

**PRODUCT NAME** Wave Analyzer

**MEASURING RANGE**

1. Wave height 0.10 to 15.0 m
2. Wave period 4.00 to 16.00 s
3. Wave direction 0.00 to 359.99°
4. Wave component 2 max.
5. Bearing -140 to +140° (from the bow)
6. Distance 150 to 1,200 m

**SEA WEATHER CONDITIONS**

1. Sea state code 3 minimum (wave height: 0.5 m or above)\*
2. Beaufort scale 3 minimum (wind speed: 3.4 m/s or above)\*
3. Sea Depth 0.5 times or more of the measured wavelength  
\*The measurement may be lowered when the conditions are not enough.

**MONITOR (USER SUPPLY)**

1. Display resolution SXGA/UXGA/FHD
2. Language English

**DATA INPUT / OUTPUT**

- 1. Data sentence**  
 LAN (Input) MWV  
 PFEC (Output) RAww1, RAww2

**SYSTEM REQUIREMENT**

1. OS Windows10 Pro/Home
2. CPU Intel Corei5 or later
3. GPU NVIDIA GeForce GTX1050, 384 cores, VRAM 2GB or more
4. SSD/HDD 128GB or more
5. Memory capacity 4GB or more
6. Interface LAN:1port -Ethernet 100Base-TX  
 RS-232C:1port (USB/RS-232C converter available)  
 USB:2port (for dongle and serial communication)

**EQUIPMENT LIST**

1. CD-ROM (Wave Analyzer and Operation Manual)
2. USB Protection Key
3. Installation Manual

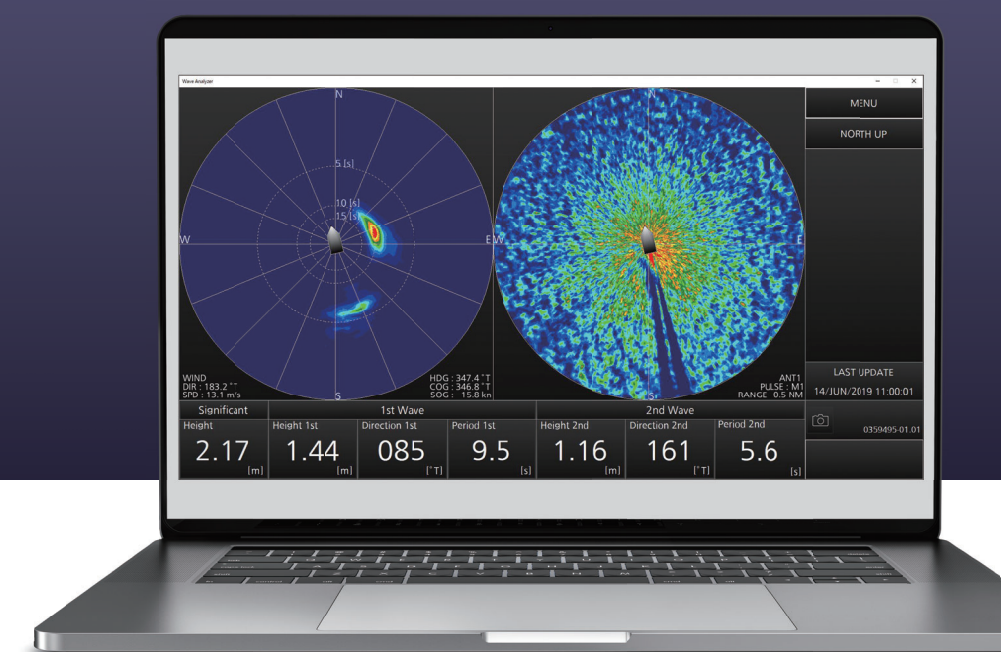
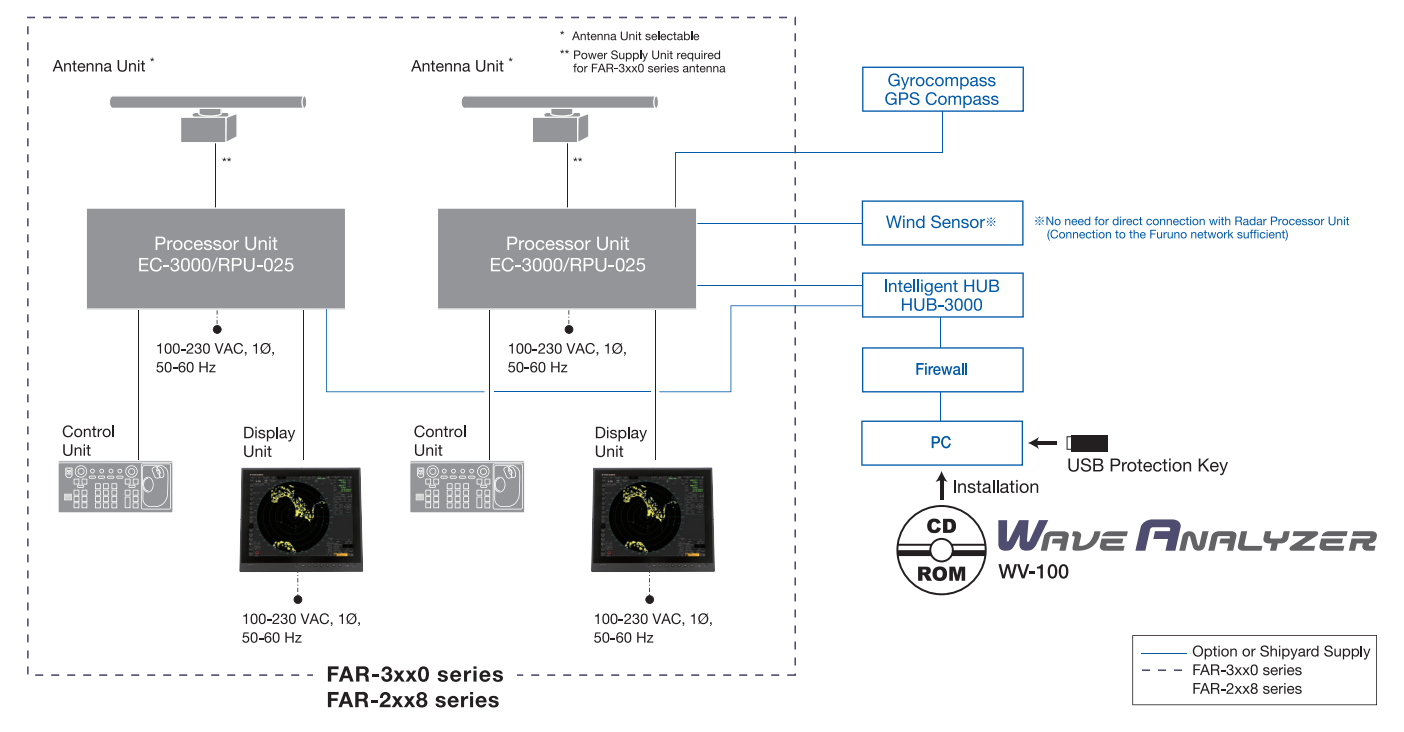
# WAVE ANALYZER

Model: WV-100

## Support To Visual Observation

with accurate digitized wave information

**INTERCONNECTION DIAGRAM** WV-100



Beware of similar products

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1-A-19121LB  
 Catalogue No. CA000001354

# The power of digitized information to support visual observation.

## Economical and safe navigation

Leveraging the performance of the FAR-2xx8 and FAR-3xx0 Radars, the Wave Analyzer WV-100 allows real-time monitoring and analysis of wave echoes and ensures safety at sea even at night. Finally, data sharing between ship and shore and between vessels is available for quick adjustment, economical route planning, and efficient traffic management around ports, where monitoring of sea conditions is required to guarantee the safety of all ships.

\*As the Wave Analyzer is a computer-based program, it does not affect the performance of the Radar system.

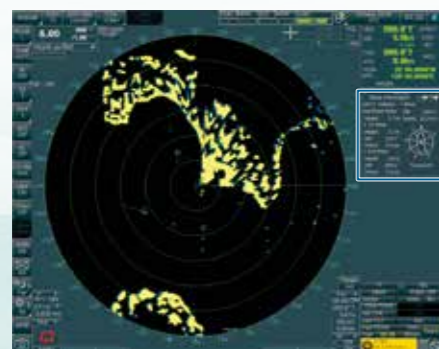
### World's First Wave Analyzer/S-band antenna compatibility

Possible to switch X-Band, S-Band and Solid State antennas according to weather conditions.



### Display wave data on the Radar monitor

The information can be displayed on both the PC screen and the Radar screen.



**Wave Information**

ANT-1 X-BAND ▲ Wind

Significant Wave DIR 324.3°

Height 1.7 m Speed 22.2 m/s

▲ 1st Wave

Height 1.2 m

DIR 122.2°

Period 9.6 sec

▲ 2nd Wave

Height 0.8 m

DIR 039.2°

Period 9.4 sec

True-North

### Automatic adjustment function

It is the first time that a Wave Analyzer incorporates an automatic adjustment function that frees the user from calibrating the Wave Analyzer following the installation.

In addition, the influence of a sudden sea condition change is minimal and does not affect the quality and accuracy of the wave information obtained.

### Real-time wave data output

Via serial transmission, data can be output to any external compatible system (Automated weather report system and Dynamic position system .etc).

## Clear and intuitive readings

Displays wave data, echo, and system information on a PC monitor.

Significant	1st Wave			2nd Wave		
Height	Height 1st	Direction 1st	Period 1st	Height 2nd	Direction 2nd	Period 2nd
1.71 [m]	1.22 [m]	119 [°T]	9.6 [s]	0.80 [m]	028 [°T]	9.0 [s]

### Significant wave height

The significant wave height is a statistical value obtained by averaging the height of the one-third highest waves when observing the specified area.

### [1st Wave] [2nd Wave]

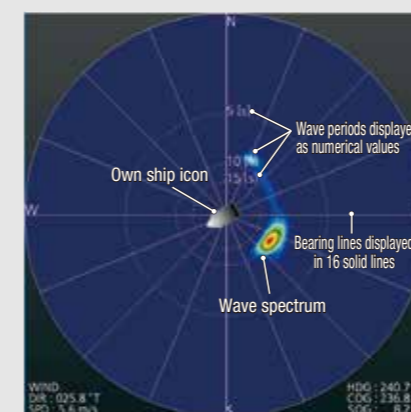
Among the observed waves, the two most outstanding waves are selected and assigned as [1st Wave] and [2nd Wave] for reference. There is no distinction made between wind waves and swells for this selection.

### ● Radar information

- ① ANT3 S-MAG
  - ② PULSE : S1
  - ③ RANGE : 0.5 NM
- ①Antenna ID, Band width, Transceiver type  
②Pulse width ③Display range

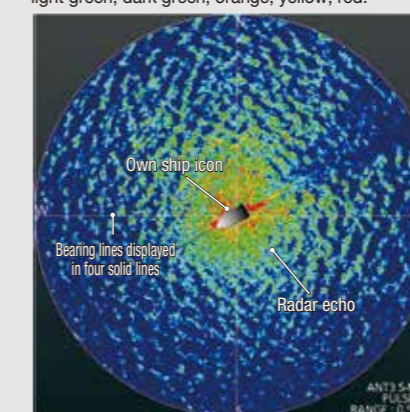
### ■ Wave spectrum display

The Color of the wave spectrum indicates the relative intensity of the wave spectrum display.



### ■ Radar echo display

The absolute intensity of the radar reflection from the wave increases in order of dark blue, light blue, light green, dark green, orange, yellow, red.



### ● System information box

- ① SEA TRIAL MODE
  - ② ADJUST: MANUAL
  - ③ 0359495-99.02
- ①Shown in the sea-trial mode. (No indication in the normal mode.)  
②Shown in yellow when setting the wave height analyzing mode to Manual. (No indication for Auto mode.)  
③Programming version NO. this software.

### ● Camera icon

📷 Takes a screenshot.

### ● Alert information box

⚠️ Click the alert icon to display the [Alert Status] screen.