle beams provide a sign of a weak reflection of a fish school as well as improved visibility of schools of shoal fish and rock fish

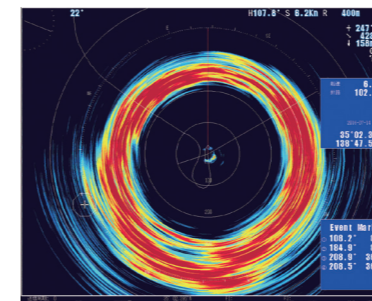


Beam width	Previous model	JFS-280
Transmission	14 degrees	▶ 7 degrees
Reception	16 degrees	▶ 12 degrees

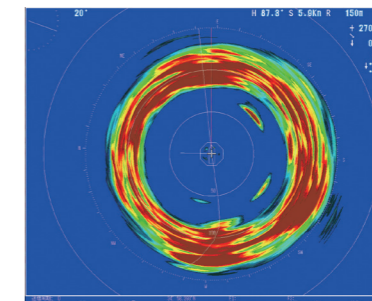


### Optimum mode selection according to the operation condition

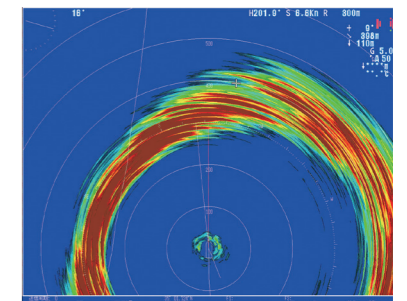
The JFS-280 provides high-definition images covering 32 color video output with a sharp 19-inch high resolution LCD (1280 x 1024 pixels). The JFS-280 clearly displays the distribution and density of a fish school. You can select the most suitable mode according to your operation condition.



Normal view



Full screen



Off-center

### High operability inherited from the successful predecessor

Five optimum fish types are preset in the IMAGE knob. You can select the suitable operation simply by turning the knob.

Fish types registered in the IMAGE knob	A : Normal prospecting	D : Bottom fish
	B : Sardine and mackerel	E : Bonito and tuna
	C : Squid and saury	



### Components

Item name	Model	Remarks
Display	NWZ-207	
Keyboard	NCH-578	
Processor	NJC-31	
Transceiver	NTB-23	
Hull unit	NKF-2800	
Transducer	CHC-2800	Included in NKF-2800
Connection cable and spare parts		

### Option

Item name	Model
Tank	MBPX31141
Speaker	6USFD00010
Gyro I/F	CMJ-304E
Desktop frame	CWB-1594
Sub display	NWZ-207
Sub keyboard	NCH-578