MULTIBEAM SONAR
F3 Series

DISCOVER
A NEW UNDERWATER WORLD

Outstanding performance, versatility and value. That's what you expect and exactly what you get with the new WASSP F3 series.

This next generation multi beam sonar has been redesigned from the ground up around a new fully digital DRX transceiver. It delivers on every front - accurate, versatile, user-friendly and most importantly, scalable to your exact needs.

The only thing that hasn't changed with the F3 series is our commitment to bring you a multi beam sonar at a cost-effective price.

MULTI BEAM SONAR
F3/F3i/F3L/F3Li

Models:
F3 (WMB-1320F)   F3L (WMB-1320FL)
F3i (WMB-1320Fi)   F3Li (WMB-1320FLi)

Specifications

1. GENERAL

Transmitting frequency	Wide band; F3/F3i: 160 kHz, F3L/F3Li: 80 kHz
Effective beamwidth	F3/F3i: 200m, F3L/F3Li: 450 m
Beam width	120° x 4° (Athwartships x Fore-aft)
	PS: 4.4°
Beam spacing	FA: 3.2°
Depth	F3: 200 m* (Side Beam Best Performance)
	400 m* (Main Beam Directly Under Boat)
	F3L: 450 m* (Side Beam Best Performance)
	900 m* (Main Beam Directly Under Boat)
	*Depth capability subject to a variety of external factors
Max range resolution	2 cm
Power supply unit	9 to 32 VDC
Bottom detections	Amplitude & Phase
Tide correction	Fully Geo Referenced

2. INTERFACE

NMEA0183/RS422/RS232	GGA, GGK, GLL, HDG, HDM, HDT, HVE, PASHR, PTNL PFEC, RMC, RCD, TSS1, ZDA
Ethernet	GbE
NMEA2K	
Other Interfaces	PPS, KP, Remote Power

3. DISPLAY & FUNCTIONALITY
Bathymetry, Sonar polar view, Sounder (single, triple & quint beam)
(Licensing options)
Backscatter, Open Client Support, Water Column Targets, Uncorrected Data, XYZ export, Sidescan, RTK tides, other export formats*

* available in 2017

4. USER INTERFACE
WASSP CDX
TimeZero pro**   Option

** Requires WASSP interface module & excludes 3rd party software.

5. MINIMUM PC SPECS

OS	Windows 8.1, 10
CPU	2 Ghz, 4 Cores/4 Threads
Memory	8 GB (Min. 4 GB)
Graphics	Direct X11
Screen resolution	Full HD 1920 x 1080 (Min. XGA 1024 x 768)
SSD	2 TB (Min. 250 GB)
Network	Ethernet - GbE, Wifi-802.11ac
Dual screen support	Yes

6. ENVIRONMENTAL CONDITIONS (Transceiver unit)

|	
Ambient temperature	0°C to +50°C (storage:-20°C to +85°C)
Humidity/Damp heat	IEC60945, 93 % or less at +40°C
Vibration	IEC60945 Ed.4
Waterproofing	IP53, Bulkhead mounted (IP67 option available)

Equipment List

Standard
1. Transceiver unit DRX
2. WASSP CDX (PC application)
3. Transducer unit F3 (G3 TRANSDUCER: 160 kHz) with 10 m cable
   Transducer unit F3L (G3 TRANSDUCER: 80 kHz) with 20 m cable
4. WASSP sensor package*   *For F3i (WMB-1320Fi)/F3Li (WMB-1320FLi).

Option
F3 (G3 TRANSDUCER: 160 kHz) with 20 m cable
Gland (aluminum/plastic/steel)
Satellite Compass plus cable with WASSP sensor box*
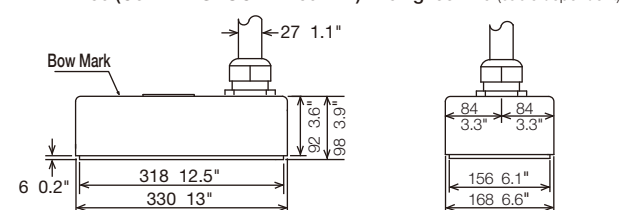WASSP sensor box
          *For F3 (WMB-1320F)/F3L (WMB-1320FL).

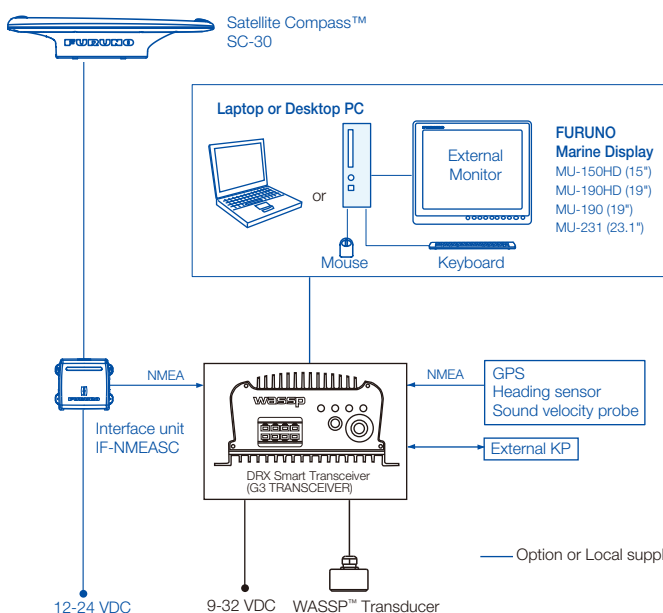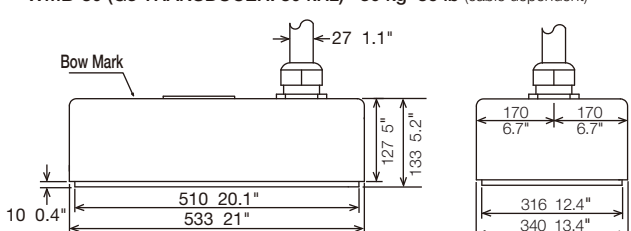### TRANSCEIVER UNIT
DRX (F3 DRX) 8.3 kg 18.3 lb
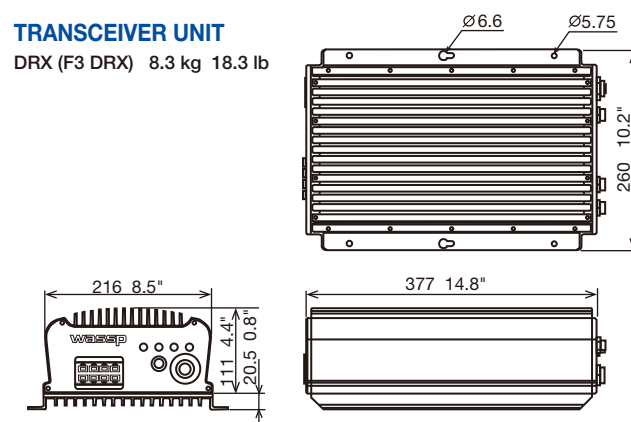
TRANSDUCER
WMB-160 (G3 TRANSDUCER: 160 kHz) 15 kg 33.1 lb (cable dependent)

WMB-80 (G3 TRANSDUCER: 80 kHz) 39 kg 86 lb (cable dependent)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

MULTI BEAM SONAR
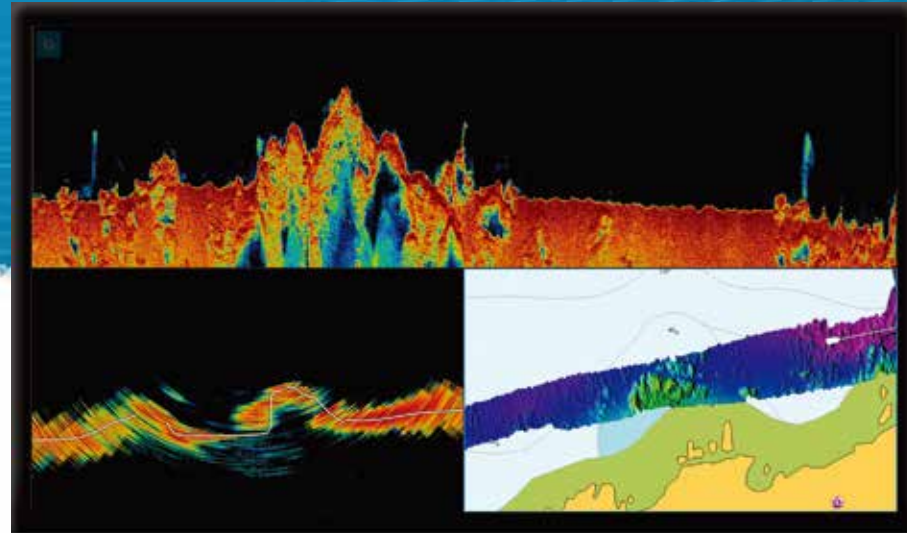### Model F3 Series
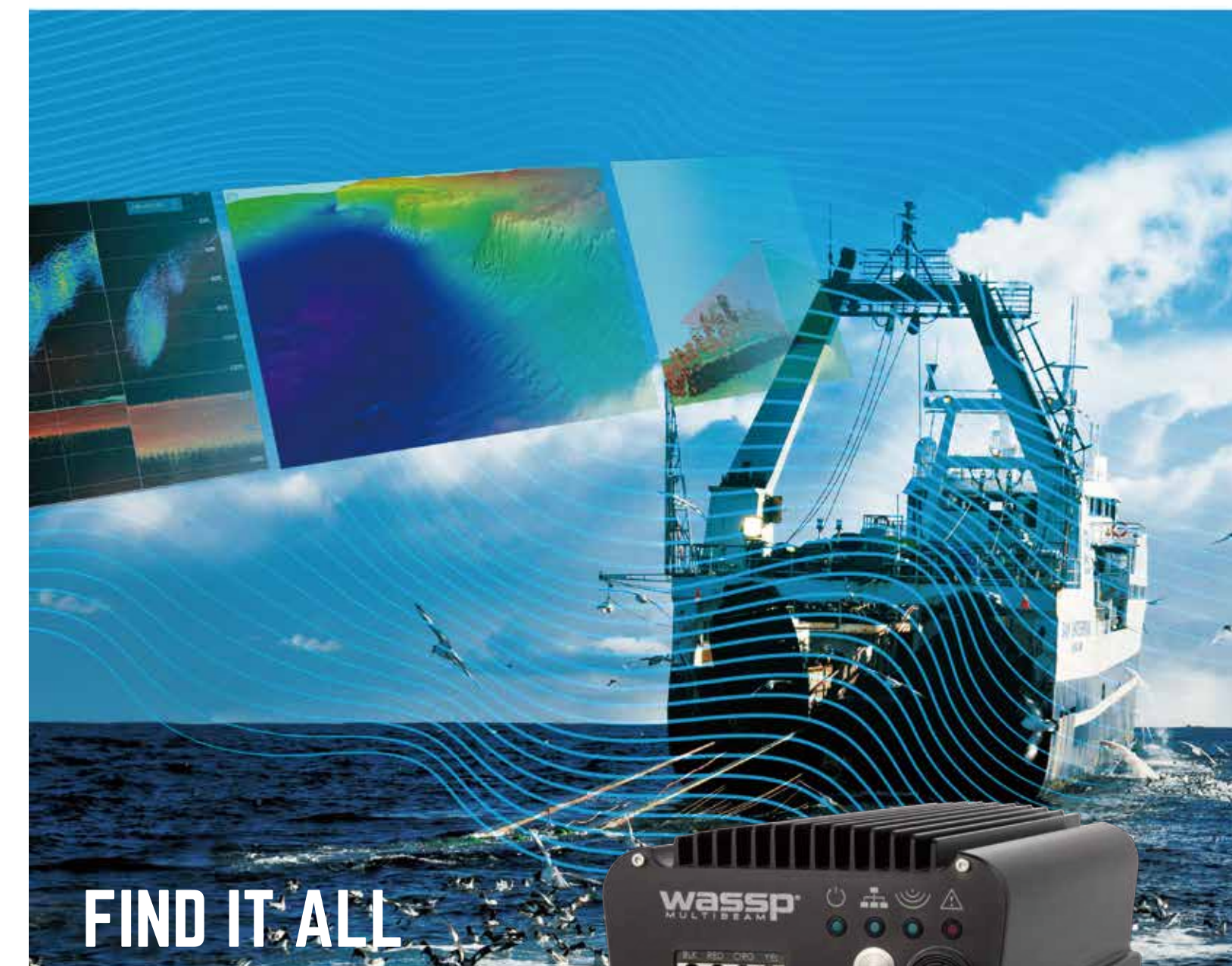
# FIND IT ALL

www.furuno.com
www.wassp.com

This next generation WASSP multi beam sonar delivers on every front
## – accurate, versatile, user-friendly and most importantly, scalable to your exact needs.

User adjustable Multi Functional Display

Generate your own personal Multibeam Chart

The F3 series is set to revolutionise inshore fisheries with its Wideband CHIRP technology. Scanning a 120 degrees swath port to starboard and using 224 beams, the F3 series delivers each and every time. By using advanced signal processing, you get a complete picture of seafloor bathymetry with ease.
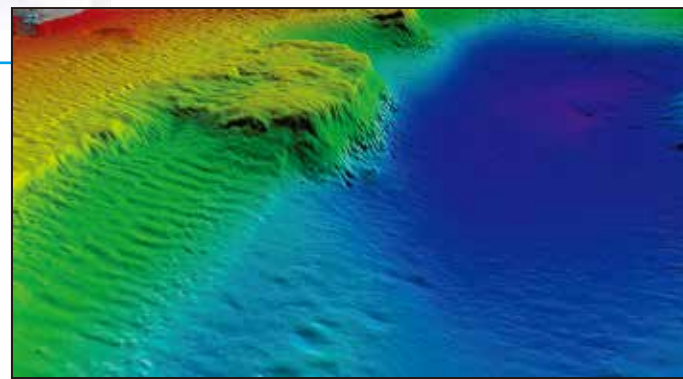
WASSP 3D
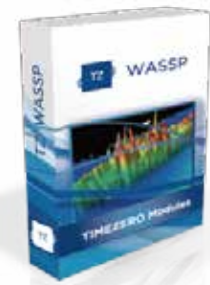
▶ Capability to save chart into the CDX software
▶ TIMEZERO compatible with optional licence

New easy-to-use interface

The F3 series inctoduce a new simplified software "WASSP CDX" for control, visualisation and data management while still providing a comprehensive set of functions to meet the most demanding fishing requirements.

▶ Cost-effective solution for multiple applications
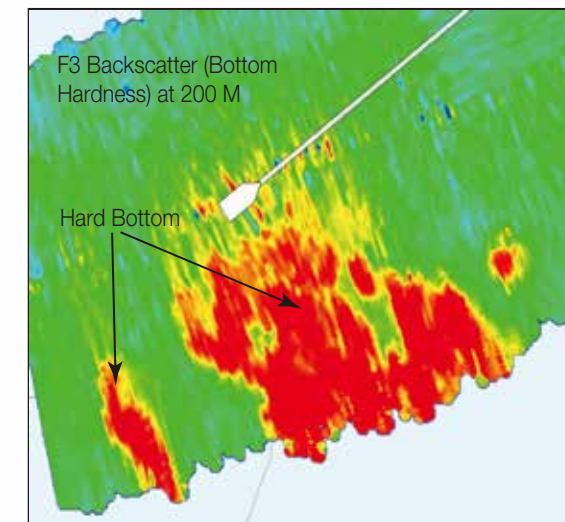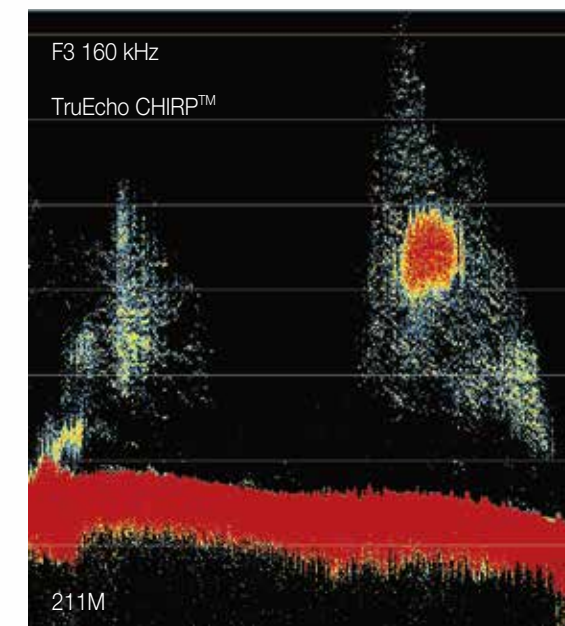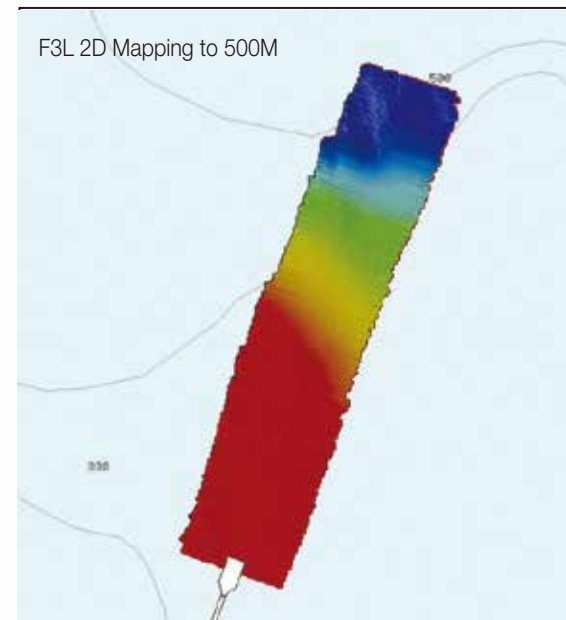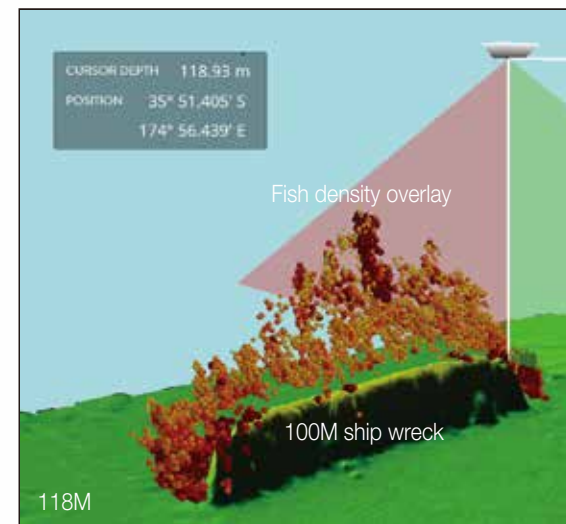▶ Choose your own functions with new licensing options

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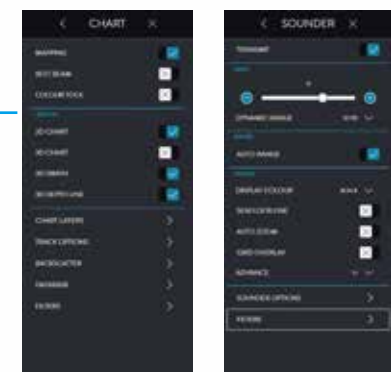
All-in-one DRX transceiver, incredibly versatile and ready for the next technology advances

This innovative all-in-one "BlackBox" is not just a robust hardware platform but also introduces cutting-edge technical innovations and incredible versatility for finding your catch. This opens countless new possibilities for your operations.

▶ Easy to install/commission

CURSOR DEPTH 118.93 m
POSITION 35° 51.405' S
174° 56.439' E

Fish density overlay

100M ship wreck

118M

F3L 2D Mapping to 500M

F3 160 kHz

TruEcho CHIRP™

211M

F3 Backscatter (Bottom Hardness) at 200 M

Hard Bottom

INSHORE FISHING

The scalable system has a wide range of features and capabilities; all manner of inshore fishing types can be optimised, ensuring efficiency and increased productivity in all fishing methods employed.

The system can be tailored for all types of inshore fisheries.

34.31 m
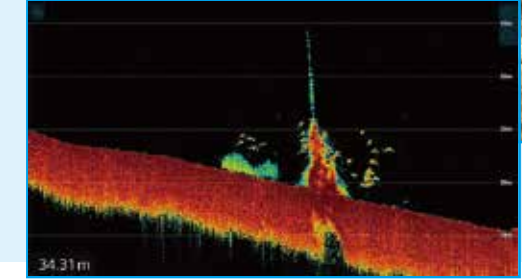
POTTING

The 3D presentation of the seabed, coupled with the optional backscatter function, to aid in the assessment of seafloor hardness, ensures the best location of pots in a range of environments.

TRAWLER

With accurate water column and seabed information at hand, skippers are better informed, and can make decisions ensuring they maximise their catch while minimising time at sea.

249.31 ft
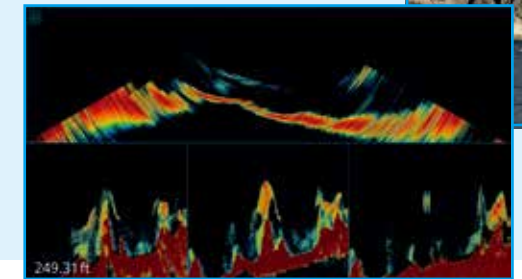
WASSP transducer

▶ The WASSP sonar transducer is available in 2 frequencies
    - 136-184 kHz Wideband (160 kHz center)
    - 68-92 kHz Wideband (80 kHz center)