

MONITORING SYSTEMS



R E D H O R I Z O N

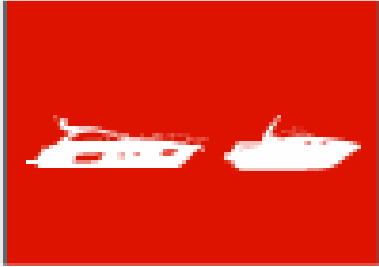
FPT INDUSTRIAL MONITORING SYSTEMS

MONITORING SYSTEM: PORTFOLIO POSITION

PREMIUM



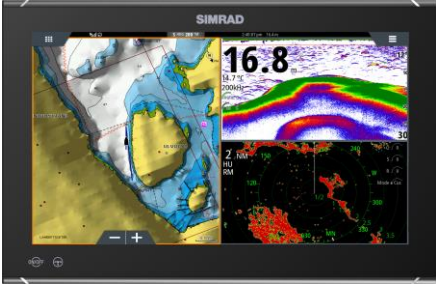
MID-RANGE



VALUE



Recreational
and Commercial



NSO Evo3S



NSS Evo3s



GO XSE/XSR

SIMRAD NAVIGATION DISPLAY LINE-UP

GO XSE/XSR 7/9/12"

NSS Evo3S 9/12"

NSO Evo3S 16"

CRUISING AND FISHING



QUALITY /
PERFORMANCE

- VALUE
- Traditional + Basic Imaging Sonar
- Radar networking
- Engine networking
- Basic Ethernet

- MID-RANGE
- Dual CHIRP Sonar Capability Built in
- Advanced Networking to include 3D
- Chart Sharing
- SolarMax HD screens

- PREMIUM
- Responsiveness and Dependability CRITICAL
- Customized System Install for Cruising or Sportfish with premium performance standard (S5100 & Halo)

EASE-OF-USE (EOU)

- Touchscreen
- Tablet-like
- Intuitive

- Buttons and keypad for ease-of-use under any conditions

- Primary Touch interface with Ruggedized Controllers that are designed for functionality (Large Buttons and knobs) and aesthetics in mind

VALUE

- Charts included (US)
- Chart options (ROW)

- Better Embedded Charts
- Chart Options

- Premium Design and Advanced Functionality

SIMRAD NAVIGATION DISPLAY LINE-UP

GO XSE/XSR 7/9/12"

NSS Evo3S 9/12"

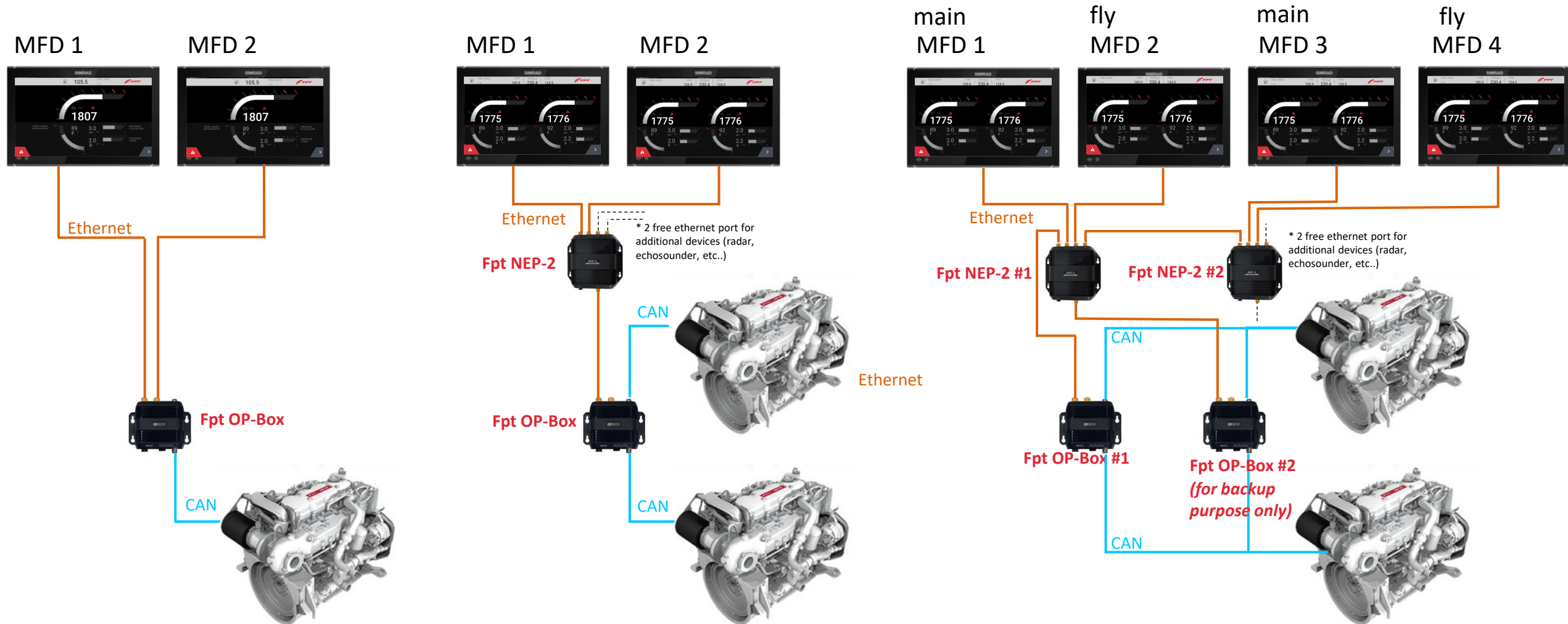
NSO Evo3S 16"

Weight	1,32 kg (2.91 lb)	1,41 kg (3.11 lb)	3,9 kg (8.6 lbs)
Power Consumption max	20 W	21 W	44 W
Operating Voltage	10-17 V DC	10-31,2 V DC	10-32 V DC
NMEA 2000 Connectivity	1 x NMEA 2000 Micro-C port		
Colour	Black		
Display: Size	7" / 9" / 12" Diagonal	9" / 12" Diagonal	16" Diagonal
Type	TFT Widescreen	SolarMAX™ IPS touchscreen	
Resolution	800x480	1280x720	1980x1080
Screen Brightness	1200 nits		
Viewing Angle	80° top/bottom, 80° left/right		
Waterproof rating	IPX6 and IPX7		IPX6 on the front
Operating Temperature range	-15°C to +55°C (+5°F to +131°F)		

SIMRAD NAVIGATION DISPLAY LINE-UP

	GO XSE/XSR 7/9/12"	NSS Evo3S 9/12"	NSO Evo3S 16"
High Brightness Display	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IPS Screen Technology (including "IPS-Like")		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi-touch screen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Built-in WiFi	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Built-in CHIRP echosounder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	External module required (\$5100)
Built-in Structurescan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	External module required (SonarHub)
Built-in Forwardscan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	External module required (SonarHub)
Dual echosounder ports		<input checked="" type="checkbox"/>	External module required (SonarHub)
Radar capable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Network sounder capable		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Keypad control	Optional	<input checked="" type="checkbox"/>	Optional
Engine integration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Entertainment integration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3D sonar capable		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dual chirp transducer capable		<input checked="" type="checkbox"/>	External module required (\$5100)
Network chart sharing		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Quad Core processing power			<input checked="" type="checkbox"/>

SIMRAD NAVIGATION DISPLAY LINE-UP: INTERFACE WITH ENGINE



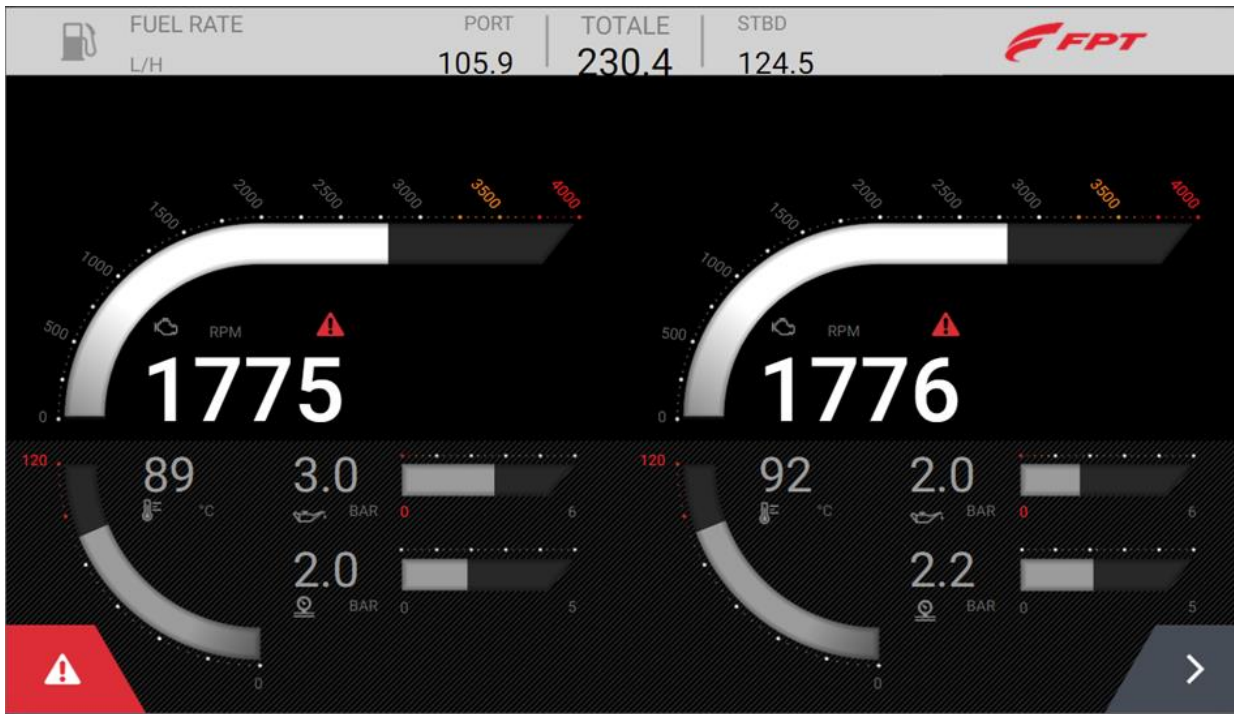
SIMRAD NAVIGATION DISPLAY LINE-UP: LANGUAGE PACKS

- **Standard Language Pack (included in FPT-branded products) :**
 - English(US), English(UK), Danish, German, Spanish, Finnish, French, Greek, Icelandic, Italian, Dutch, Norwegian, Portuguese, Swedish
- **Asian Language Pack:**
 - English (US), Japanese, Korean, Thai, Chinese,
- **Eastern European Language Pack:**
 - English (US), English (UK), Bulgarian, German, Spanish, French, Hebrew, Croatian, Hungarian, Italian, Lithuanian, Latvian, Polish, Slovak, Turkish
- **Russia/Ukraine Language pack:**
 - English (US), English(UK), German, Spanish, French, Italian, Russian, Ukrainian
- **Middle Eastern Language Pack:**
 - English (US), English (UK), Arabic, German, Spanish, Farsi, French, Italian

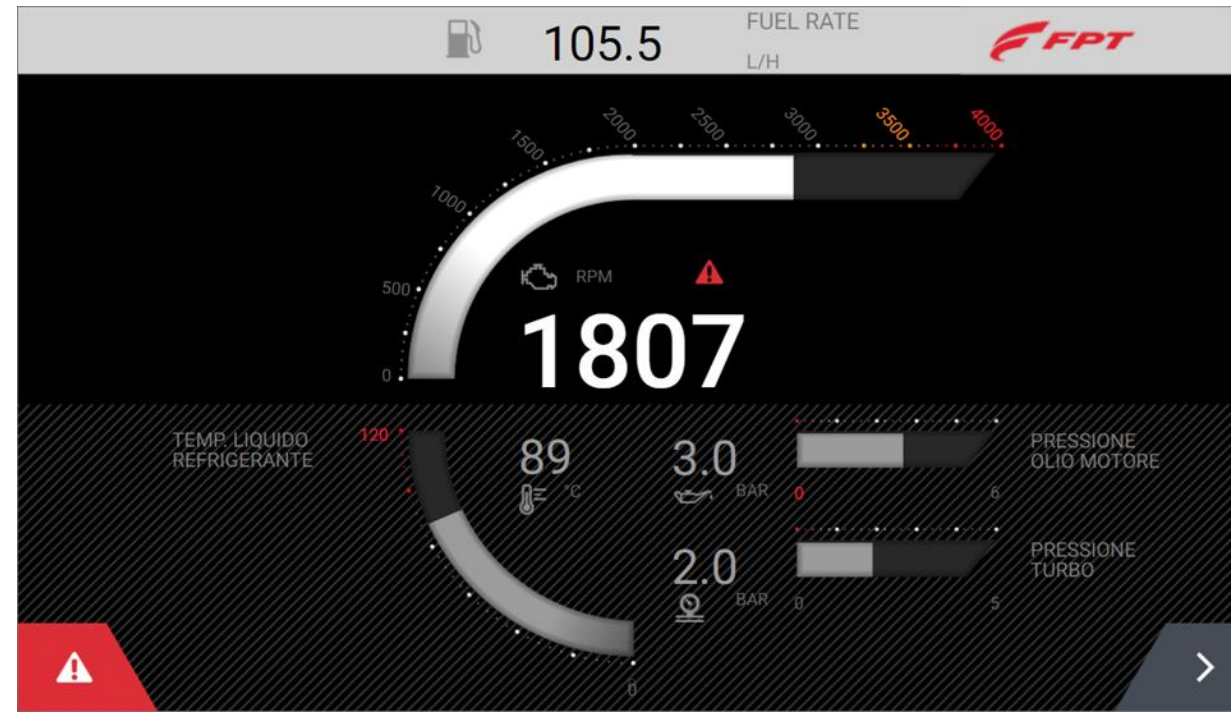
AVAILABLE ON SIMRAD
STORES

SIMRAD NAVIGATION 12" AND 16" DISPLAY : ENGINE MONITORING

MAIN DASHBOARD



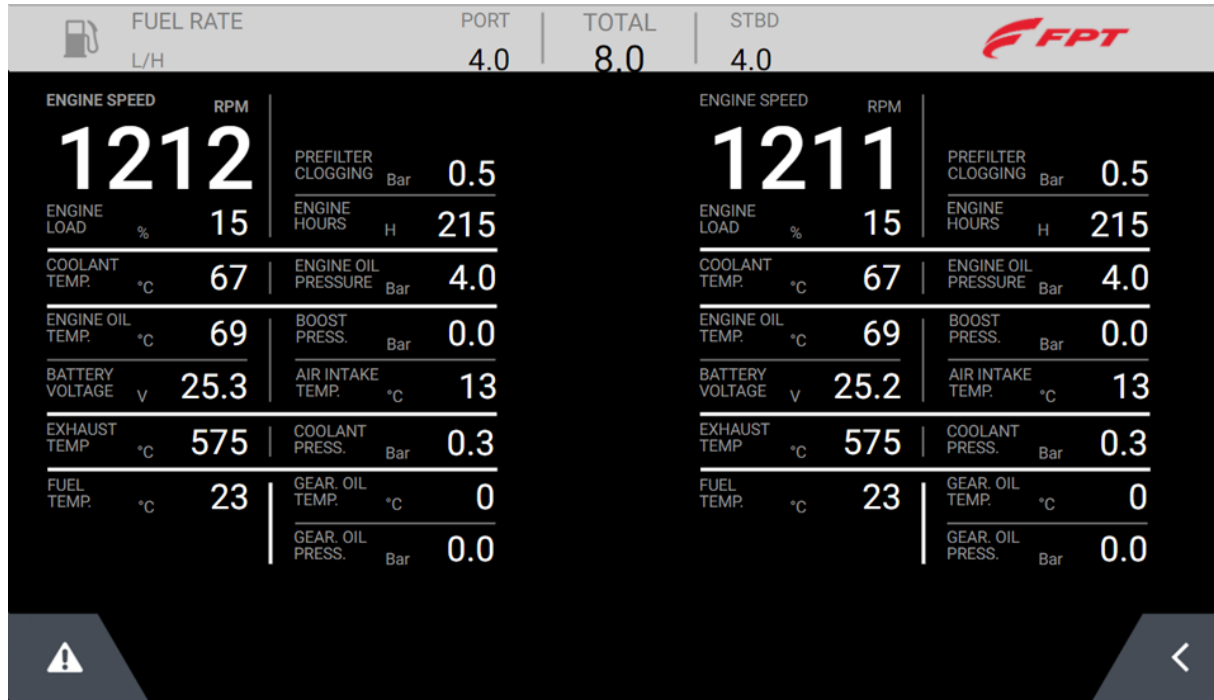
TWIN ENGINE



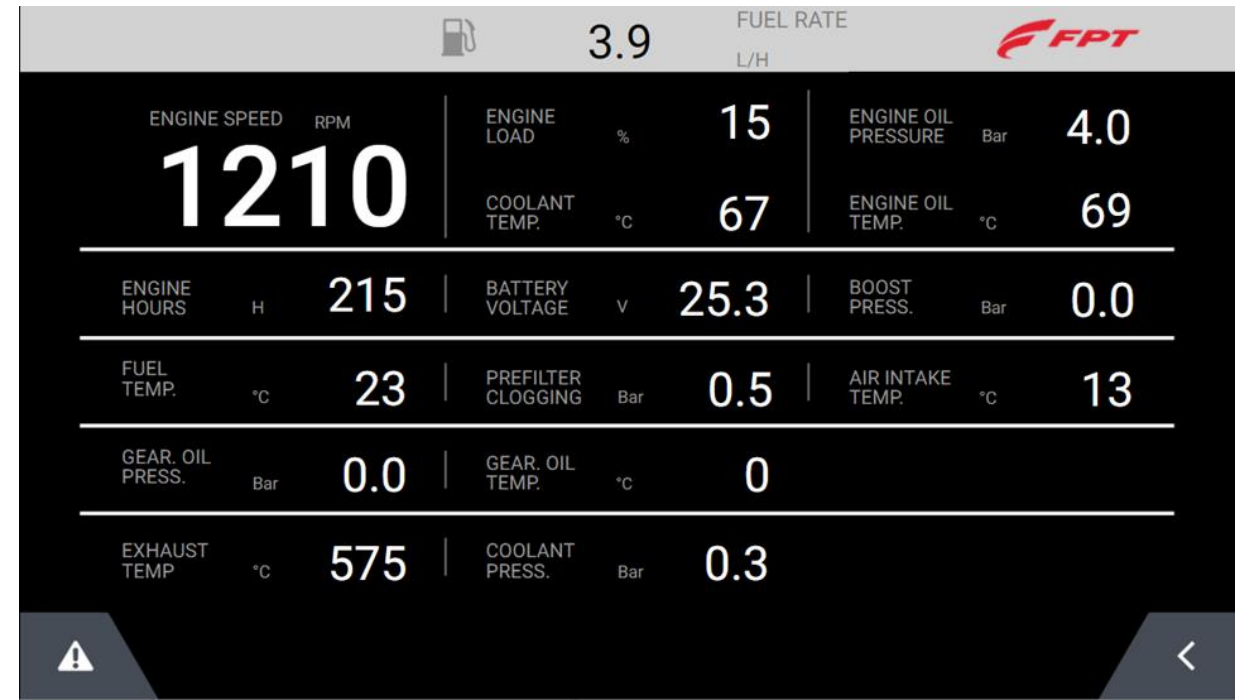
SINGLE ENGINE

SIMRAD NAVIGATION 12" AND 16" DISPLAY : ENGINE MONITORING

DETAILED VALUES



TWIN ENGINE



SINGLE ENGINE

SIMRAD NAVIGATION 7" AND 9" DISPLAY : ENGINE MONITORING

MAIN DASHBOARD



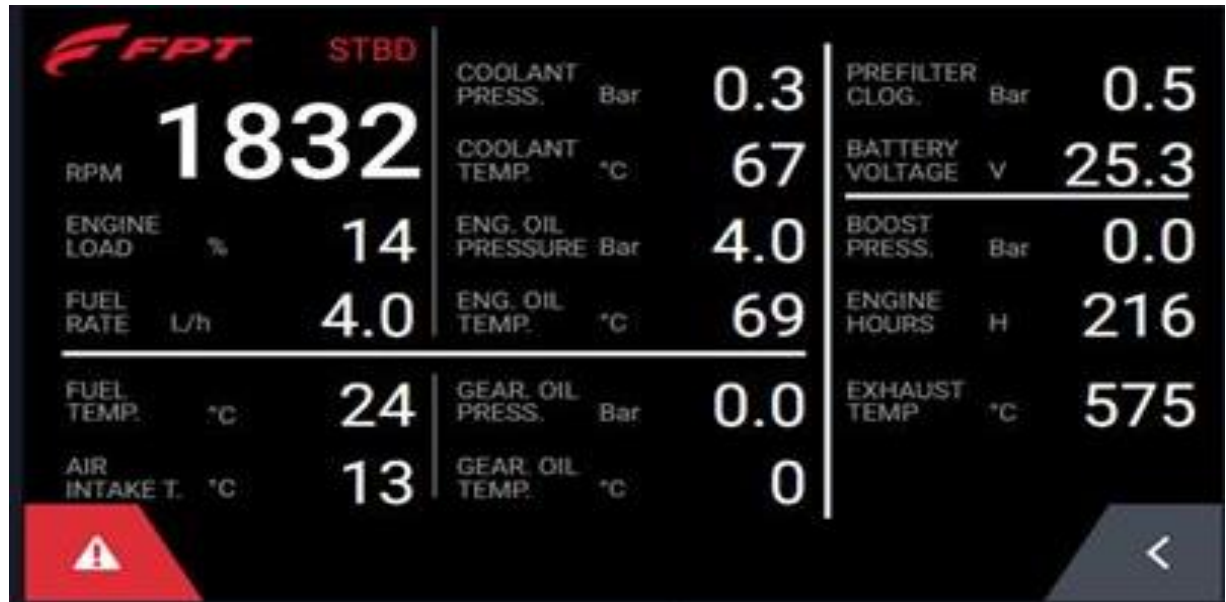
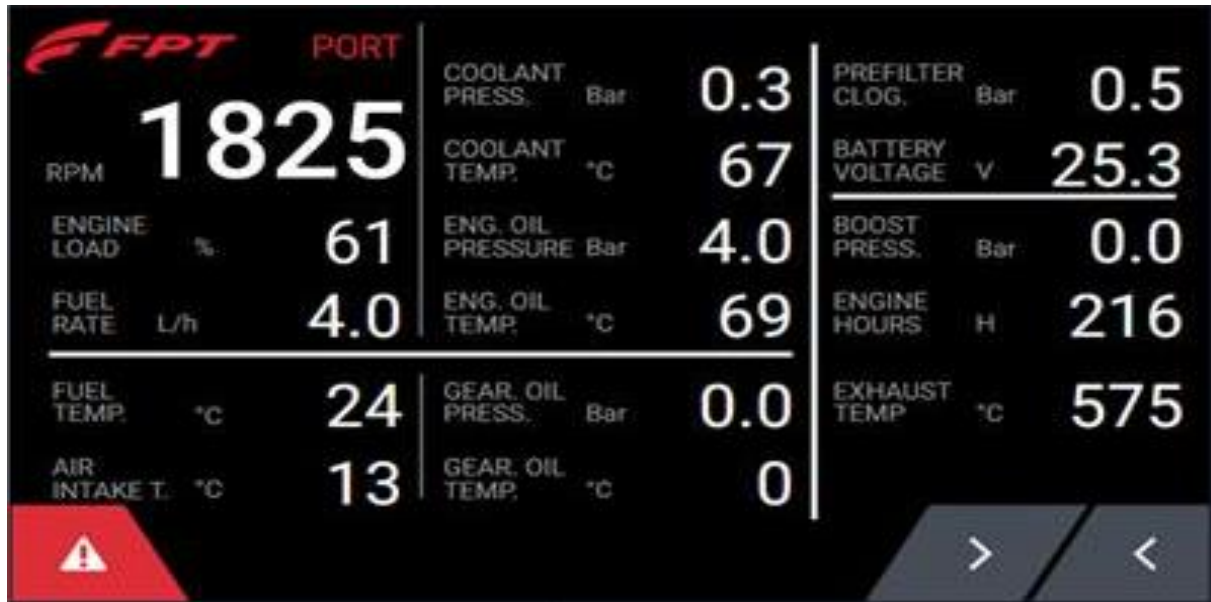
Twin engine



Single engine

SIMRAD NAVIGATION 7" AND 9" DISPLAY : ENGINE MONITORING

DETAILED VALUES



SIMRAD NAVIGATION DISPLAY LINE-UP: PRELOADED MAPS AND CUSTOMIZED VISUALIZATION



- PRELOADED MAPS



- CUSTOMIZE YOUR DESKTOP VISUALIZATION
- CREATE YOUR OWN FAVOURITE SCREEN AND APPS COMBINATIONS

SIMRAD NAVIGATION DISPLAY LINE-UP: APP FOR SCREEN MIRRORING

Built in Wi-Fi connectivity means no extra hardware is required:

- Mirror your GO, NSS and NSO Series screen on compatible smartphones by downloading the Link app (by Navico GoFree), available for Android and iOS.
- Take control of your GO, NSS and NSO Series using a compatible tablet.
Note, Auto pilot can't be controlled from a tablet.

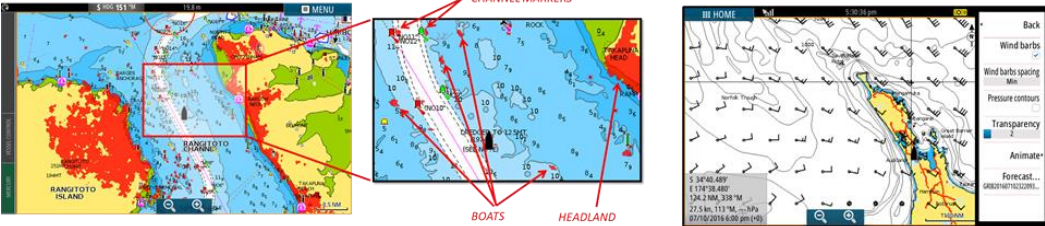


SIMRAD NAVIGATION DISPLAY LINE-UP: ADDITIONAL FUNCTIONS

AUDIO CONTROL



RADAR and WEATHER



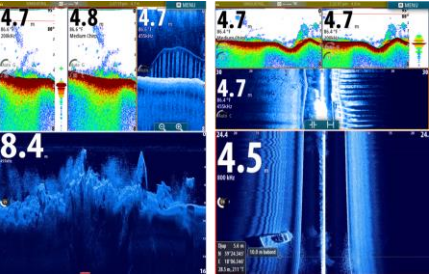
AUTOPILOT



TRIP DATA STATISTICS



ECHOSOUNDER



CAMERA/THERMAL CAMERA





GO SERIES XSE/XSR

7", 9" and 12"

SIMRAD GO-SERIES: KEY FEATURES

- Wide variety of Screen sizes – 7", 9", 12"
- Easy to use multi touch software
 - Safely and easily navigate using your favourite cartography (Insight, Navionics, CMAP, NV Digital)
 - Determine depth, bottom type and find fish using one of the many echosounder technology options
 - Quick and simple control of entertainment systems connected on NMEA2000
 - Vessel circuit control when connected to a C-zone digital switching system
 - View and monitor engine data while underway
- Low Profile Glass dash styling on all models
- Super bright widescreen display
- Built in Wi-Fi connectivity
 - Software update notifications and downloads when connected to the internet
 - Screen mirroring when connected to a mobile device with Link app
 - Rapid vessel certification with LinkPro app
- Built in 10 Hz GPS antenna
- Built in echosounder (Broadband & Chirp)
- Built in DownScan and Sidescan Imaging (transducer required)
- Built in Forwardscan Imaging (transducer required)
- Radar port for direct connection to Simrad 3G/4G or Halo Radar scanners and Future Enhancements
- Sirius Weather display when connected to a WM-3 module (USA only)
- Operable with Remote Controller (optional)
- Dual Micro SD card slots (only for GO9 XSE & GO12 XSE)

SIMRAD GO-SERIES: TECHNICAL FEATURES

	GO7 XSR	GO9 XSE	GO12 XSE
High Brightness Display	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi-touch screen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Built-in WiFi	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Built-in CHIRP echosounder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Structurescan capable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TotalScan capable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forwardscan capable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
NMEA2000 networking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Engine integration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Autopilot integration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Entertainment integration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10Hz Built-in GPS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (high sensitivity)	<input checked="" type="checkbox"/> (high sensitivity)
4-way screen split	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Waypoints/Routes/Tracks sharing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Radar capable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dual chart card slots		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

SIMRAD GO-SERIES: MOUNTING OPTIONS



Dash Mount

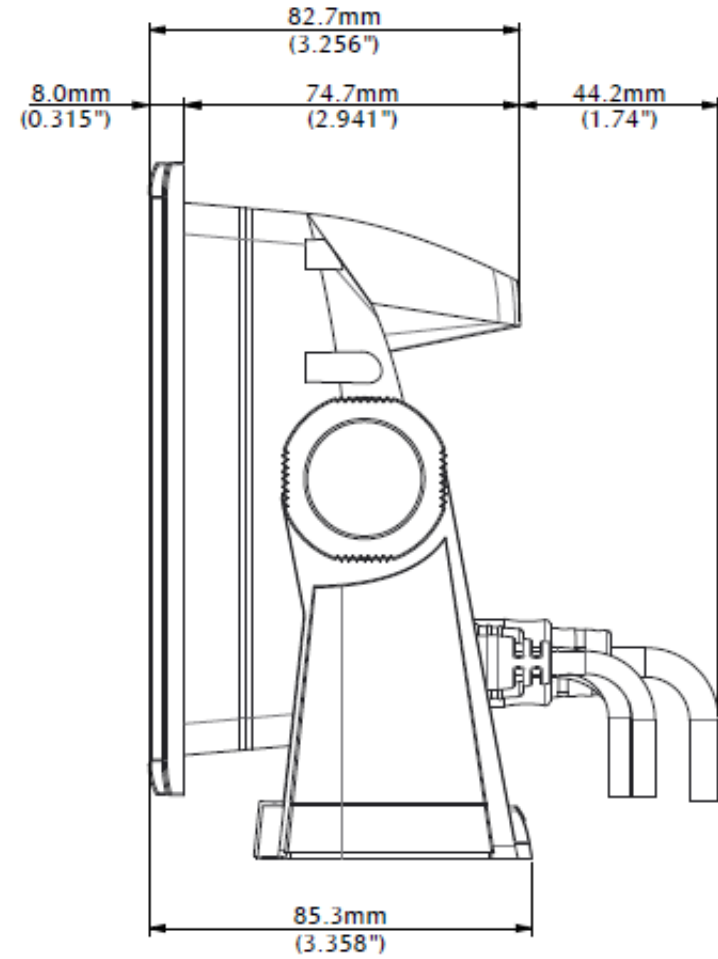
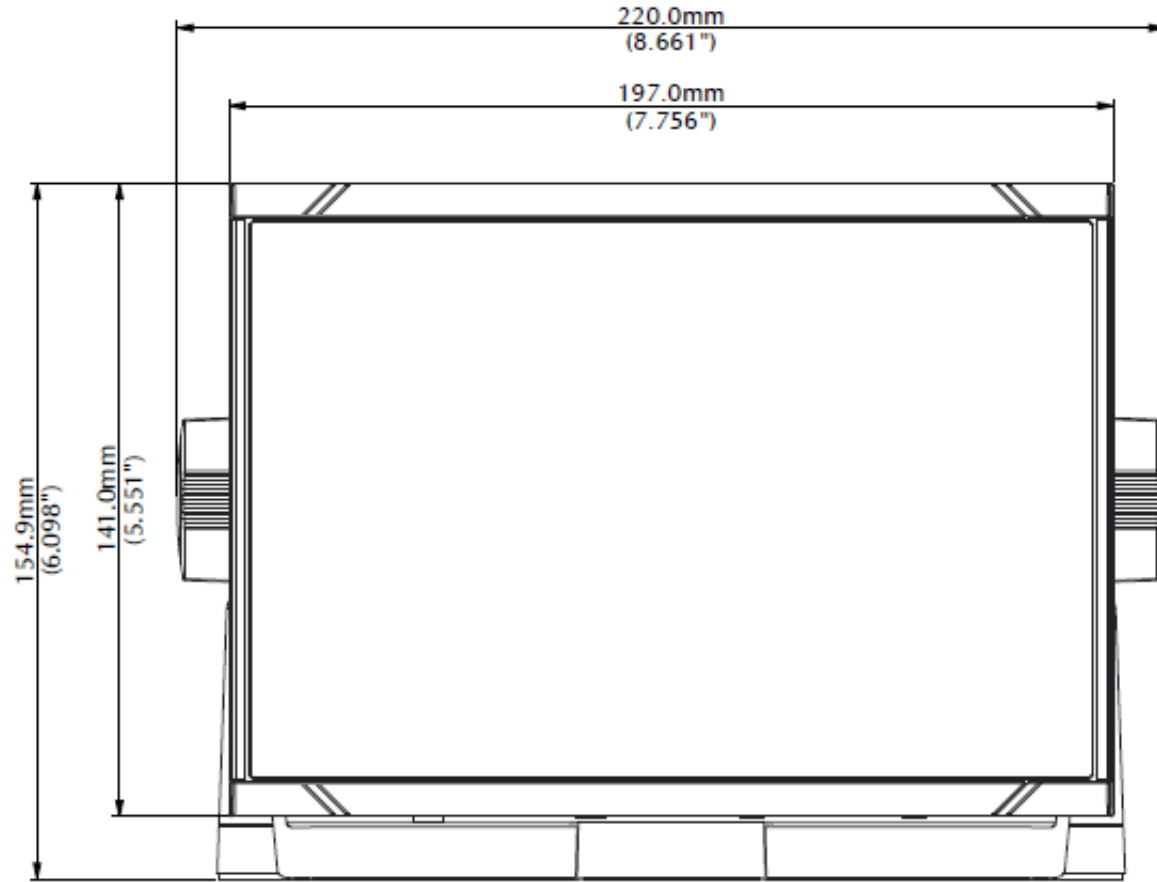
- Dash mount directly onto a console or dash
- 8mm profile
- Screws install from the front with removable surround bezel



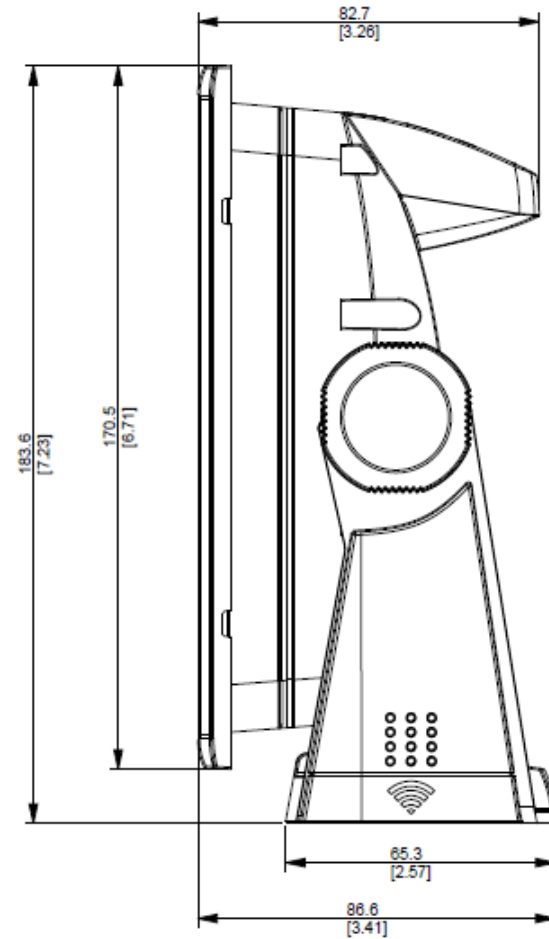
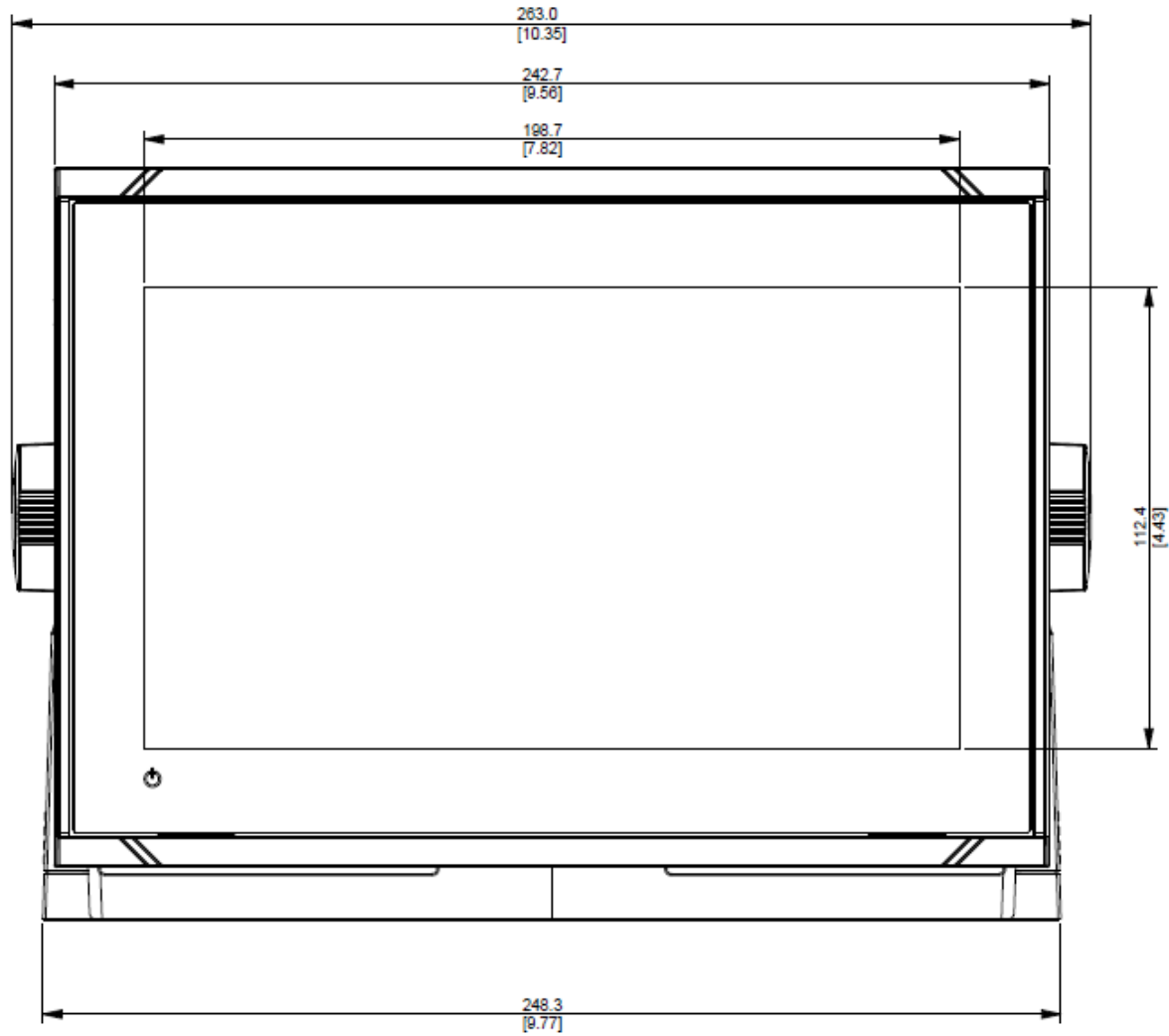
Bracket mount installation

- Easily mount onto a flat surface
- Tilt for best viewing angles
- Can be hung overhead

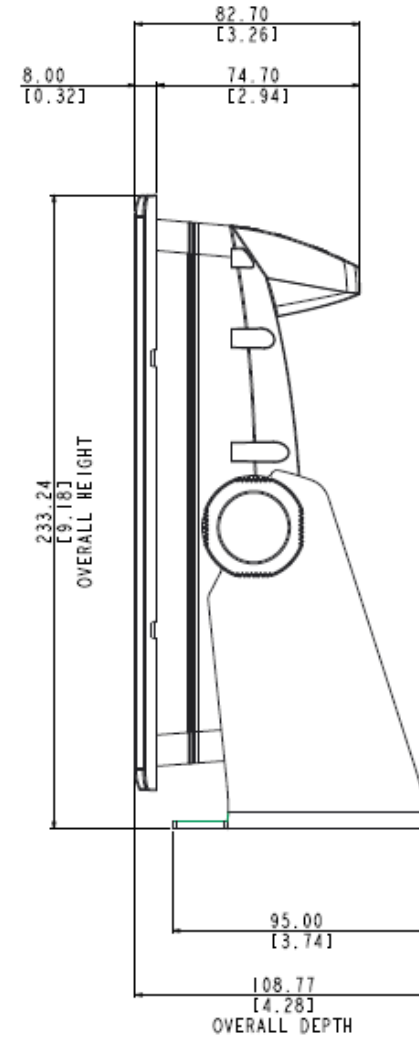
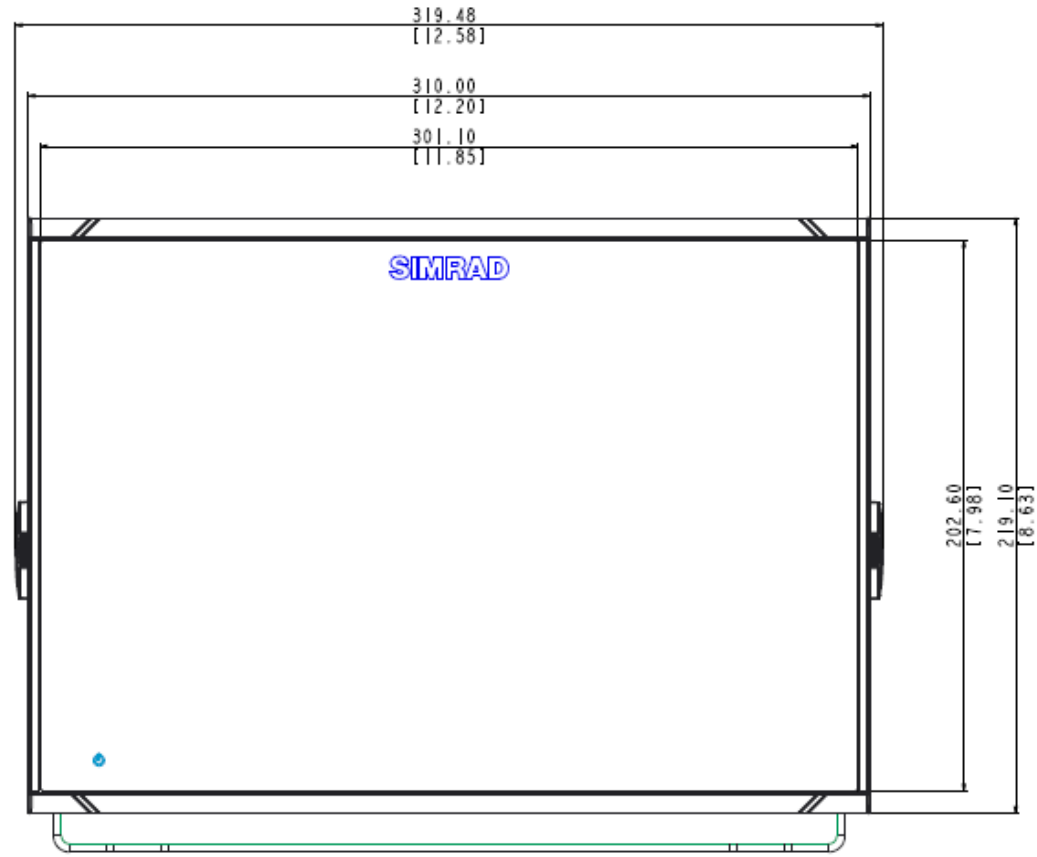
GO7 XSR: DIMENSIONS



GO9 XSE: DIMENSIONS



GO12 XSE: DIMENSIONS

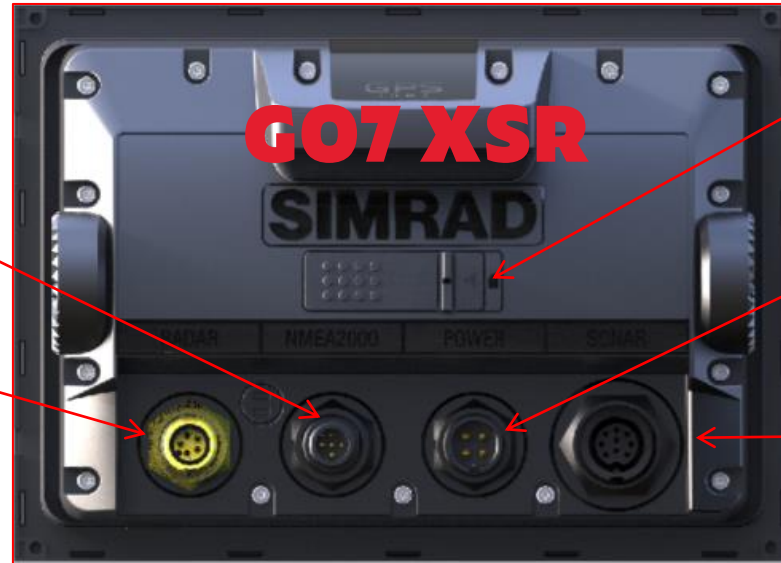


MM

GO SERIES: CONNECTORS

NMEA2000
5pin NMEA2000 Micro-C

Radar Port
5pin Navico waterproof Ethernet connector



Micro SD card slot

4 Pin Power
12V supply with Yellow ignition input and alarm output

Sonar 9 Pin
CHIRP, Structurescan, Forwardscan and Totalscan transducer capable

NMEA2000
5pin NMEA2000 Micro-C

Radar Port
5pin Navico waterproof Ethernet connector



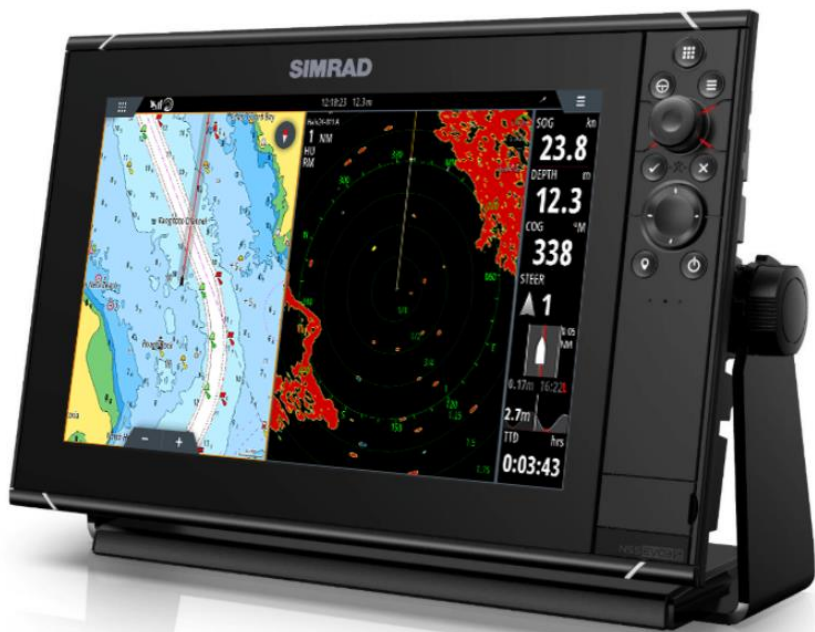
Dual Micro SD card slots

4 Pin Power
12V supply with Yellow ignition input and alarm output

Sonar 9 Pin
CHIRP, Structurescan, Forwardscan and Totalscan transducer capable

SIMRAD GO7 XSR: IN THE BOX

	GO7 XSR (000-14448-001)	GO9 XSE (000-14444-001)	GO12 XSE (000-14442-001)
Display	✓	✓	✓
Sun Cover	✓	✓	✓
Dash mount kit	✓	✓	✓
Gimbal U-Bracket, Fasteners	✓	✓	✓
Replacement bezel	✓	✓	✓
Power Cable	✓	✓	✓
Documentation	✓	✓	✓
83/200 HDI Skimmer transducer	✗	✗	✗
TotalScan Transducer	✗	✗	✗
Blank SD card	✗	✗	✗
3G/4G Radar	✗	✗	✗
Radar cable, RI10 & network cable	✗	✗	✗



NSS Evo3S

9" and 12"

SIMRAD NSS-SERIES: KEY FEATURES

- High Resolution, High Bright, SolarMax IPS Displays
- Screen sizes available – 9" and 12"
- Easy-to-use touchscreen user interface as well as full keypad for simple and precise control in any sea conditions
- Fast iMX8 processor
 - Fast page changes
 - Smooth transitions (like chart rotation and panning)
 - Multi-tasking
- Built-in advanced echosounder capable of 1kW Dual channel CHIRP, Forwardscan, Sidescan, Downscan and StructureScan 3D images
- Take another step forward with Simrad's premium network modules for the ultimate offshore performance
 - Halo Dome and Open Array Radars
 - S5100 Sportfishing Echosounder
- Direct audio, autopilot and engine connection and control
- Low profile glass dash styling
- Built in Wi-Fi connectivity
 - Software update notifications and downloads when connected to the internet
 - Screen mirroring when connected to a mobile device
- Built in high sensitivity 10 Hz GPS antenna
- Dual Micro SD card slots

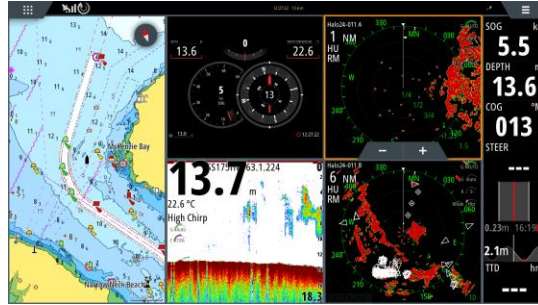


SIMRAD NSS-SERIES: USER INTERFACE CUSTOMIZATION

Look and Feel

Dark themed wallpaper means less light pollution when you have a dash full of MFDs.

Split the screen up to 6 ways to make sure you keep everything in view at all times.



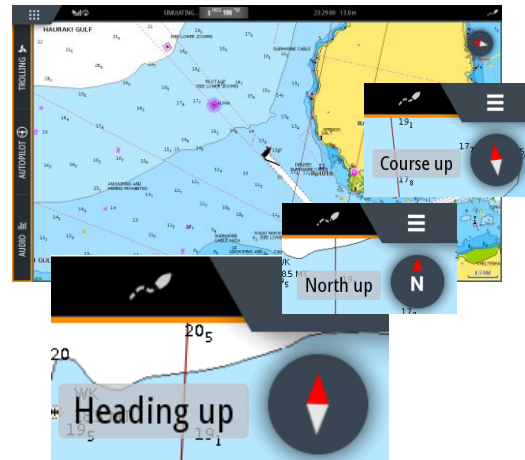
Full Page Audio

Along with the Audio side bar you can now expand that into a full page view for greater control of your sound system.



Chart Orientation Control

A simple addition to the chart panel is a chart orientation button. Change between North up, Heading up and Course up quickly and easily on the chart screen without having to open the menu. Great for if you like to have it in heading up while moving and North up while drifting.



Tide Graph In Instrument Bar

You can now have a quick reference to your local Tide Graph in the instrument bar on the right hand side of your screen.

Always know when the tide changes without having to leave the page you're on.

Tapping on this Tide Graph opens the full tides page if you want to see more information.



SIMRAD NSS-SERIES: SOLARMAX IPS DISPLAY TECHNOLOGY

With NSS evo3S you have full control of your vessel at your fingertips.

- The super responsive touchscreen makes route planning and adjusting settings a breeze.
- Full keypad control with both rotary dial and arrow keys means that when conditions get rough you have something physical to hold on to and have no doubt about who's in control.
- Ultra-wide viewing angles for excellent viewability from any angle on the boat (>80 degrees up/down/left/right)
- High resolutions for best on-screen detail
- High brightness LED backlight and antireflective coating for ultimate bright sunlight viewing
- Very high maximum display operating temperatures for reliable operation in the harshest boating locations
- Multi-touch screen for simple, intuitive software control
- Optical bonding for zero chance of display fogging
- Oleophobic coating for easy removal of fingerprints
- User configurable wheelkey



SIMRAD NSS-SERIES: MOUNTING OPTIONS



Dash Mount

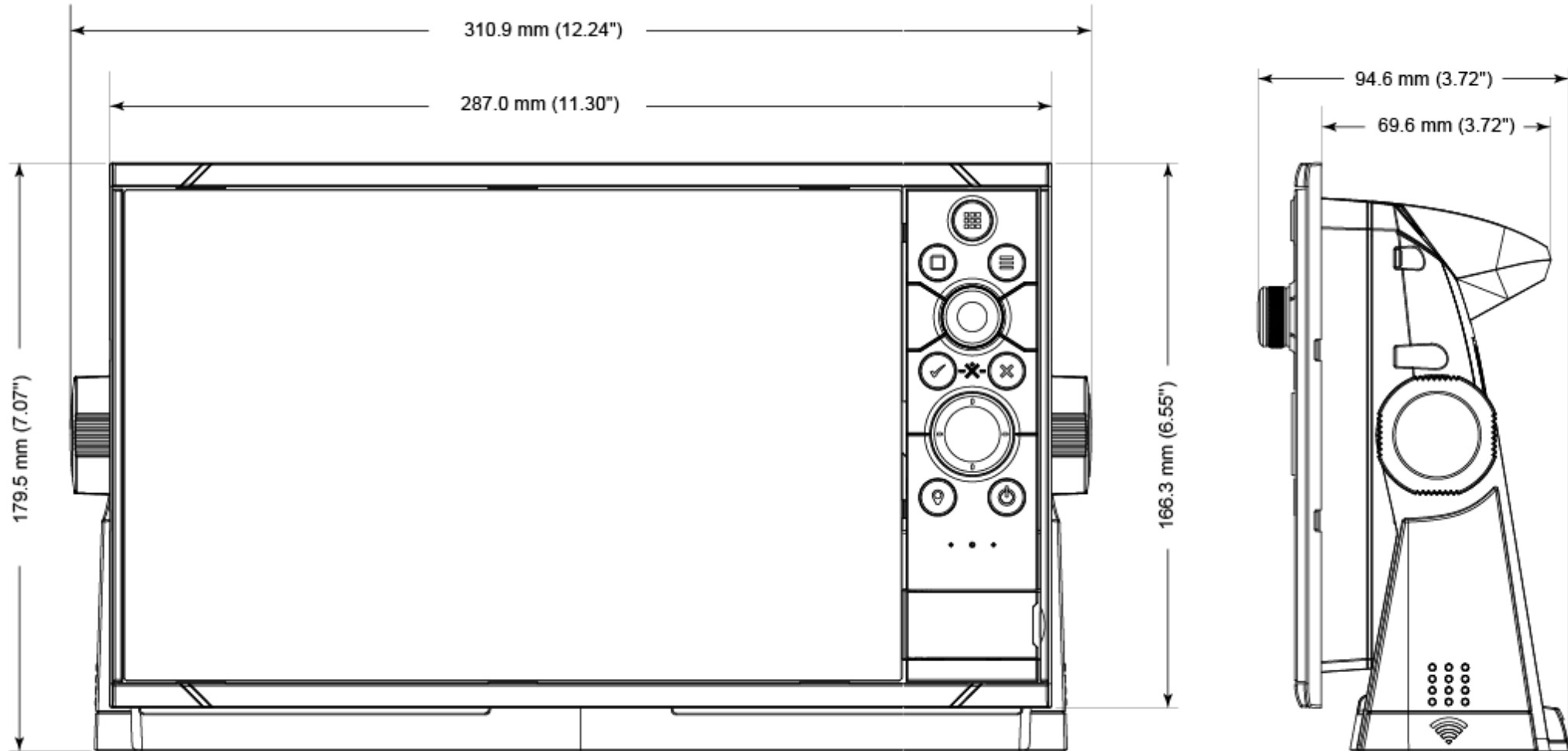
- Dash mount directly onto a console or dash
- 8mm profile
- Screws install from the front with removable surround bezel



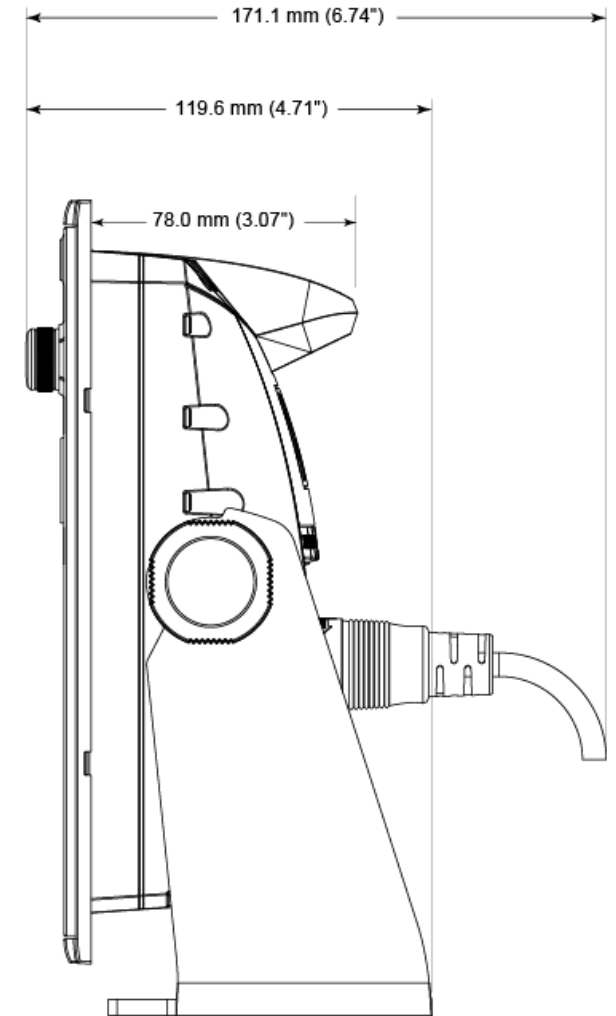
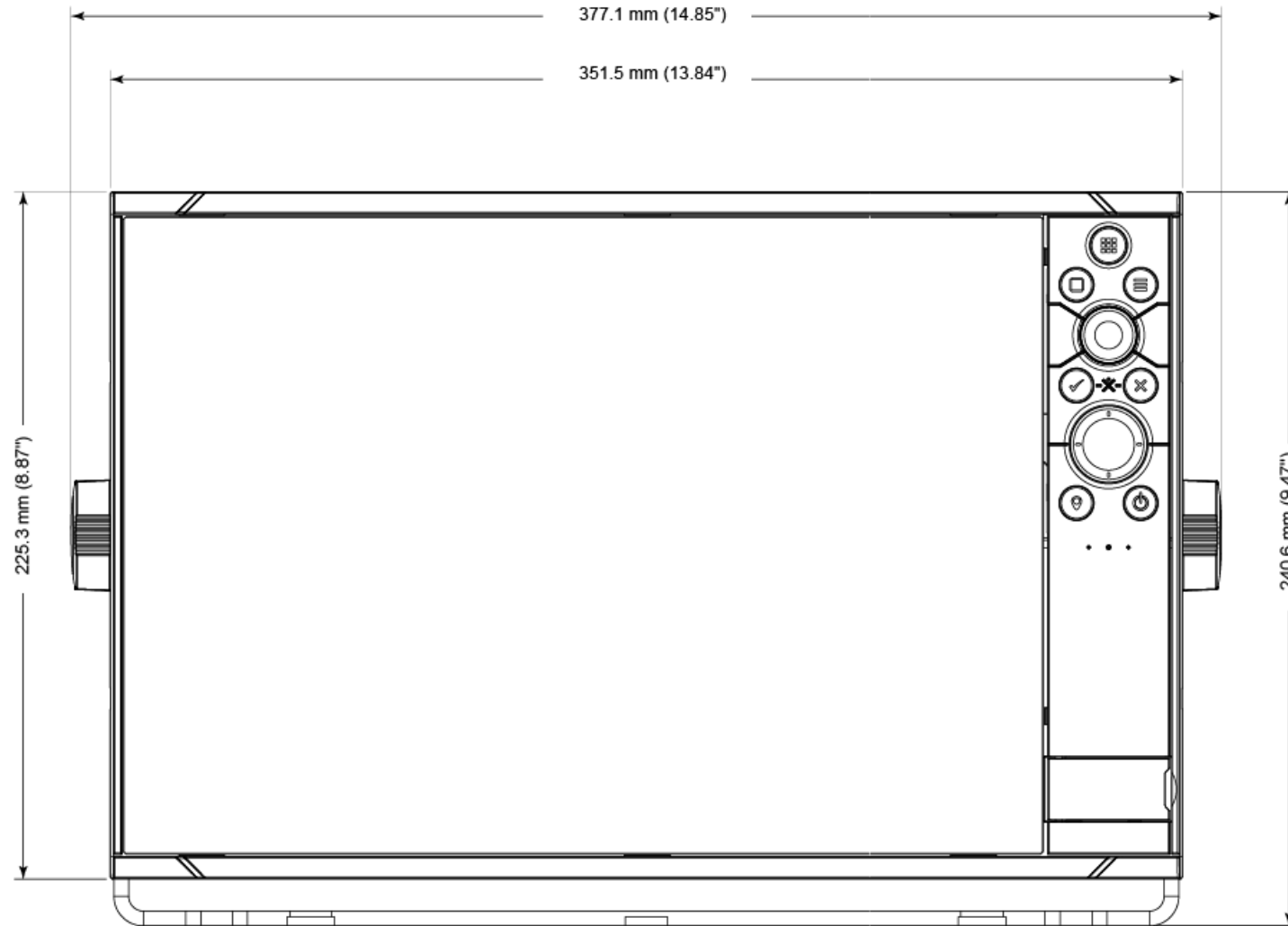
Bracket mount installation

- Gimbal brackets available for all screen sizes
- Easily mount onto a flat surface
- Tilt for best viewing angles
- Can be hung overhead

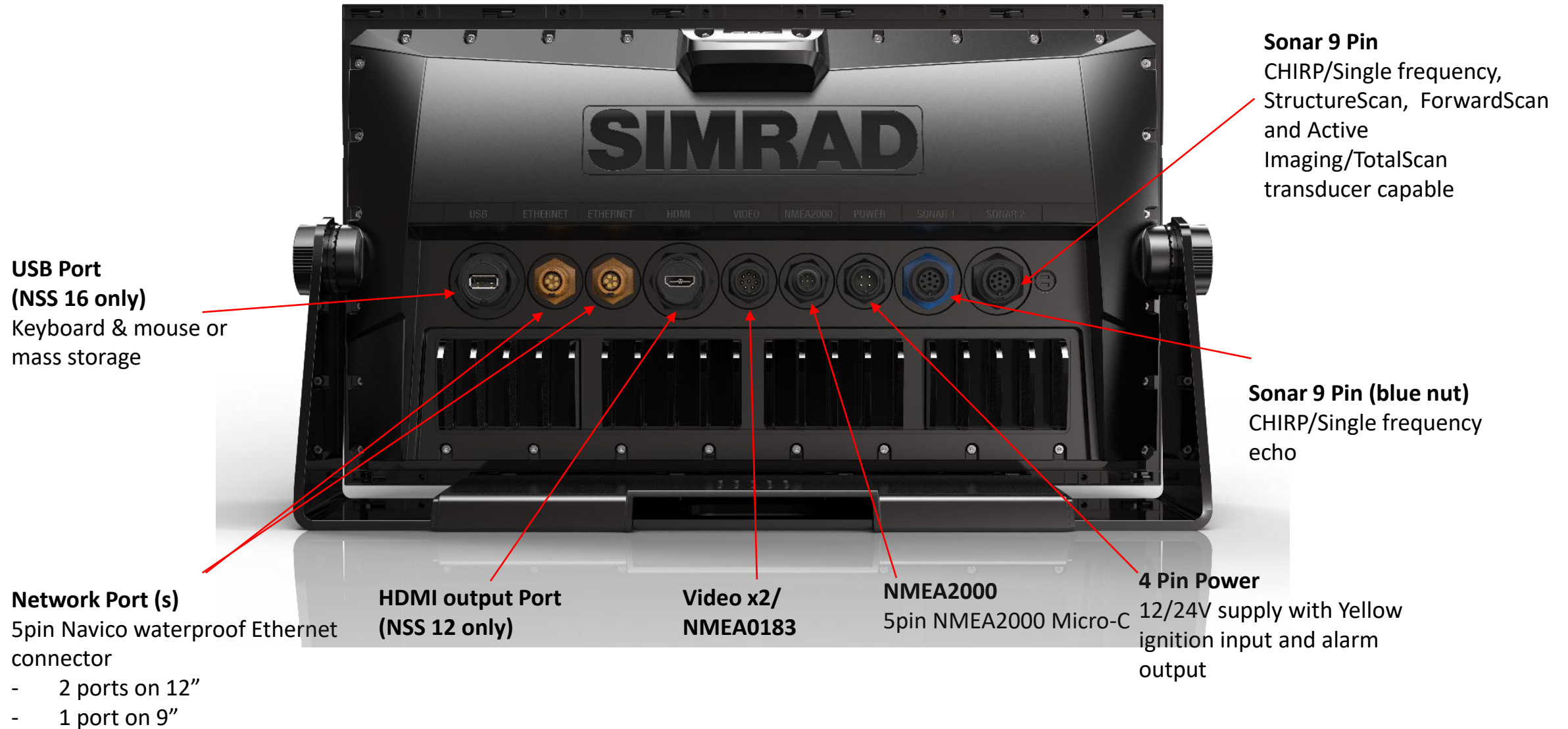
SIMRAD NSS9 EVO3S: DIMENSIONS



SIMRAD NSS12 EVO3S: DIMENSIONS



SIMRAD NSS-SERIES: CONNECTORS



SIMRAD NSS-SERIES: SPECIFICATIONS

	NSS 9 evo3S	NSS 12 evo3S
Dimensions	287 x 166 x 90 mm (11.30 x 6.55 x 3.50") with bracket 311 x 180 x 95 (11.30 x 7.07 x 3.72)	352 x 225 x 98 mm (13.84 x 8.87 x 3.82") with bracket: 377 x 241 x 120 (14.85 x 9.47 x 4.71)
Weight	1.41kg/3.11lb	3.10kg/6.83lb
Display size and type	High Visibility SolarMax HD® IPS 9" optically bonded TFT	High Visibility SolarMax HD® IPS 12.1" optically bonded TFT
Display screen brightness	1200 nits	1200 nits
Display resolution	720 x 1280	800 x 1280
Fuse rating	5 A	5 A
Power consumption (Max)	21 W	28 W
Ethernet connectivity	1 x 5 pin yellow connector x 100 Mbit	2 x 5 pin yellow connector x 100 Mbit
HDMI Output	No	Yes
ALL		
Mounting options	Bracket (Supplied) or panel mount	
Operating temperature range	-15°C to +55°C (5° F to 131° F)	
Storage temperature range	-20°C to +60°C (4°F to 140°F)	
Water resistance	IPX6 and 7	
Supply voltage	10 - 31.2 V DC	
Display backlight color	White sRGB	
Display viewing angles	80° top/bottom, 80° left/right	
Bluetooth connectivity	Internal	
NMEA2000 connectivity	1 x NMEA 2000 Micro-C port, 1 LEN	
NMEA 0183 connectivity	1 x Transmit, 1 x Receive NMEA 0183, Baud Rates 4800, 9600, 19200, 38400. TX and RX use same baud rate. Optional data cable required (P/N 000-00129-001)	
NMEA 0183 sentences	Input: GGA, GLL, GSA, GSV, VTG, ZDA, RMC, DBT, DPT, MTW, VLW, VHW, HDG, HDT, HDM, MWV, MWD, DSC, DSE, VDM. (Note AIS sentences are not bridged to or from NMEA 2000) Output: GGA, GLL, GSA, GSV, VTG, ZDA, RMC, DBT, DPT, MTW, VLW, VHW, HDG, MWV, MWD, TLL, TTM	
Video connectivity	2 x composite (RCA connectors) video inputs. Optional video/ data cable required (P/N 000-00129-001).	

SIMRAD NSS-SERIES: SPECIFICATIONS

WiFi connectivity	Internal WiFi 802.11
Sonar frequencies	40-250kHz 455-800kHz
Sonar max depth	3000'+ (tested with B175L)
Sonar output power	1kW RMS
Compliance	CE, C-Tick, HDMI, EN 60950-1:2006, EN 60945:2002, EN 300 440-2, V1.4.2
GPS	Internal, 10Hz, WASS, MSAS, EGNOS, GLONASS
GPS update rate	10 Hz
GPS channels	34 Channels
GPS correction	WASS, EGNOS, MSAS, GLONASS
GPS position accuracy	Horizontal Accuracy 3 m (9.8 ft)
GPS time to first fix	Cold start 50 sec, Satellite Reacquisition 5 sec
Interface	Full touch screen (multi-touch) and full keypad control, OP50 remote controllers
Charts Included	Insight for USA models: Base map for rest of world models
Radar	Broadband Radar, Halo Pulse Compression Radar, HD Pulse Radar
Sonar	Two 9 pin Xsonic Sonar ports. Sonar port 1: Single channel CHIRP, 50/200 khz, HDI. Sonar port 2: Single channel CHIRP, 50/200 khz, TotalScan, LSS HD, ForwardScan. Compatible with: SonarHub, BSM-3, BSM-2, network echo sounders
Weather	SiriusXM via WM-3 (USA only), GRIB
AIS	Receive AIS data over NMEA 2000 or *NMEA 0183 (has to be wired to all NSS processors)
Auto pilot integration	Full auto pilot control and commissioning
Autopilot steering modes	Auto, Nav., No Drift, Follow up, Non-follow up, Turn patterns, Standby, *Wind, *Wind NAV. (*Boat type set to Sail)
Autopilot manoeuvres turn patterns	U-turn, Spiral-turn, C-turn, Zig-zag, Square-turn, Lazy S-turn, Depth contour tracking
Supported Charts	Insight, Navionics (Gold, NAV+ Platinum+), C-MAP (MAX N, MAX N+, Reveal) NV Digital (Raster US Charts)
Digital switching	BEP C-Zone, Naviop
External storage	2 MicroSD slots, max. 32GB each. Larger if formatted to NTFS
Internal storage	32 GB
Multi-media	via SonicHub2, FusionLink, *Sirius, **JL Audio. (*USA only, **AUST. & NZ only)
Waypoints, routes & tracks	6000 waypoints, 500 Routes with 100 max route points, 50 tracks with up to 12,000 track points.
Launguage Support	Standard Language Pack: English(US), English(UK), Danish, German, Spanish, Finnish, French, Greek, Icelandic, Italian, Dutch, Norwegian, Portuguese, Swedish Other languages supported by Unlock: Japanese, Korean, Thai, Chinese, Bulgarian, Hebrew, Croatian, Hungarian, Lithuanian, Latvian, Polish, Slovak, Turkish, Russian, Ukrainian, Arabic,Farsi

SIMRAD NSS-SERIES: IN THE BOX

	NSS9 evo3S (000-15405-001)	NSS12 evo3S (000-15406-001)
Display	✓	✓
Sun Cover	✓	✓
Connector caps	✓	✓
Power Cable	✓	✓
Dash gasket and fasteners	✓	✓
Gimbal U-Bracket, Fasteners	✓	✓
Edge bezels	✓	✓
Documentation	✓	✓
Halo20+ Radar	✗	✗
Halo20+ Radar cable	✗	✗

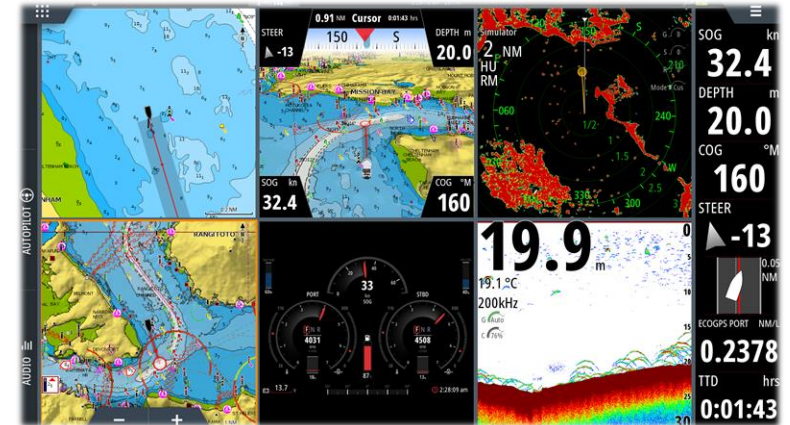


NSO EVO3S

16"

SIMRAD NSO16: PRODUCT DESCRIPTION

- NSO Evo3S is Simrad's premier larger boat MFD solution
- NSO Evo3S offers:
 - Large Wide Format Displays designed for premium boats – all in Full HD 1920x1080
 - Best in Class Viewability from all angles with and without polarized glasses
 - Customize your solution with High Performance Network Modules including:
 - Halo Radar
 - S5100 Sportfishing Echosounder
 - StructureScan 3D Echosounder
 - ForwardScan
 - Autopilot
 - The Fastest / Most Responsive Simrad System yet
 - Fast page changes
 - Smooth transitions (like chart rotation and panning)
 - Multi-tasking



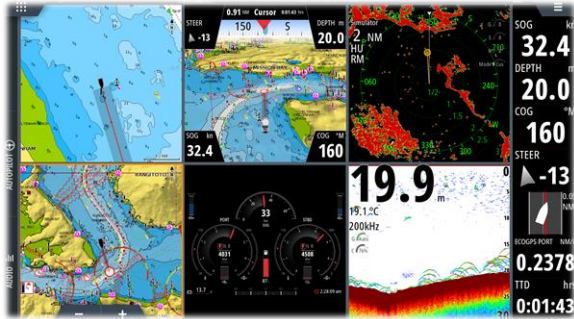
SIMRAD NS016: KEY FEATURES

- High bright, wide viewing angle displays
 - Full HD (1920x1080) on all sizes
 - Easy to use multi touch software
 - Safely and easily navigate using your favourite cartography (Insight, CMAP, Navionics)
 - Determine depth, bottom type and find fish using one of the many echosounder technology options
 - Quick and simple control of entertainment systems connected on NMEA2000
 - Vessel circuit control when connected to a NaviOP or C-zone digital switching system
 - View and monitor engine data while underway
- Low Profile Glass dash styling
- Built in Wi-Fi connectivity
 - Software update notifications and downloads when connected to the internet
 - Screen mirroring when connected to a mobile device
- Micro SD card slot
- Operable with OP50 Remote
 - Advanced networking and I/O options
 - CAN ports (NMEA 2000 and J1939)
 - NMEA 0183 serial port
 - Ethernet (3 RJ45 ports)
 - Analogue video (2 input ports)
 - HDMI video (1 Input, 1 Output)
- Direct Audio, Autopilot and engine connection and control
- Magnetic sun covers for all sizes

SIMRAD NSO16: KEY FEATURES

Ultimate Clarity

NSO evo3S delivers the ultimate view with an ultra-bright display, available in 16, 19, or 24-inch widescreen sizes. Wide viewing angles keep the screen in view from anywhere in sight, even if you're wearing polarised sunglasses. See more than ever with Full HD resolution, and the option to combine up to six panels in a split-screen layout.



Swift Response

Every NSO evo3S display features an integrated six-core processor for ultimately smooth response, from charting to StructureScan® 3D imaging. Enjoy swift access to the information you need, as you need it, whether you're cruising the open ocean or carefully navigating a crowded harbour.



Fully Connected

Built-in wireless connectivity links NSO evo3S to your existing mobile devices for remote viewing and control, and delivers easy online software upgrades via any wireless internet hotspot. Wired Ethernet, NMEA 2000®, and J1939 networking provides almost limitless integration options, from vessel-wide display systems to radar, sonar, engine integration, and much more.



Glass Helm Style

NSO evo3S glass helm systems offer the perfect combination of form and function. Create your own custom helm layouts to suit any activity, and switch seamlessly between those layouts in an instant. Low-profile glass helm styling complements any helm design, from ultra-modern to timeless classic.



SIMRAD NSO16: SPECIFICATIONS

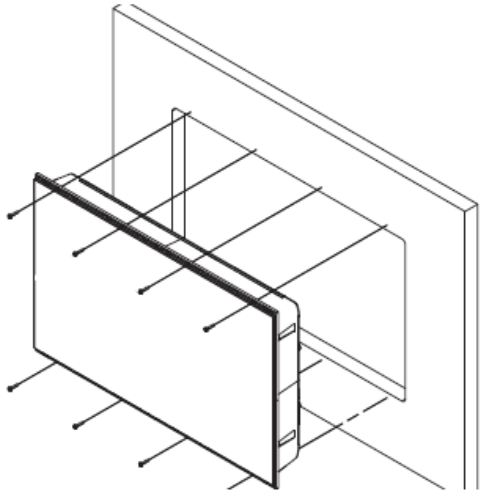
NSO 16 Evo3S

Dimensions	400.1 x 260 x 83 mm (15.75 x 10.24 x 3.27") With bracket: 474.9 x 307.5 x 222.5 mm (18.7 x 12.1 x 8.76")
Weight	3.9 kg (8.6 lbs.)
Display size and type	IPS 15.6" optically bonded TFT
Display screen brightness	1200 nits
Display resolution	1920x1080
Fuse rating (12V/24V)	6 A / 3 A
Power consumption (Max)	40 W +- 4 W
Ethernet connectivity	3x RJ45 ports
Video Input	2x composite video (BNC) 1x high definition video (1080p, HDCP 1.4, HDMI-A)
Video Output	1x high definition video output (1080p, no HDCP, HDMI-A)
Mounting options	Panel mount or bracket (optional accessory)
Operating temperature range	-15°C to +55°C (5° F to 131° F)
Storage temperature range	-40°C to +85°C (-40°F to 185°F)
Waterproof rating	IPX6 (when panel mounted correctly with only the front exposed)
Supply voltage	12/24 V DC (10 - 31.2 V DC min - max)
Display backlight color	White sRGB
Display viewing angles	80° top/bottom, 80° left/right

SIMRAD NS016: SPECIFICATIONS

Bluetooth connectivity	Internal
NMEA2000 connectivity	1 x NMEA 2000 Micro-C port
J1939 connectivity	1 x J1939 Micro-C port
NMEA 0183 connectivity	2x NMEA0183 (IEC61162-1) 2x NMEA0183-HS (IEC61162-2)
NMEA 0183 sentences	Input: GGA, GLL, GSA, GSV, VTG, ZDA, RMC, DBT, DPT, MTW, VLW, VHW, HDG, HDT, HDM, MWV, MWD, DSC, DSE, VDM. (Note AIS sentences are not bridged to or from NMEA 2000) Output: GGA, GLL, GSA, GSV, VTG, ZDA, RMC, DBT, DPT, MTW, VLW, VHW, HDG, MWV, MWD, TLL, TTM
WiFi connectivity	Internal 802.11b/g/n
Weather	SiriusXM via WM-3 (USA only), GRIB
AIS	Receive AIS data over NMEA 2000 or *NMEA 0183 (has to be wired to all NSS processors)
Auto pilot integration	Full auto pilot control and commissioning
Autopilot steering modes	Auto, Nav., No Drift, Follow up, Non-follow up, Turn patterns, Standby, *Wind, *Wind NAV. (*Boat type set to Sail)
Autopilot manoeuvres turn patterns	U-turn, Spiral-turn, C-turn, Zig-zag, Square-turn, Lazy S-turn, Depth contour tracking
Supported Charts	Insight, Navionics (Gold, NAV+ Platinum+) , C-MAP (MAX N, MAX N+) NV Digital (Raster US Charts)
Digital switching	BEP C-Zone, Naviop
External storage	MicroSD slot, max. 32GB. Larger if formatted to NTFS
Internal storage	16 GB
Multi-media	via SonicHub2, FusionLink, *Sirius, **JL Audio. (*USA only, **AUST. & NZ only)
Waypoints, routes & tracks	6000 waypoints, 500 Routes with 100 max route points, 50 tracks with up to 12,000 track points.

SIMRAD NS016: MOUNTING OPTIONS



Dash Mount

- 8mm profile
- Front screws with removable bezel (only suitable for low shock installations)



Dash Mount

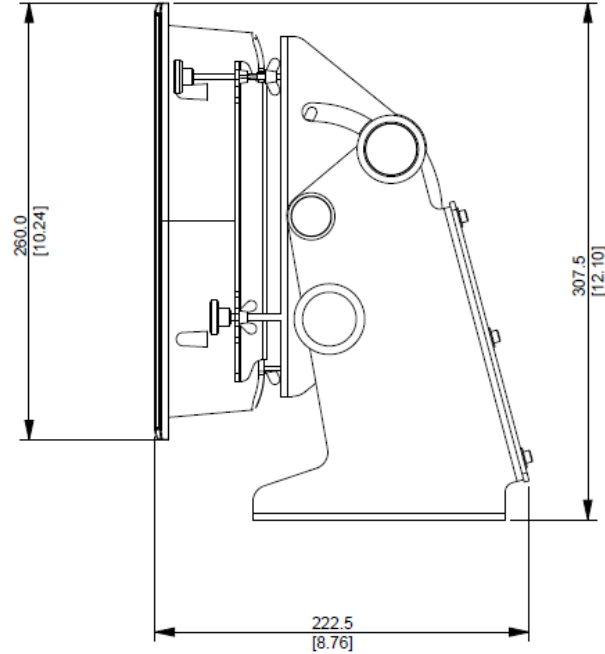
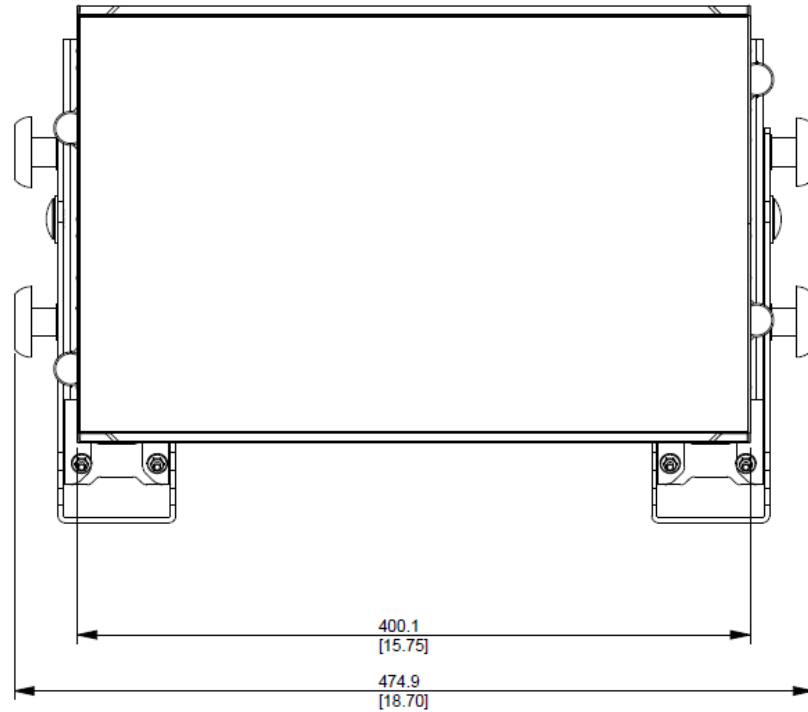
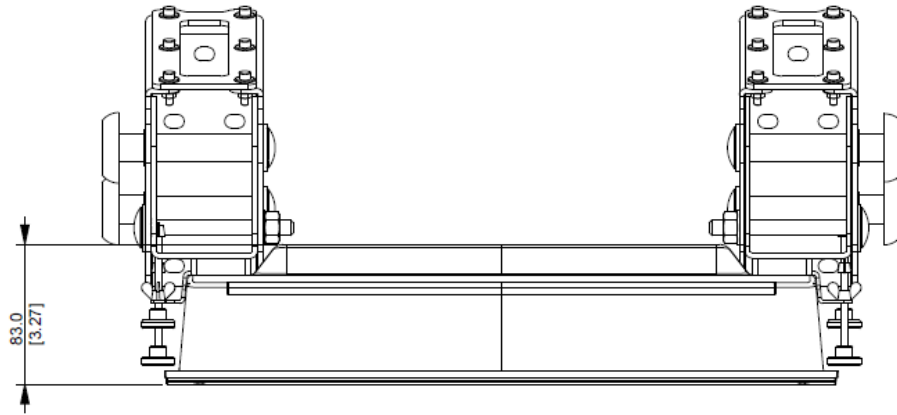
- 8mm profile
- Rear brackets



Bracket mount installation

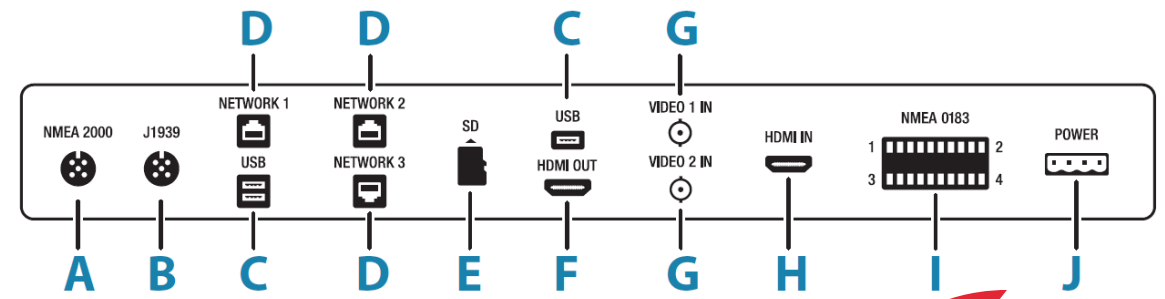
- Extra heavy duty gimbal bracket
- Easily mount onto a flat surface
- Tilt for best viewing angles
- Certified for use on bridge to IEC60945
- 16" requires spacer plate (sold separately)

SIMRAD NS016: DIMENSIONS



SIMRAD NS016: CONNECTORS

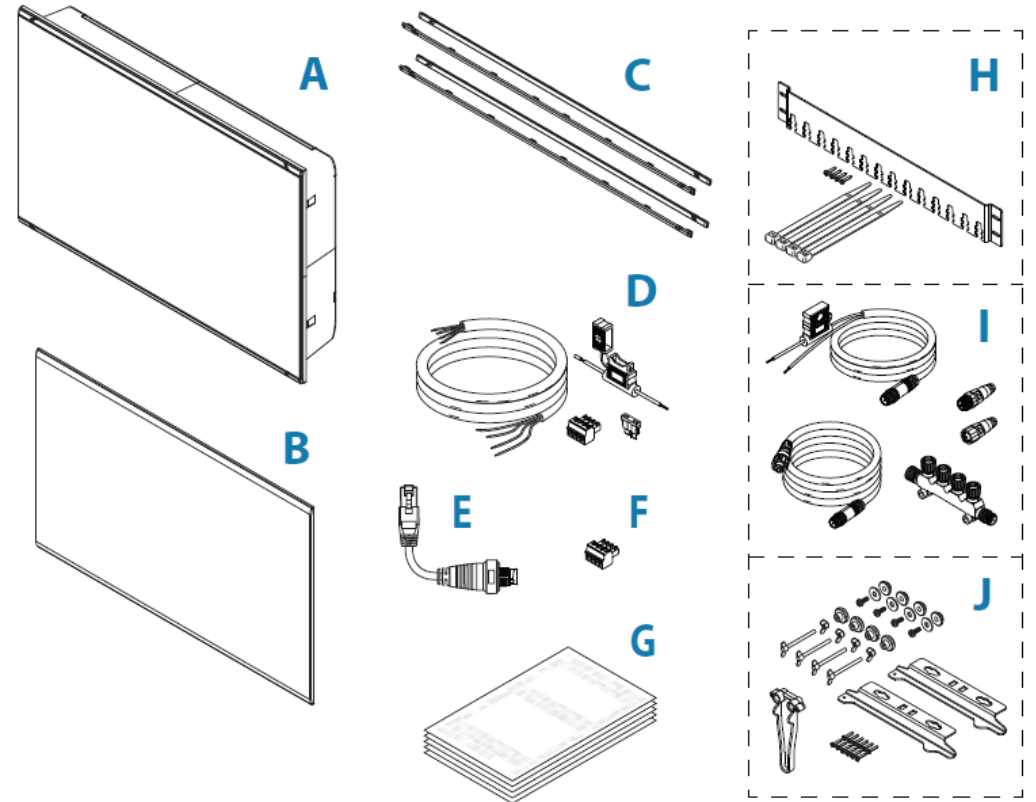
A	NMEA 2000	NMEA 2000 data
B	J1939	J1939 engine data
C	USB	mouse, keyboard or mass storage
D	NETWORK 1-3	Ethernet network
E	SD	microSD card reader
F	HDMI OUT	HDMI video output
G	VIDEO IN	composite video input
H	HDMI IN	HDMI video input
I	NMEA 0183	NMEA 0183 data
J	POWER	12 - 24 V DC input, external alarm and power control



SIMRAD NSO16: IN THE BOX

NSO Evo3S 16"
(000-15047-001)

A	Display	✓
B	Magnetic Sun Cover	✓
C	Bezels (1 set Black,1 Set Silver)	✓
D	Power Cable	✓
E	RJ45 Adaptor Cable	✓
F	NMEA0183 Connector	✓
G	Documentation	✓
H	Cable Retainer Kit	✓
I	NMEA 2000 Starter Kit	✓
J	Panel Mounting Kit	✓



THANK YOU.