

**About WASSP**

Designed and manufactured by Electronic Navigation Ltd (ENL) in New Zealand under ISO 9001/2008 certification, WASSP systems are designed, developed and tested to meet the rigorous international demands of the Commercial Fishing Industry - lobster fishing, trawling, seiners and line fishers.

Over many years, ENL and Furuno Electric Co., Ltd have built a strong partnership to offer a wide range of services, as well as developing new products for the fishing marketplace incorporating our innovative and unmatched expertise.



Innovative Multibeam Technology

WMB-160F-CT (160 kHz) / WMB-80F (80 kHz)

**SPECIFICATIONS OF WASSP**

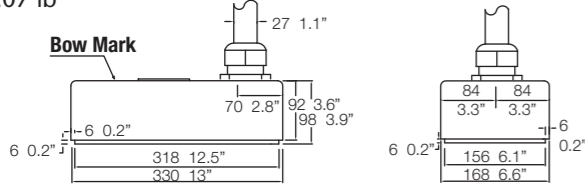
	WMB-80F	WMB-160F-CT
Frequency	80 kHz	160 kHz
Sonar Type	Multibeam	
Power	150 W - 1.5 kW	40 W - 1.2 kW
Transducer Dimensions	533 mm(L) x 340 mm(W) x 133 mm(H)	330 mm(L) x 168 mm(W) x 98 mm(H)
Transmit Beam Width (arthwartships * fore-aft)	120° * 3.5°	
Depth Range	10 - 500 m	1 - 200 m
Beam Forming / Spacing	Digital - 112 equiangular beams form a 120° swath.	
Attitude Correction (Accuracy based on sensor used)	Pitch, Roll, Heave, Heading	

**EQUIPMENT LIST**

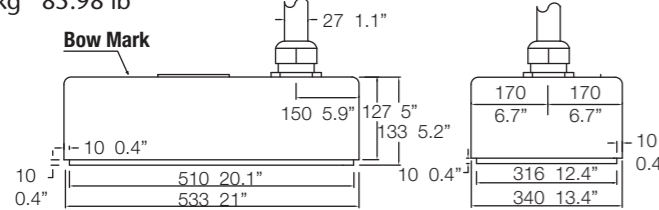
- Standard**
1. Transducer  
WMBT-160F-CT (160 kHz) with 10 m or 20 m cable or  
WMBT-80F (80 kHz) with 20 m cable
  2. Transceiver WMB-BTxR
  3. Shuttle computer complete with Windows XP operating system
  4. USB dongle with software
  5. PC mounting bracket
  6. Cable clamp
  7. Keyboard
  8. Trackball
  9. Ethernet cable 15 m
  10. NMEA optocoupler
  11. NMEA 9-pin cable 5 m
  12. Power cable transceiver 5 m
  13. Installation and operation manuals
  14. NAVIGATOR software
- Option**
1. Navigator kit with software
  2. Aluminium gland WMB-AG
  3. Plastic gland WMB-PG
  4. Steel gland WMB-SG

**DIMENSIONS**

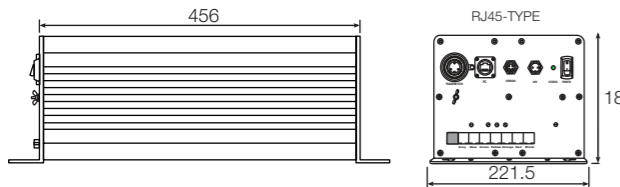
**160 kHz TRANSDUCER**  
15 kg 33.07 lb



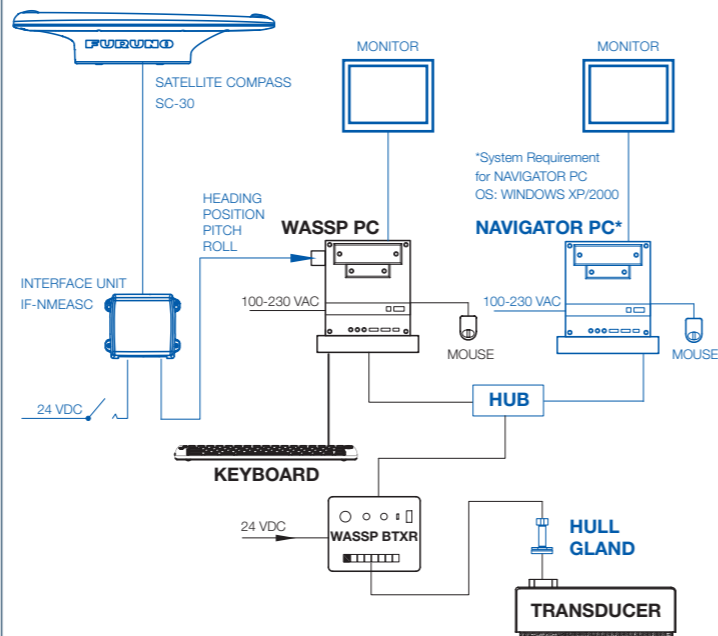
**80 kHz TRANSDUCER**  
39 kg 85.98 lb



**TRANSCEIVER MWB-BTxR**  
5 kg 11.02 lb

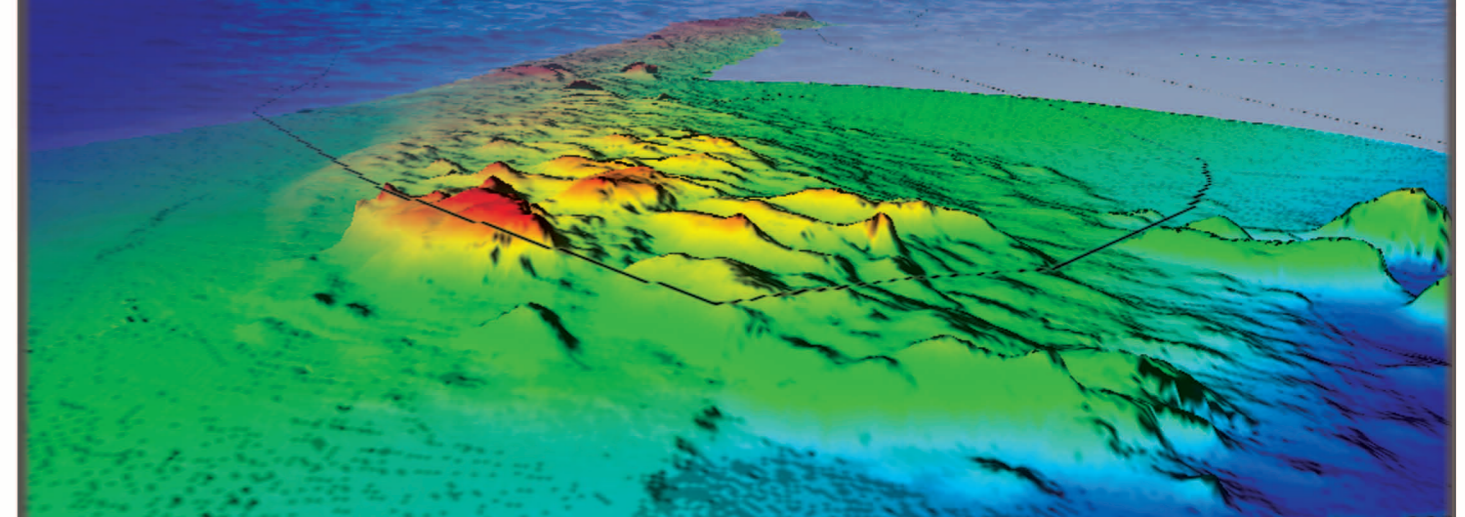


**INTERCONNECTION DIAGRAM** — option or local supply



**MORE TECHNOLOGY.  
MORE RESULTS.**

Commercial fishing operators worldwide are benefiting from WASSP Multibeam Sonar.



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FURUNO is an authorized distributor of WASSP.

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SEA MORE - CATCH MORE - DISCOVER MORE - MAP MORE

# Future-Proofing your Commercial Fishing Operations



Improve your fishing business with WASSP multi-beam technology. WASSP multibeam sonar features multiple key functions designed to optimize fishing operations by enabling you to reduce gear damage, fuel costs and sea time, while increasing catch rates.

With WASSP multibeam technology your understanding of the marine environment will be greatly improved, enabling you to become more target specific, thereby reducing by-catch and the impact on the environment. WASSP is the technology for the future of commercial fishing.

### SEA MORE

WASSP multibeam technology delivers 120° high resolution coverage and quickly locates and profiles fish shoals – both pelagic and ground fish. WASSP profiles fish shoals over reefs and ground structures, wrecks and changes in seafloor hardness, enabling fishermen to target specific shoals of fish or specific ground habitat for lobster, crayfish, crab, prawns, and langoustine.

### DISCOVER MORE

WASSP multibeam technology generates extremely detailed bathymetric profiles, allowing fishermen to be very target specific. This technology dramatically reduces gear damage while increasing catch rates. A 'win-win' outcome! Seafloor hardness can be displayed in 2D and 3D; in full color or black and white; allowing fishing captains to discover more new fishing grounds and optimise their fishing activity.

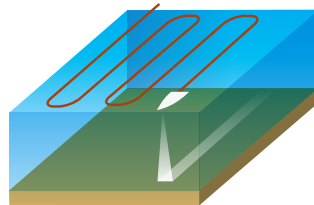
### MAP MORE

WASSP multibeam technology can generate over 700 depth points per second. Each point is stabilized, tide corrected, and characterized with seafloor hardness. This allows fishermen to very rapidly build high resolution bathymetric profiles of the marine environment where they operate. WASSP also profiles all fish and water column targets, building a true picture: – hardness + profile + fish targets into a real-time 3D display.

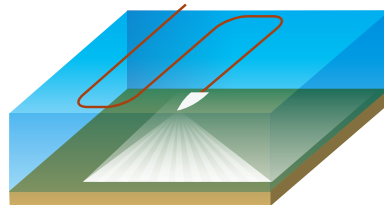


For optimal performance, roll, heave, pitch, heading and position inputs are required. These can be provided through the FURUNO SC-30 Satellite Compass.

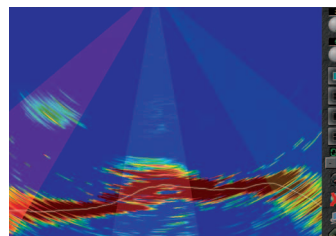
## WASSP delivers unparalleled 120° high resolution coverage



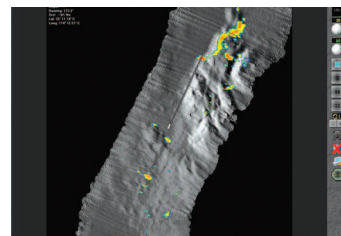
Conventional (10°) single beam sonar



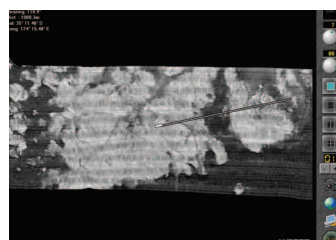
WASSP Multibeam sonar (120°) high resolution coverage



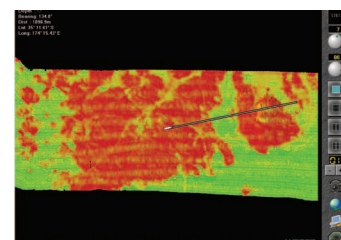
Sonar & mid-water fish



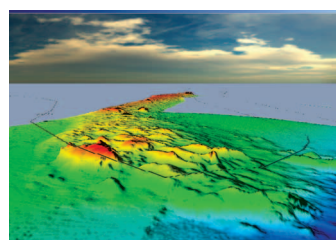
Fish marks over reef structure



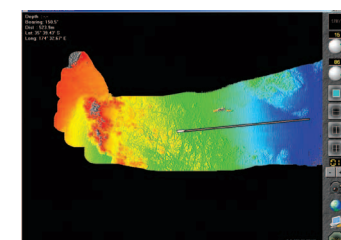
Black & white hardness view



Full color hardness



Detailed bathymetric profile 3D



Detailed bathymetric profile 2D

# NAVIGATOR

## SHARE MORE WITH WASSP NAVIGATOR

WASSP Navigator will enable you to build and save very detailed bathymetric profiles, to record and save fish shoal information and to share this information with other WASSP users or vessels in a fleet. Navigator is a management tool that enables you to highlight, profile, view in any direction in 2D or 3D, and save and print information you collect about the marine environment. It's fast, accurate and very easy to use.



**NAVIGATOR software is included as standard**  
A standard PC system (Windows XP/2000) with mouse, keyboard and color monitor are required for the NAVIGATOR system.

### MORE DEPTH

WASSP multibeam sonars are packed with features that enable you to better understand the marine environment. There are two frequency options available, 160kHz or 80kHz, depending upon the depth performance required. WASSP can profile from one meter to over 500 meters, which meets most fishing applications. Talk to your WASSP agent about the frequency that best suits your fishing needs.

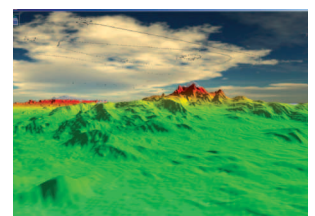
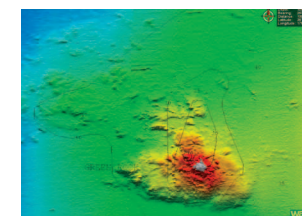
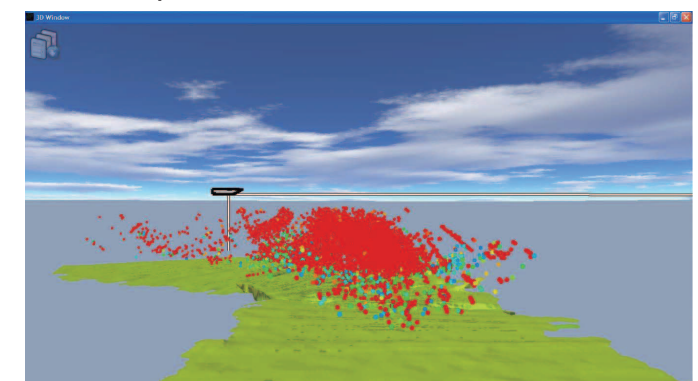
### MORE EASE

WASSP customers – from fishermen and marine scientists to surveyors – report how easy WASSP is to use. A standard PC mouse controls all functions and a user-friendly split-screen Windows System allows you to optimize the displays to suit your particular fishing requirements. WASSP hardware is designed and manufactured to ISO9001-2008 standards.

### MORE OPTIONS

WASSP Navigator now gives you the ability to overlay bathymetric data, fish shoal information and seafloor hardness information with a Navionics Gold® chart database, so you can view, scroll, save and better utilize the valuable information generated by WASSP. Flexibility is key and WASSP enables you to export your bathymetric profiles and fish information to world renowned plotting systems such as Olex and Sodena Turbo Tactic.

### 3D view of reef plus fish in the water column



## What a commercial fisherman has to say....

**“WASSP is really marvellous - we have increased our daily catches about 20% while the other trawlers have real difficulty to reach their targeted catch volume at the moment. Also, I identify the shoal species more according to the multibeam view and I catch more ‘pure’ species...”**

Alain Rico “Septimanie II”,  
French Fisherman, South of France

