

**SIMRAD**<sup>®</sup>

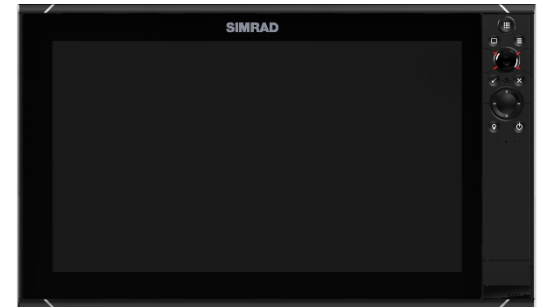
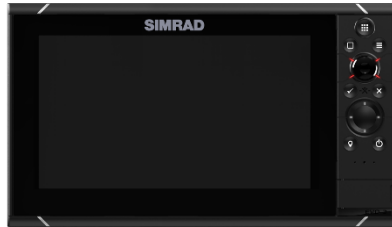
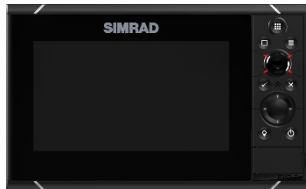
Go With Confidence

# NSS evo3

Product Brief – **Internal Version**

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July 2016



# Key Features for Sportfishing and Offshore Cruising

- High Visibility SolarMax HD® Displays
- Easy to use HEROiC 2 software and full keypad for simple and precise control in any sea conditions
- Built-in advanced echosounder capable of displaying Dual channel CHIRP, Forwardscan, Sidescan, Downscan and StructureScan 3D images
- Connects to Simrad's premium network modules for the ultimate offshore performance
  - Halo PUC Radar
  - BSM3 Sportfishing Echosounder
- Direct Audio, Autopilot and engine connection and control

# Key Features - Continued

- Low Profile Glass dash styling
- Full keypad for precise control in rough sea conditions
- 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
- Built in echosounder – Broadband and dual channel CHIRP
- Built in DownScan and Sidescan Imaging (transducer required)
- Built in Forwardscan Imaging (transducer required)

# SolarMAX HD® Display Technology

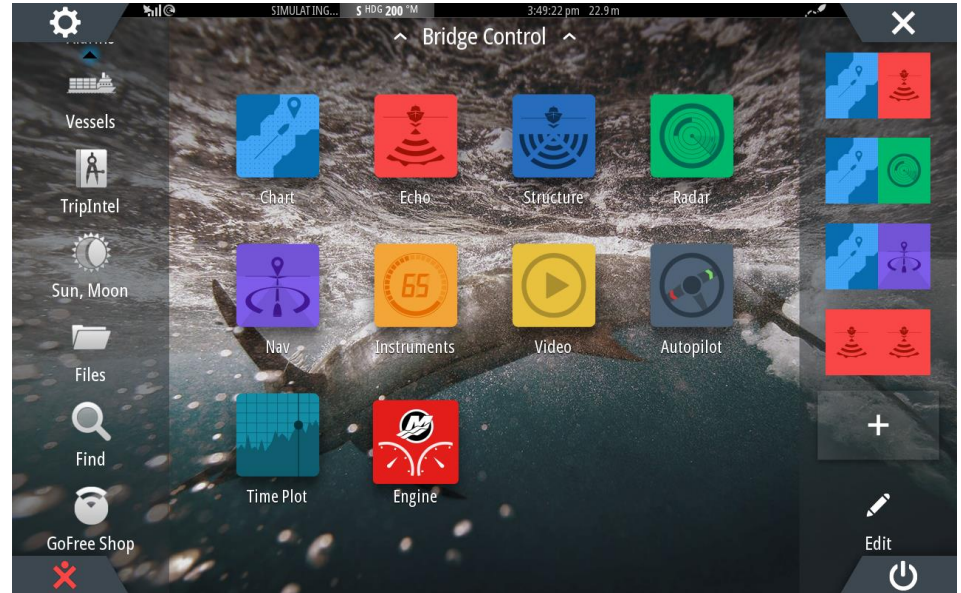
- Ultra-wide viewing angles for excellent viewability from any angle on the boat (>80 degrees up/down/left/right)
- High resolutions for best on-screen detail
- High brightness LED backlight and antireflective coating for ultimate bright sunlight viewing
- Very high display operating temperatures for reliable operation in the most harsh 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

# Full touch screen and keypad hybrid control



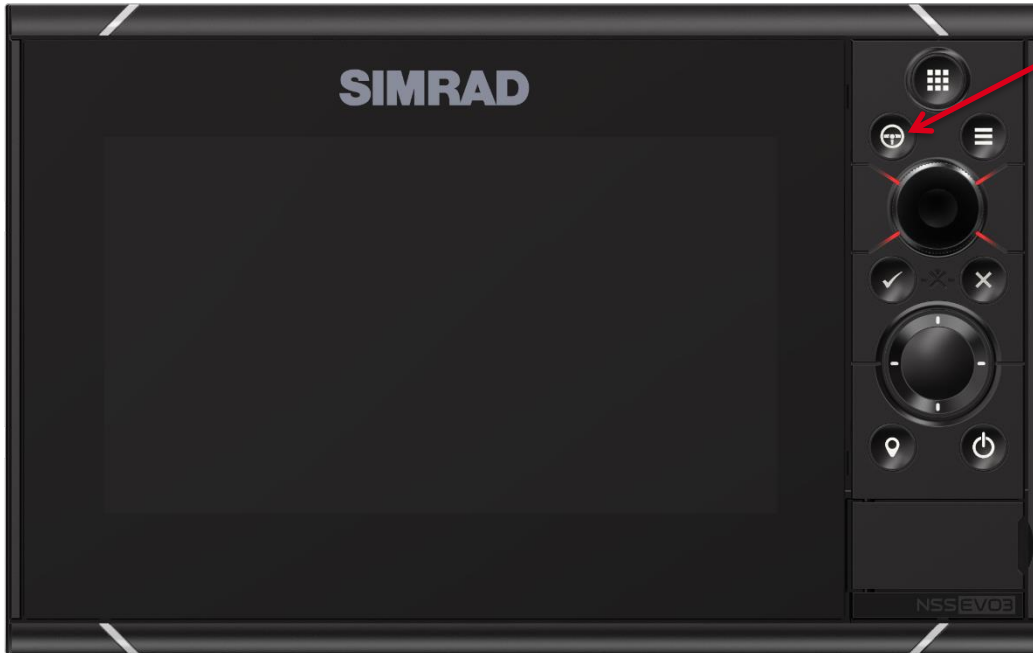
# HEROic 2 Software

- **New user interface software with updated styling and layout for easy access of important functions**
- **Press and hold functionality for quick menu access**
  - **Chart interaction**
  - **Sonar interaction**
  - **Instrument bar item editing**
- **Improved Bridge Control access by swiping home screen**



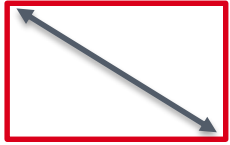
# User Configurable WheelKey

Setup the WheelKey to control your favourites:

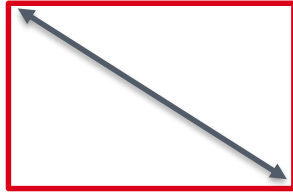


- Goto Cursor
- Goto Coordinate
- New Route
- Measure
- Maximise panel
- Toggle window
- Log sonar
- Pause/unpause sonar
- Transmit/standby radar
- MOB
- Autopilot control
- Toggle analog video source
- Screenshot
- Find
- Touchscreen lock/unlock
- Chart
- Echo
- Radar
- Nav
- ..... and more

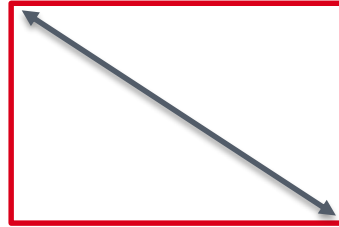
# 4 Display Sizes



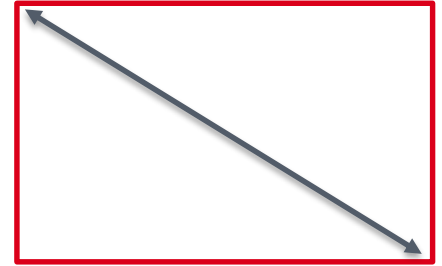
7"



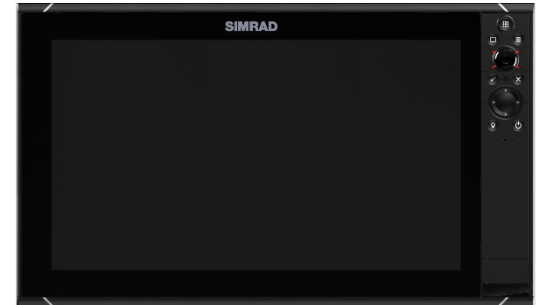
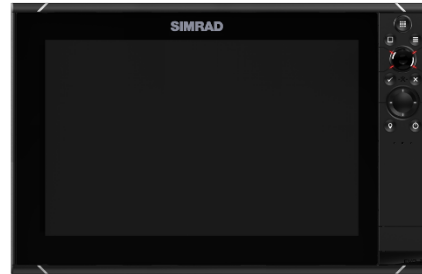
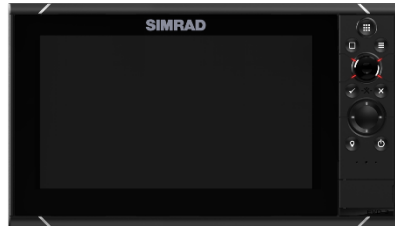
9"



12"



16"





# 9 Pin xSonic plugs



## Single channel sonar port (blue nut)

- Single channel CHIRP transducer
- 50/200kHz traditional sonar transducer
- HDI transducers

## Multi channel sonar port (black nut)

- Single channel CHIRP transducer
- 50/200kHz traditional sonar transducer
- Totalscan
- LSS HD
- Forwardscan

# Built-in Dual Channel CHIRP

- Dual channel CHIRP transducers plug directly into both NSS evo3 sonar ports
- Or plug single channel CHIRP transducers into each port

**NB:** there are no limitations on frequency combinations

- ✓ High + Low
- ✓ Med + Low
- ✓ High + Med



**B275LH-W**

OR

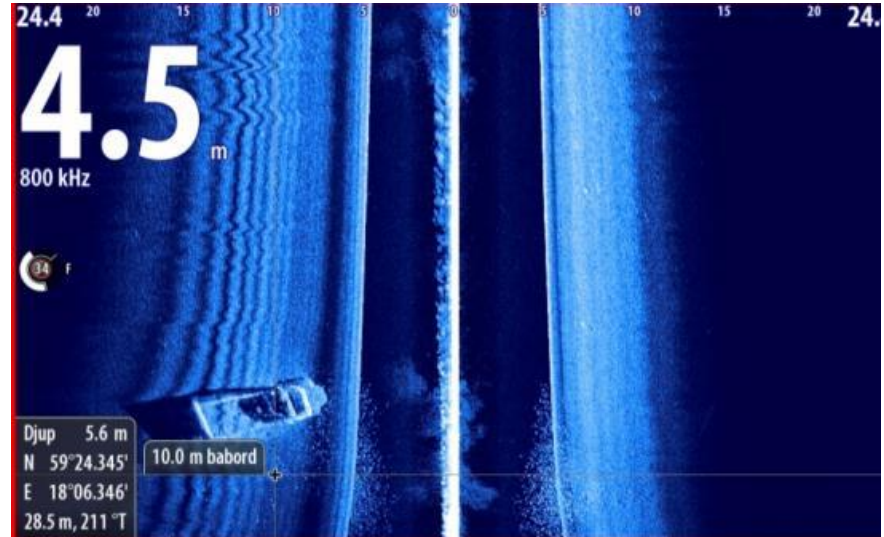
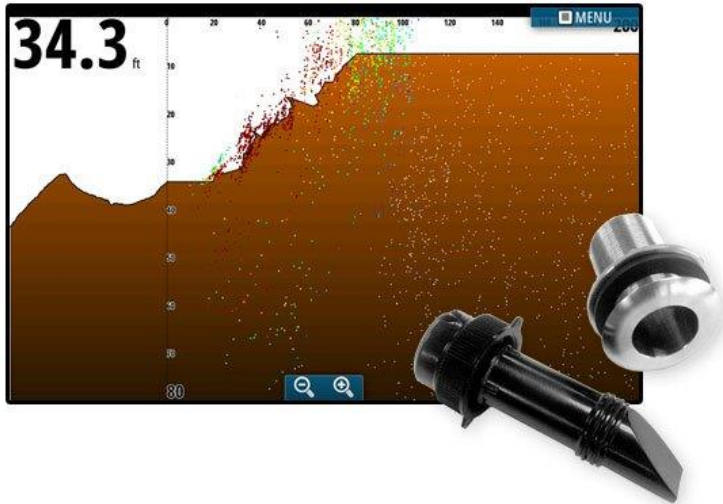


**B175H-W**

**B175L**

# Built-in Advanced Echosounder

- NSS evo3 includes built-in advanced echosounder functions including StructureScan and Forwardscan when connected with compatible transducers
- \* NSS evo3 also supports simultaneous use of StructureScan and CHIRP echosounder.



# Transducer connection Matrix

		Sonar Port 2 (Multi Channel – Black Nut)					
		50/200kHz or 83/200kHz	HDI	CHIRP	TotalScan	LSS-HD	ForwardScan
Sonar Port 1 (Single Channel – Blue Nut)	50/200kHz or 83/200kHz	✓	✓	✓	✓	✓	✓**
	HDI	✓	✓*	✓	✓*	✓*	✓**
	CHIRP	✓	✓	✓	✓	✓	✓**
	TotalScan	✗	✗	✗	✗	✗	✗
	LSS-HD	✗	✗	✗	✗	✗	✗
	ForwardScan	✗	✗	✗	✗	✗	✗

\* DownScan image will come from Sonar Port 2 transducer

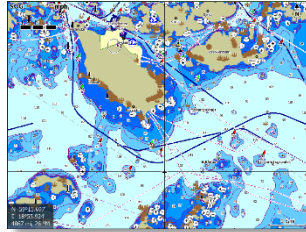
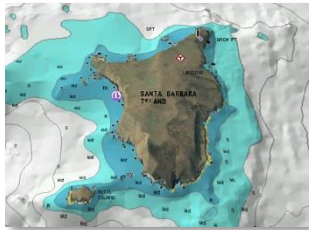
\*\* Forwardscan and echo cannot be displayed simultaneously, unless they are plugged in to separate devices. The echo will be paused while ForwardScan is viewed and vise-versa

# Portfolio Position

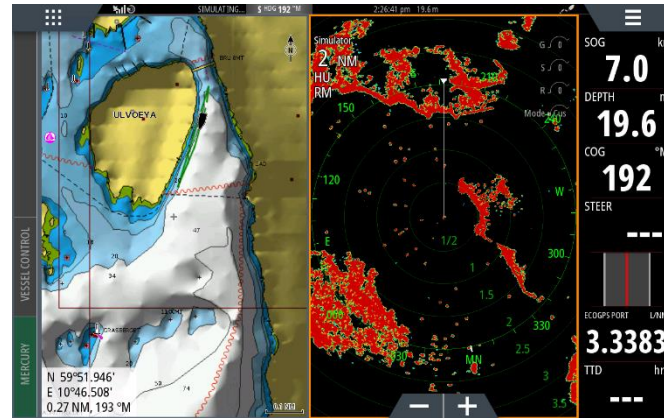
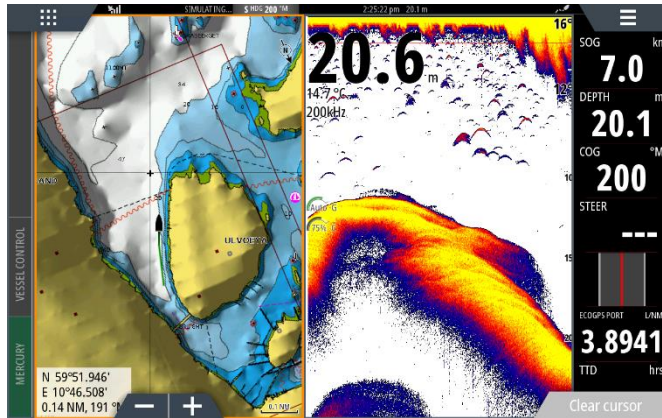


# Software Features - Charting

- Choose your favourite chart vendor or chart that best covers your area of usage
  - Navionics, CMAP, Insight, NV Digital...



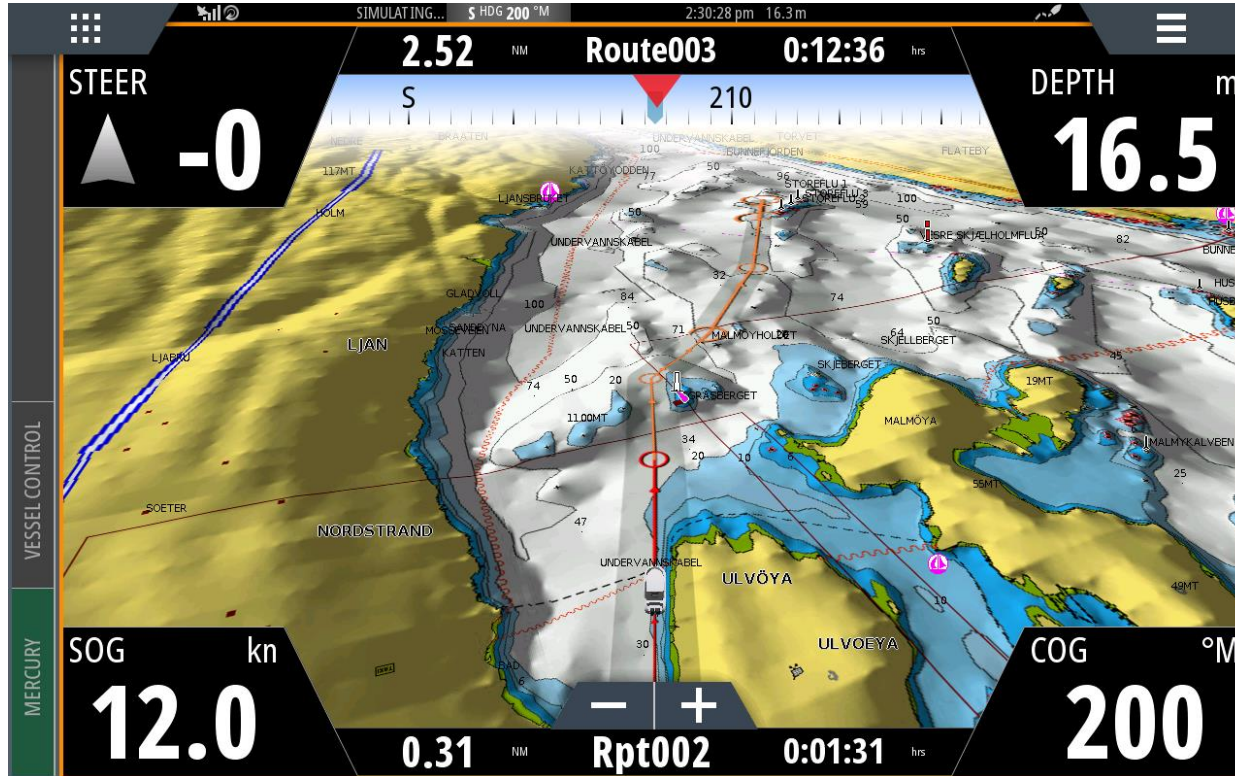
- Create your own favourite chart split screen combinations





# Software Features - Charting

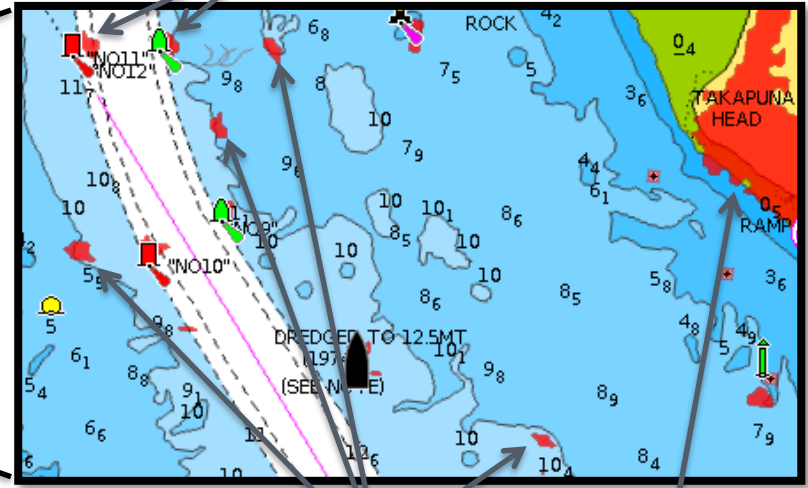
- View in 3D or Nav. perspective for easy cruising



# Software Features - Charting

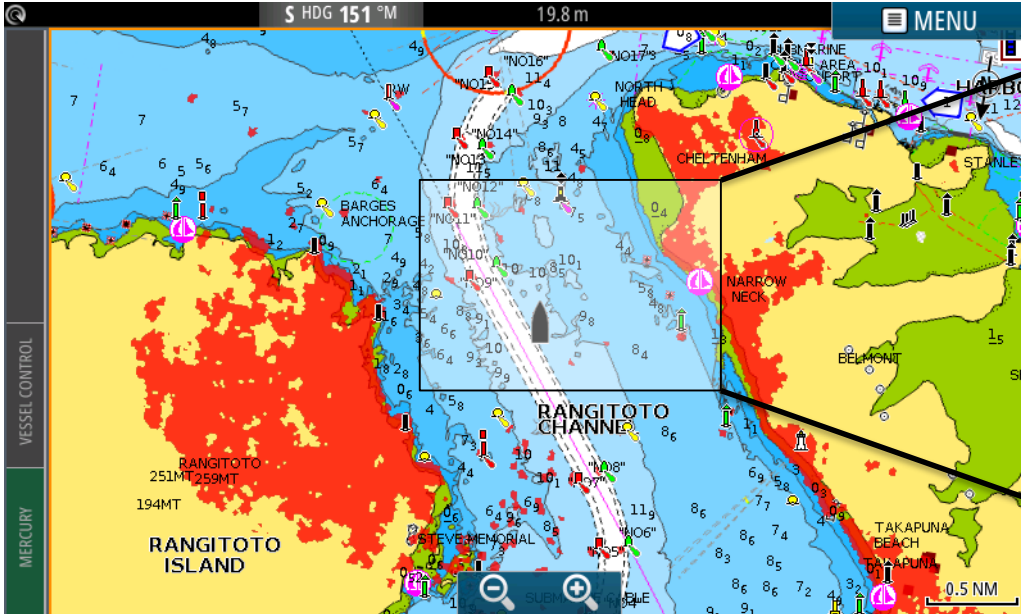
- Overlay Radar for ultimate situational awareness

Channel markers



Boats

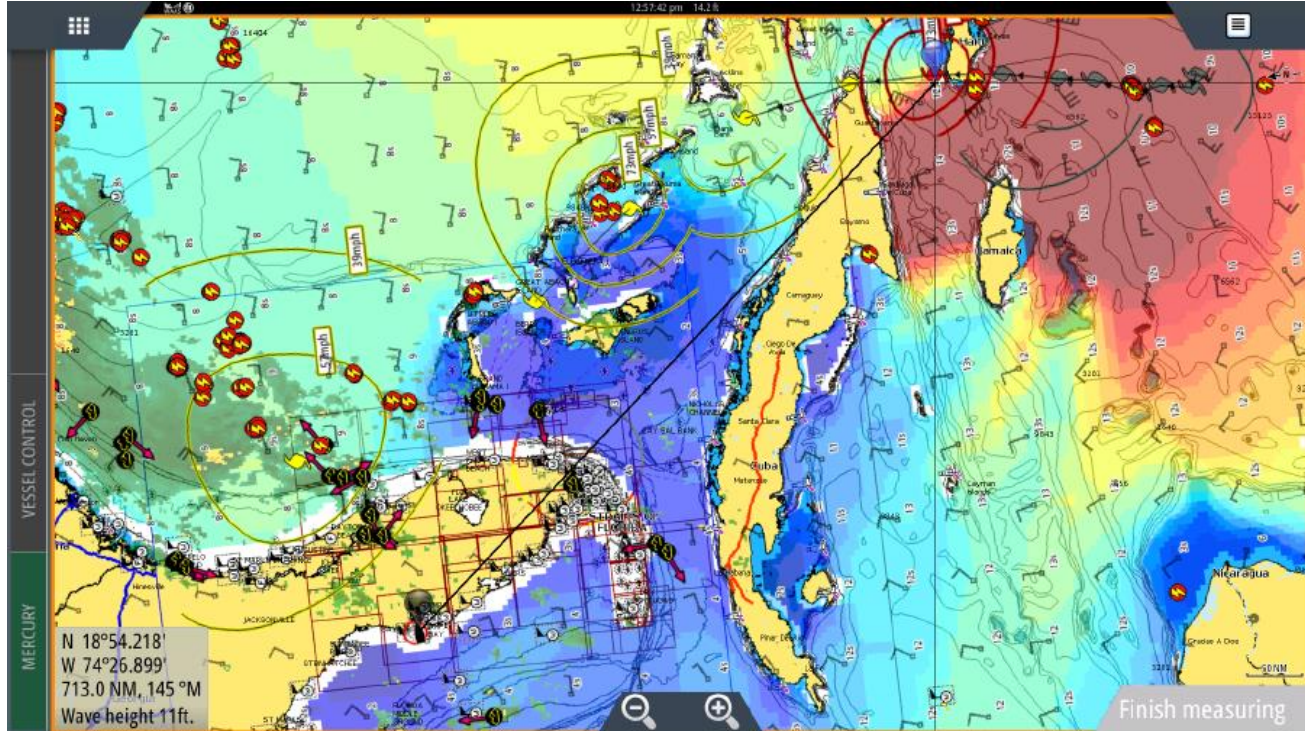
Headland



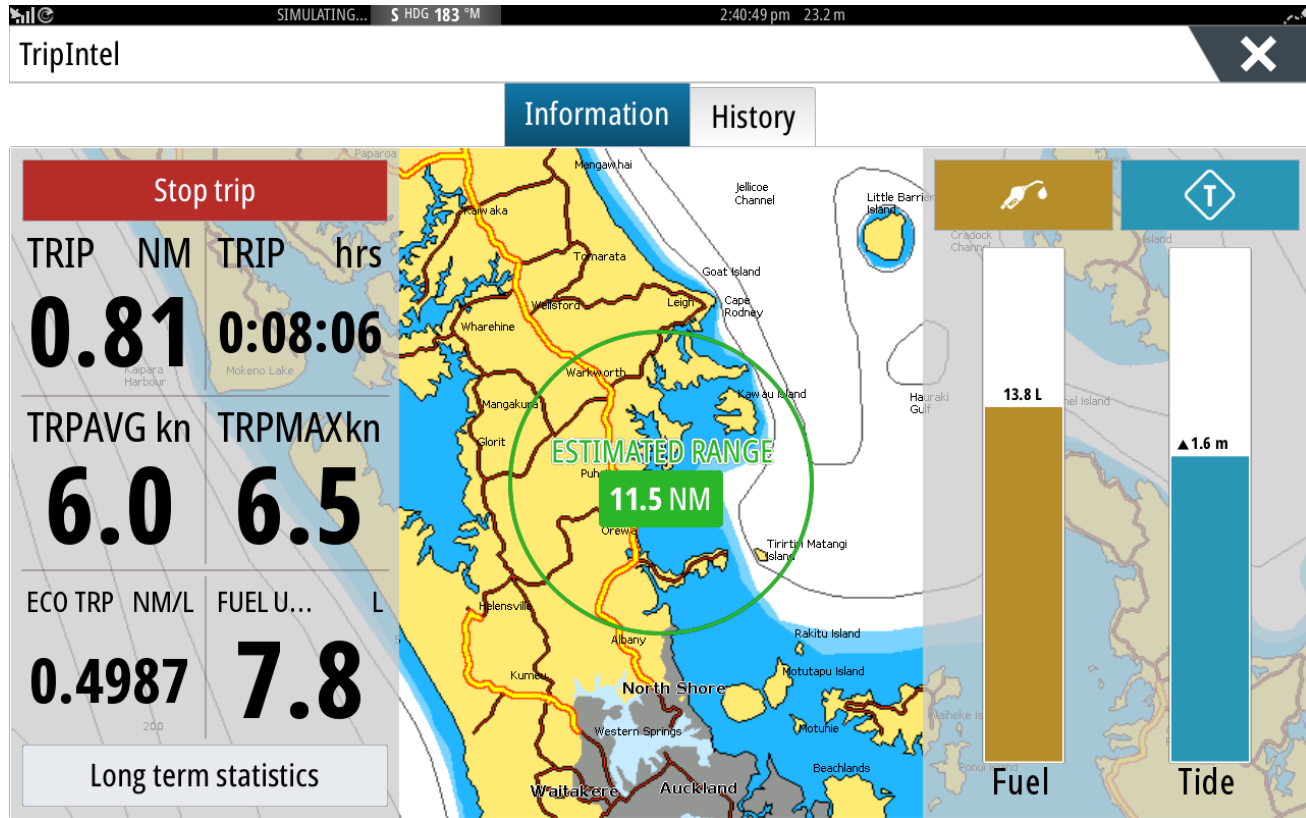


# Software Features – Sirius weather

- Connect a WM3 Sirius weather module for latest weather data drawn directly on the chart \* USA customers only

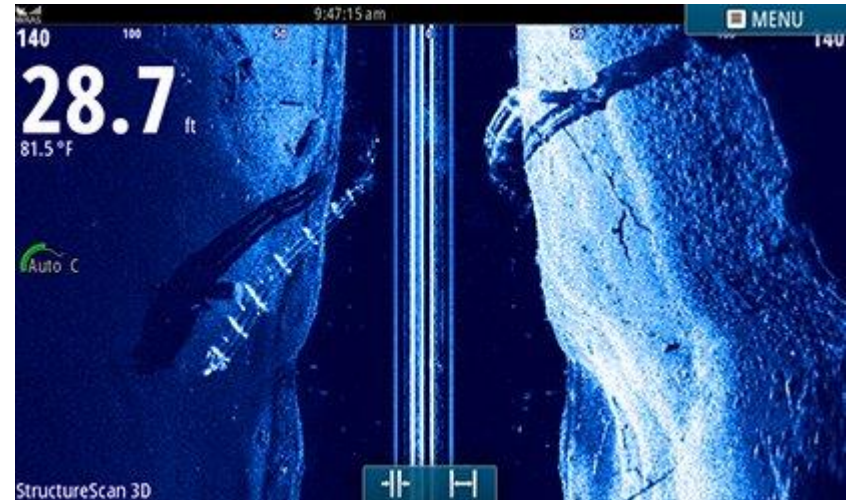
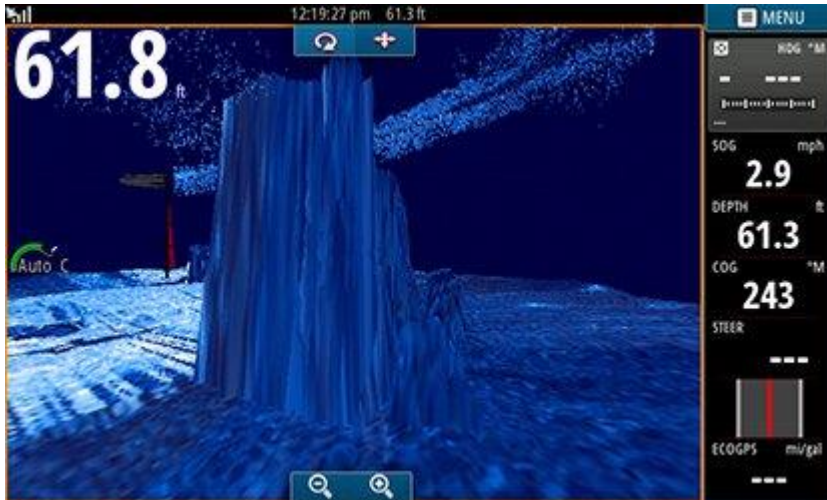


# Software Features – TripIntel

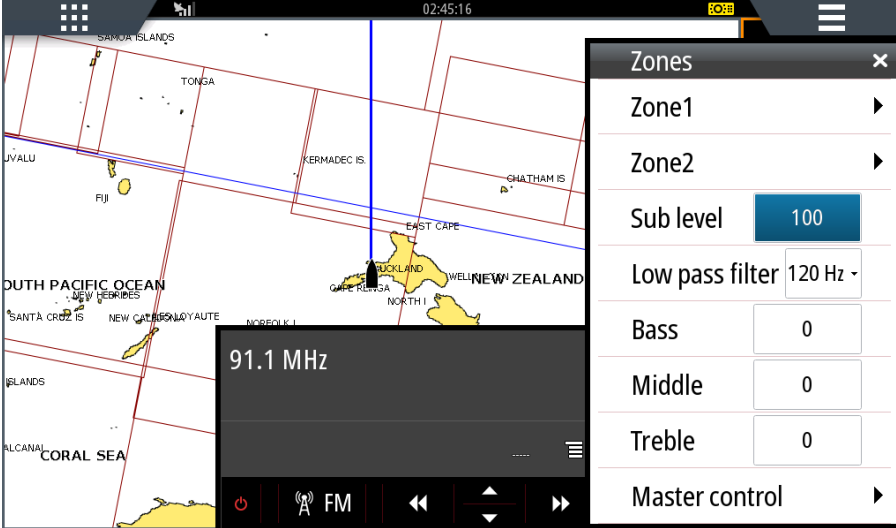


# Software Features – Structurescan 3D

- NSS evo3 supports StructureScan 3D imaging when connected to an external StructureScan 3D module




# Software Features – Engine, Audio and Autopilot integration



The screenshot displays a map of the South Pacific Ocean region, including New Zealand, Tonga, and the Kermadec Islands. A settings menu is overlaid on the right side of the screen, titled "Zones". The menu includes the following options:

- Zone1
- Zone2
- Sub level: 100
- Low pass filter: 120 Hz
- Bass: 0
- Middle: 0
- Treble: 0
- Master control

At the bottom of the screen, there is a radio frequency display showing "91.1 MHz" and a power button icon.



The screenshot displays a map of the North Atlantic Ocean region, including Greenland, Iceland, and the British Isles. An autopilot control panel is overlaid on the map, showing the following information:

- Autopilot mode: ND
- HDG: 200 °M
- Set Course: 203 °M
- VRF

On the right side of the screen, there is a vertical panel displaying various engine and vessel data:

- ND: 203
- SOG: 7.0 kn
- DEPTH: 21.5 m
- WTRTMP: 14.7 °C
- TIME: 04:14:05
- DTD: --- km
- FUEL: --- L

At the bottom of the screen, there is a coordinate display showing "N 59°51.732' E 10°46.430'" and "0.64 km, 188 °M".

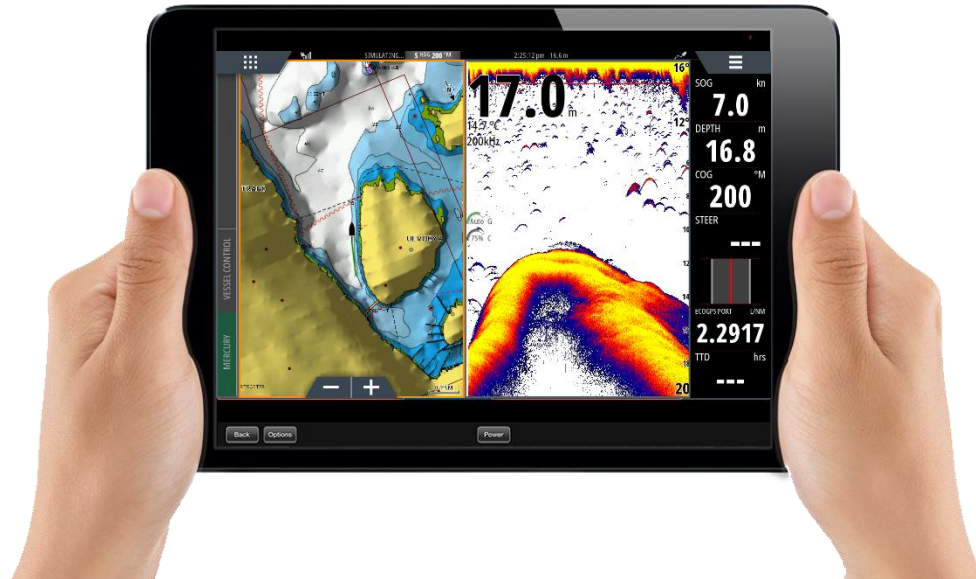


# Software Features – GoFree Link Screen Mirroring

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

- Mirror your NSS evo3 screen on compatible smart phones by downloading the GoFree Link app onto your phone.
- Take control of your NSS evo3 using a compatible tablet.

*Note: Autopilot can't be controlled from a mobile device.*



# NSS7 evo2 to evo3 upgrade



## Panel mounting

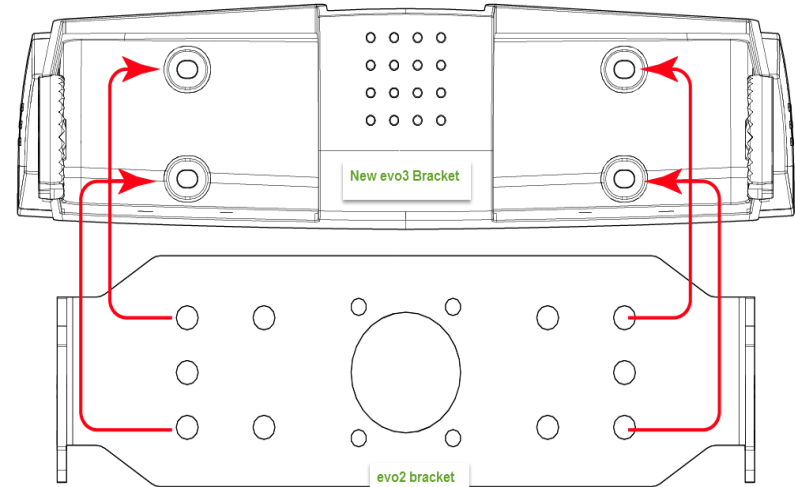
- Cut out is the same as evo2
- Product is overall 8mm(5/16") wider and 3mm(1/8") Taller
- Evo3 has four more screw holes
- Fill /seal evo2 screw holes before drilling evo3 holes.

## Bracket mount

- New bracket can utilize the old bracket screw positions
- Fill /seal surplus evo2 bracket screw holes.

## Transducer connection

- Existing installs with blue plug transducers require a 7-9 pin adaptor cable



# NSS9 evo2 to evo3 upgrade



## Panel mounting

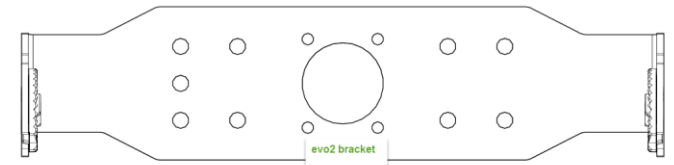
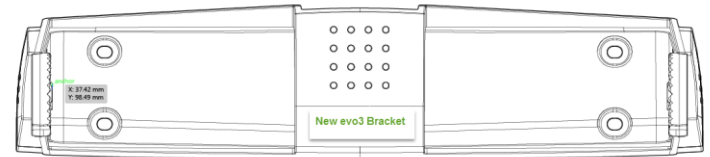
- Cut out is the same as evo2
- Product is overall 8mm(5/16") wider and 3mm(1/8") Taller
- Fill /seal evo2 screw holes before drilling evo3 holes.

## Bracket mount

- No screw hole reuse, fill /seal surplus evo2 bracket screw holes.

## Transducer connection

- Existing installs with blue plug transducers require a 7-9 pin adaptor cable



# NSS 12 evo2 to NSS 12 evo3 upgrade



## Panel mounting

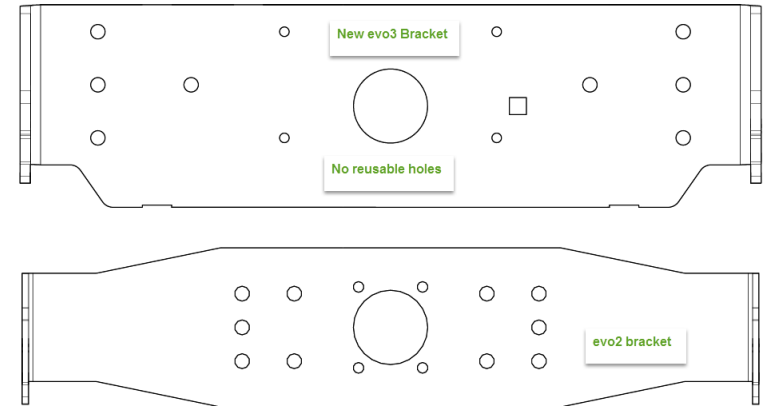
- Cut out is the same as evo2
- Product is overall 7mm(9/32") wider and 10mm(3/8") Taller
- Fill /seal evo2 screw holes before drilling evo3 holes.

## Bracket mount

- No screw hole reuse, fill /seal surplus evo2 bracket screw holes.

## Transducer connection

- Existing installs with blue plug transducers require a 7-9 pin adaptor cable





# NSS16 evo2 to evo3 upgrade



## Panel mounting

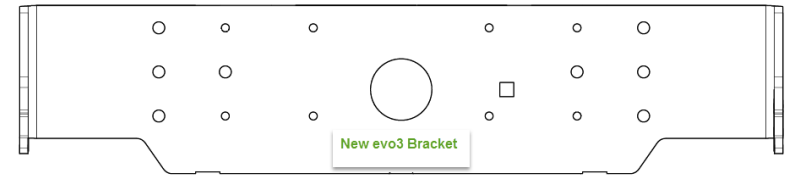
- Cut out is the same as evo2
- Product is overall 8mm(5/16") wider and 10mm(3/8") Taller
- Fill /seal evo2 screw holes before drilling evo3 holes.

## Bracket mount

- NSS16 evo2 had no bracket mount option.

## Transducer connection

- Existing installs with blue plug transducers require a 7-9 pin adaptor cable



# 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

# Autopilot integration

Simrad NSS evo3 can function as an autopilot controller when connected to a Simrad autopilot system via NMEA2000.

NSS evo3 is compatible with the following autopilot systems:

## NAC-2 & NAC-3 Autopilot computers

- Directly control the autopilot from the NSS evo3
- Commissioning the autopilot system requires the presence of a fixed AUTO/STBY key on a nearby pilot controller. This could be an OP10, OP40, OP50, AP24, AP28, NSS evo2, AP44, OP12

## DrivePilot™ and OutboardPilot™

- Directly control the autopilot from the NSS evo3
- NAC-1 pilot computer
- Commissioning the autopilot system requires the presence of a fixed AUTO/STBY key on a nearby pilot controller. The DrivePilot system pack includes an Auto/Stby wired key but this could also be done with an OP10, OP40, OP50, AP24, AP28, NSS evo2, AP44, OP12



# Part Numbers – Main Products

P/N	Description	APAC (AUD)	EMEA (Euro)	AMER SRP (USD)	ROW (USD)	AMER MRP (USD)
000-13233-001	NSS7 EVO3 COMBO MFD,INSIGHT			\$1,299.00		\$1,299.00
000-13234-001	NSS9 EVO3 COMBO MFD,INSIGHT			\$2,299.00		\$2,299.00
000-13235-001	NSS12 EVO3 COMBO MFD,INSIGHT			\$3,499.00		\$3,499.00
000-13236-001	NSS16 EVO3 COMBO MFD,INSIGHT			\$5,499.00		\$5,499.00
000-13237-001	NSS7 EVO3 COMBO MFD,WORLD BASEMAP	\$2,090.00	€ 1,499.00		\$1,799.00	
000-13238-001	NSS9 EVO3 COMBO MFD,WORLD BASEMAP	\$2,999.00	€ 2,299.00		\$3,029.00	
000-13239-001	NSS12 EVO3 COMBO MFD,WORLD BASEMAP	\$4,317.27	€ 3,499.00		\$4,599.00	
000-13240-001	NSS16 EVO3 COMBO MFD,WORLD BASEMAP	\$6,180.91	€ 5,499.00		\$6,199.00	
000-13593-001	NSS7 EVO3 COMBO MFD,INSIGHT,BOAT BLDR			\$1,299.00		\$1,299.00
000-13594-001	NSS9 EVO3 COMBO MFD,INSIGHT,BOAT BLDR			\$2,299.00		\$2,299.00
000-13595-001	NSS12 EVO3 COMBO MFD,INSIGHT,BOAT BLDR			\$3,499.00		\$3,499.00
000-13596-001	NSS16 EVO3 COMBO MFD,INSIGHT,BOAT BLDR			\$5,499.00		\$5,499.00
000-13597-001	NSS7 EVO3 COMBO MFD,NO CARTO,BOAT BLDR	\$2,090.00	€ 1,499.00		\$1,799.00	
000-13598-001	NSS9 EVO3 COMBO MFD,NO CARTO,BOAT BLDR	\$2,999.00	€ 2,299.00		\$3,029.00	
000-13599-001	NSS12 EVO3 COMBO MFD,NO CARTO,BOAT BLD	\$4,317.27	€ 3,499.00		\$4,599.00	
000-13600-001	NSS16 EVO3 COMBO MFD,NO CARTO,BOAT BLD	\$6,180.91	€ 5,499.00		\$6,199.00	

# Part Numbers - Bundles

P/N	Description	APAC (AUD)	EMEA (Euro)	AMER SRP (USD)	ROW (USD)	AMER MRP (USD)
000-13790-001	NSS7 EVO3,INSIGHT,4G RADAR BUNDLE			\$2,999.00		\$2,999.00
000-13791-001	NSS9 EVO3,INSIGHT,4G RADAR BUNDLE			\$3,949.00		\$3,949.00
000-13792-001	NSS12 EVO3,INSIGHT,4G RADAR BUNDLE			\$4,999.00		\$4,999.00
000-13793-001	NSS7 EVO3,ROW,4G RADAR BUNDLE	\$3,999.09	€ 3,399.00		\$4,410.00	
000-13794-001	NSS9 EVO3,ROW,4G RADAR BUNDLE	\$4,862.72	€ 4,149.00		\$5,360.00	
000-13795-001	NSS12 EVO3,ROW,4G RADAR BUNDLE	\$6,090.00	€ 5,249.00		\$6,799.00	

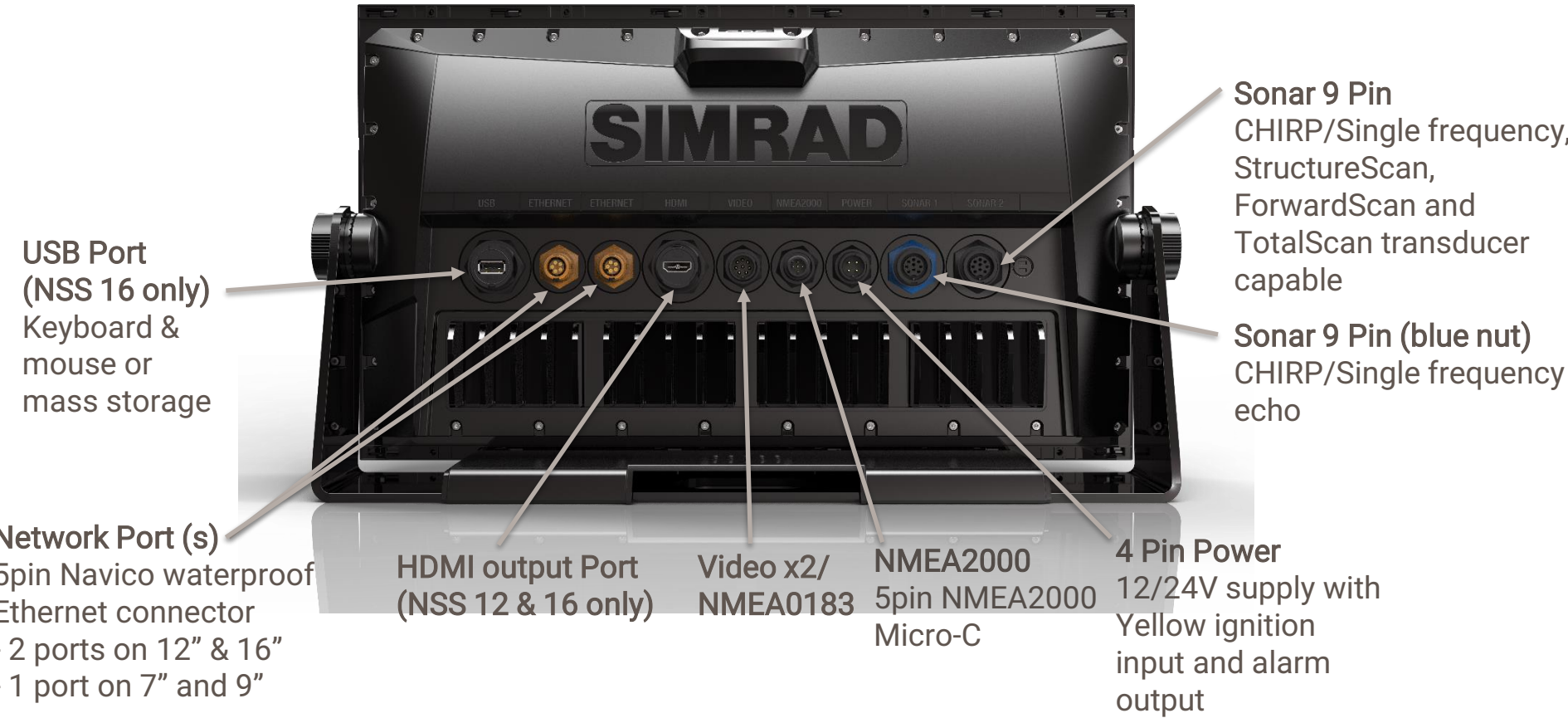
# Part Numbers – Spares and Accessories

P/N	Description	APAC (AUD)	EMEA (Euro)	AMER SRP (USD)	ROW (USD)	AMER MRP (USD)
000-13740-001	NSS7 EVO3 SUN COVER					
000-13741-001	NSS9 EVO3 SUN COVER					
000-13742-001	NSS12 EVO3 SUN COVER					
000-13743-001	NSS16 EVO3 SUN COVER					
000-13748-001	NSS EVO3 & ZEUS3 CHART CARD DOOR					
000-13749-001	NSS7 EVO3 & ZEUS3 – 7 EDGE BEZELS					
000-13750-001	NSS9 EVO3 & ZEUS3 – 9 EDGE BEZELS					
000-13751-001	NSS12 EVO3 & ZEUS3 – 12 EDGE BEZELS					
000-13752-001	NSS16 EVO3 & ZEUS3 – 16 EDGE BEZELS					
000-13753-001	NSS7 EVO3 & ZEUS3 - 7 DASH MOUNT KIT					
000-13754-001	NSS9 EVO3 & ZEUS3 - 9 DASH MOUNT KIT					
000-13755-001	NSS12 EVO3 & ZEUS3 - 12 DASH MOUNT KIT					
000-13756-001	NSS16 EVO3 & ZEUS3 - 16 DASH MOUNT KIT					
000-13702-001	NSS7 EVO3 & ZEUS3 - 7 MOUNTING BRACKET					
000-13758-001	NSS9 EVO3 & ZEUS3 - 9 MOUNTING BRACKET					
000-13759-001	NSS12 EVO3 & ZEUS3-12 MOUNTING BRACKET					
000-13760-001	NSS16 EVO3 & ZEUS3-16 MOUNTING BRACKET					

# In The Box

	NSS evo3 Retail SKU's	NSS evo3 Boat Builder SKU's	NSS evo3 4G Radar KIT
<b>NSS evo3 Display</b>	✓	✓	✓
<b>Sun Cover</b>	✓	✓	✓
<b>Connector caps</b>	✓	✓	✓
<b>Power Cable</b>	✓	✓	✓
<b>Gimbal Bracket, Fasteners</b>	✓	x	✓
<b>Documentation</b>	✓	Op Manual Only	✓
<b>Dash gasket and fasteners</b>	✓	✓	✓
<b>4G Radar</b>	x	x	✓
<b>4G Radar cable, RI10 &amp; network cable</b>	x	x	✓

# Connectors



**USB Port (NSS 16 only)**  
Keyboard & mouse or mass storage

**Sonar 9 Pin**  
CHIRP/Single frequency, StructureScan, ForwardScan and TotalScan transducer capable

**Sonar 9 Pin (blue nut)**  
CHIRP/Single frequency echo

**Network Port (s)**  
5pin Navico waterproof Ethernet connector  
- 2 ports on 12" & 16"  
- 1 port on 7" and 9"

**HDMI output Port (NSS 12 & 16 only)**

**Video x2/ NMEA0183**

**NMEA2000**  
5pin NMEA2000 Micro-C

**4 Pin Power**  
12/24V supply with Yellow ignition input and alarm output



# Transducer Compatibility

Through hull	Part Number	Tilt °	Freq (kHz)	Power	Cone angle °	Connector
Bronze HDI	000-13905-001	0°	50/200/L/H		45°/11°	xSonic
	000-13906-001	12°	50/200/L/H		45°/11°	xSonic
	000-13907-001	20°	50/200/L/H		45°/11°	xSonic
P319	000-13915-001	0°	50/200	600W	45°/12°	xSonic
B117	NEW		50/200	600W	45°/12°	xSonic
B45	NEW		50/200	600W	45°/12°	xSonic
SS60	000-13784-001	0°	50/200	600W	45°/12°	xSonic
	000-13785-001	12°	50/200	600W	45°/12°	xSonic
	000-13786-001	20°	50/200	600W	45°/12°	xSonic
SS164	000-13916-001	0°	50/200	1kW	20°/6°	xSonic
	000-13917-001	12°	50/200	1kW	20°/6°	xSonic
	000-13918-001	20°	50/200	1kW	20°/6°	xSonic
SS260	000-13783-001		50/200	1kW	19°/6°	xSonic
B150M	000-13920-001	0°	M (95-155)	300W	17°-26°	xSonic
	000-13921-001	12°	M (95-155)	300W	17°-26°	xSonic
	000-13922-001	20°	M (95-155)	300W	17°-26°	xSonic
SS75M	000-13908-001	0°	M (80-130)	600W	16°-24°	xSonic
	000-13909-001	12°	M (80-130)	600W	16°-24°	xSonic
	000-13910-001	20°	M (80-130)	600W	16°-24°	xSonic
SS75H	000-13911-001	0°	H (130-210)	600W	9°-15°	xSonic
	000-13912-001	12°	H (130-210)	600W	9°-15°	xSonic
	000-13913-001	20°	H (130-210)	600W	9°-15°	xSonic
SS175L	000-13774-001	0°	L (40-60)	1kW	21°-32°	xSonic
	000-13775-001	12°	L (40-60)	1kW	21°-32°	xSonic
	000-13776-001	20°	L (40-60)	1kW	21°-32°	xSonic
SS175M	000-13777-001	0°	M (85-135)	1kW	11°-16°	xSonic
	000-13778-001	12°	M (85-135)	1kW	11°-16°	xSonic
	000-13779-001	20°	M (85-135)	1kW	11°-16°	xSonic
SS175H-W	000-13780-001	0°	H (150-250)	1kW	25°	xSonic
	000-13781-001	12°	H (150-250)	1kW	25°	xSonic
	000-13782-001	20°	H (150-250)	1kW	25°	xSonic
B275LH-W	000-13771-001		L (42-65)/H(150-250)	1kW	16°-25°/25°	xSonic
R509LH-W	000-13773-001		LL (28-60)/H(150-250)	3kW	9°-23°/25°	xSonic

# Transducer Compatibility

Transom Mount	Part Number	Tilt °	Freq (kHz)	Power	Cone angle °	Connector
P66	000-11062-001		50/200	600W	45°/11°	xSonic
HDI SKIMMER	000-12728-001		83/200/M/H			xSonic
HDI SKIMMER	000-12569-001		50/200/L/H			xSonic
TM260	000-13904-001		50/200	1kW	19°/6°	xSonic
TM150M	NEW		M (95-155)	300W	17°-26°	xSonic
TM275LH-W	000-13770-001		L (42-65)/H(150-250)	1kW	16°-25°/25°	xSonic

In Hull/Pocket/Chest Mount	Part Number	Tilt °	Freq (kHz)	Power	Cone angle °	Connector
P79	NEW		50/200	600W	45°/12°	xSonic
M260	000-13914-001		50/200	1kW	19°/6°	xSonic
PM275LH-W	NEW		L (42-65)/H(150-250)	1kW	16°-25°/25°	xSonic
CM275LH-W	000-13772-001		L (42-65)/H(150-250)	1kW	16°-25°/25°	xSonic
CM599LH-W	NEW		LL (28-60)/H(150-250)	3kW	9°-23°/25°	xSonic

# Connecting 7pin blue plug transducers into NSS evo3

NSS evo3 utilises the 9 pin xSonic connector. For retrofit installs or installs using an existing transducer with a 7 pin blue plug – the 7pin to 9pin Adaptor cable is needed



**7-9 Pin Adaptor  
000-13313-001**

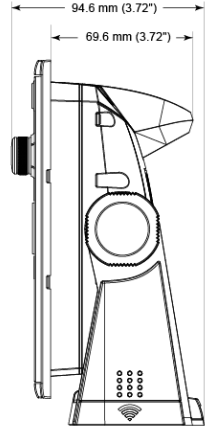
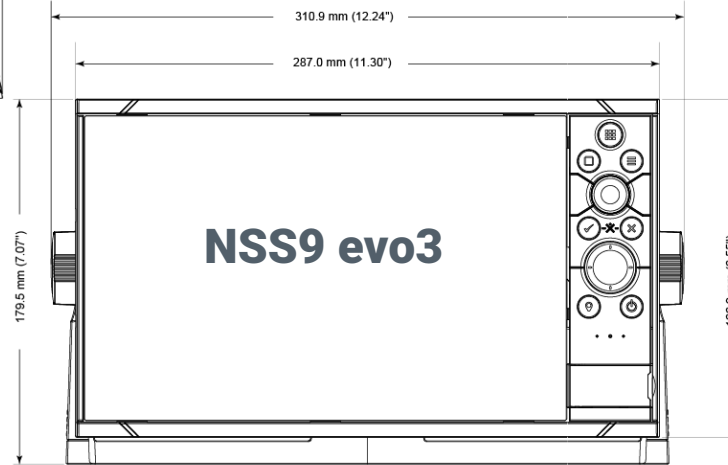
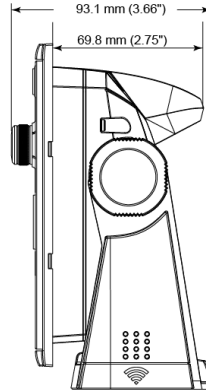
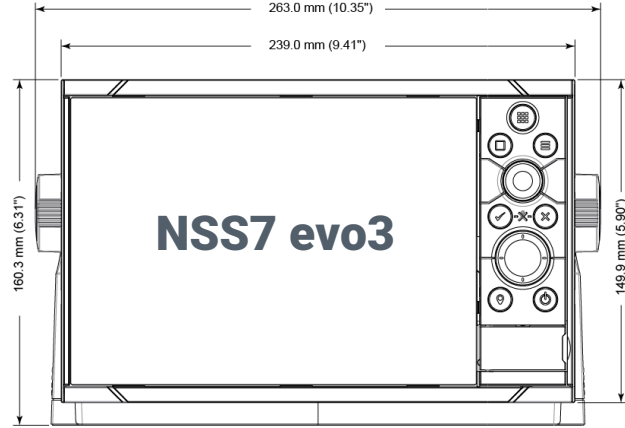


**B175  
– Blue Plug**

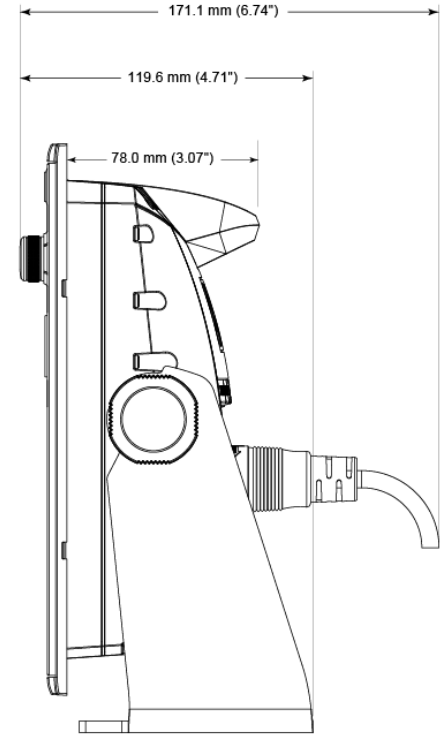
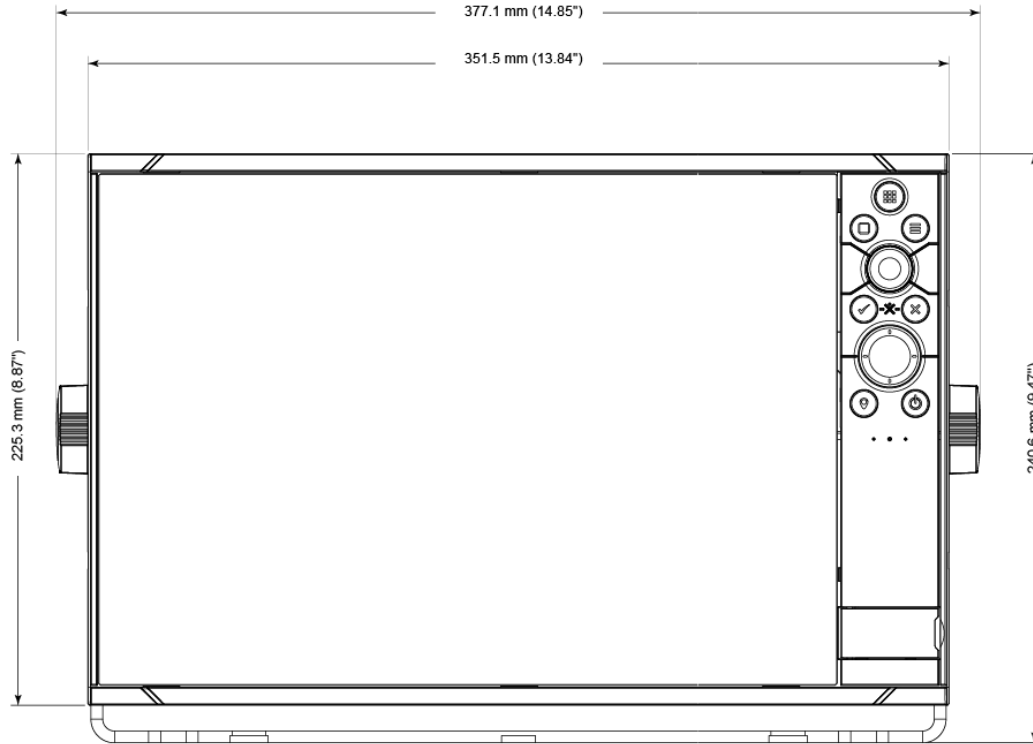
# Language Unlock

- **Standard Language Pack:**
  - 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

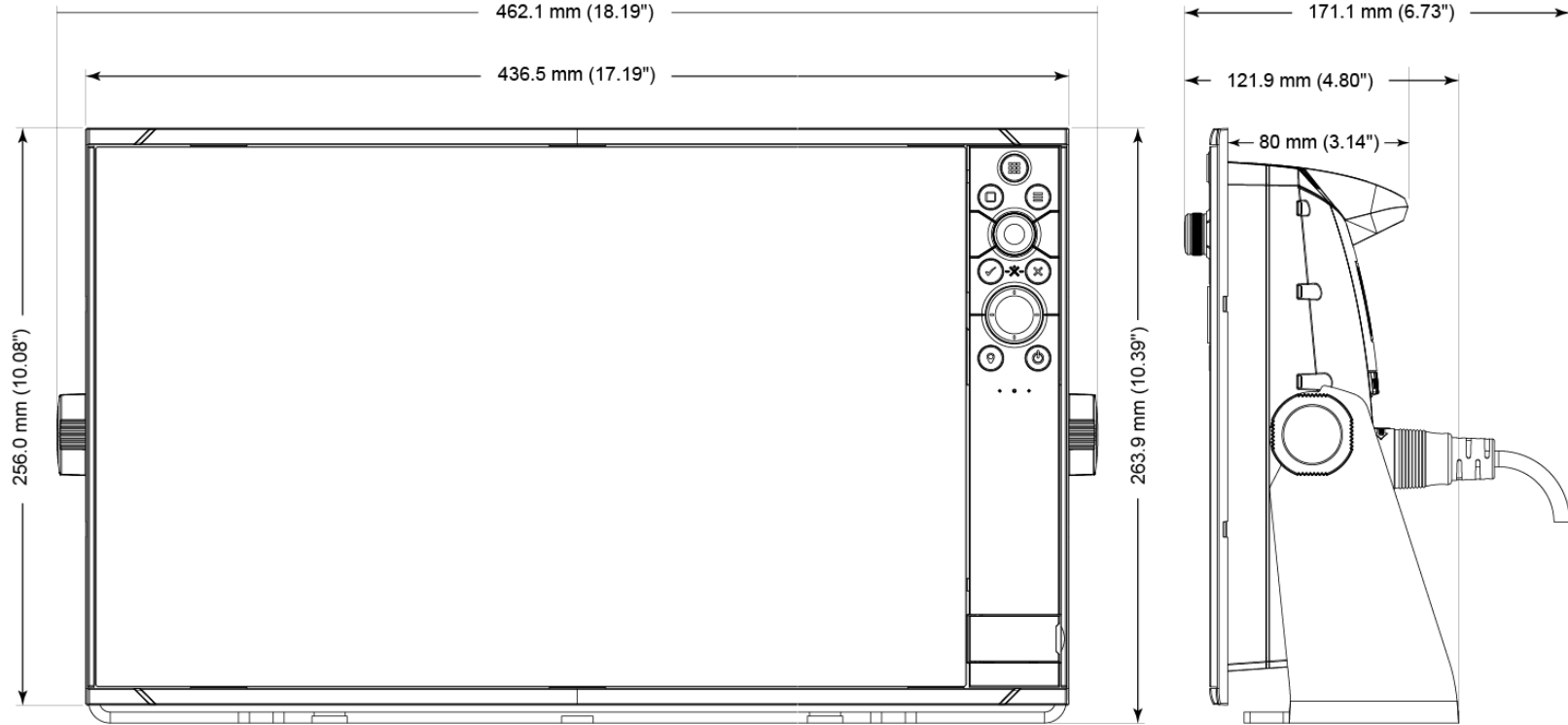
# Dimension drawings 7 & 9 evo3



# Dimension drawings NSS12 evo3



# Dimension drawings NSS16 evo3



# Specifications

	<b>NSS 7 evo3</b>	<b>NSS 9 evo3</b>	<b>NSS 12 evo3</b>	<b>NSS 16 evo3</b>
<b>Dimensions</b>	239 x 150 x 90 mm (9.4 x 5.9 x 3.5") With bracket: 263 x 161 x 93 (10.35 x 6.31 x 3.66)	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)	437 x 256 x 98 mm (117.19 x 10.08 x 3.82") with bracket: 462 x 264 x 122 (18.19 x 10.39 x 4.80")
<b>Weight</b>	1.10kg/2.42lb	1.41kg/3.11lb	3.10kg/6.83lb	4.65kg/10.25lb
<b>Display size and type</b>	High Visibility SolarMax HD® IPS 7" optically bonded TFT	High Visibility SolarMax HD® IPS 9" optically bonded TFT	High Visibility SolarMax HD® IPS 12.1" optically bonded TFT	High Visibility SolarMax HD® IPS 15.6" optically bonded TFT
<b>Display screen brightness</b>	1200 nits	1200 nits	1200 nits	1200 nits
<b>Display resolution</b>	600 x 1024	600 x 1280	800 x 1280	1080 x 1920
<b>Fuse rating</b>	TBD A	TBD A	TBD A	TBD A
<b>Power consumption (Max)</b>	TBD W	TBD W	TBD W	TBD W
<b>Power consumption (Min)</b>	TBD W	TBD W	TBD W	TBD W
<b>Power consumption (Nom)</b>	TBD W	TBD W	TBD W	TBD W
<b>Ethernet connectivity</b>	1 x 5 pin yellow connector x 100 Mbit	1 x 5 pin yellow connector x 100 Mbit	2 x 5 pin yellow connector x 100 Mbit	2 x 5 pin yellow connector x 100 Mbit
<b>HDMI Output</b>	No	No	Yes	Yes
	<b>ALL</b>			
<b>Mounting options</b>	Bracket (Supplied) or panel mount			
<b>Operating temperature range</b>	-15°C to +55°C (5° F to 131° F)			
<b>Storage temperature range</b>	-20°C to +60°C (4°F to 140°F)			
<b>Water resitance</b>	IPX6 and 7			
<b>Supply voltage</b>	10 - 31.2 V DC			
<b>Display backlight color</b>	White sRGB			
<b>Display viewing angles</b>	80° top/bottom, 80° left/right			
<b>Bluetooth connectivity</b>	Internal			
<b>NMEA2000 connectivity</b>	1 x NMEA 2000 Micro-C port, 1 LEN			
<b>NMEA 0183 connectivity</b>	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)			
<b>NMEA 0183 sentences</b>	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			
<b>Video connectivity</b>	2 x composite (RCA connectors) video inputs. Optional video/ data cable required (P/N 000-00129-001).			



# Specifications

<b>WiFi connectivity</b>	Internal WiFi 802.11
<b>Sonar frequencies</b>	40-250kHz 455-800kHz
<b>Sonar max depth</b>	3000'+ (tested with B175L)
<b>Sonar output power</b>	1kW RMS
<b>Compliance</b>	CE, C-Tick, HDMI, EN 60950-1:2006, EN 60945:2002 EN 300 440-2, V1.4.2
<b>GPS</b>	Internal, 10Hz, WASS, MSAS, EGNOS, GLONASS
<b>GPS update rate</b>	10 Hz
<b>GPS channels</b>	34 Channels
<b>GPS correction</b>	WASS, EGNOS, MSAS, GLONASS
<b>GPS position accuracy</b>	Horizontal Accuracy 3 m (9.8 ft)
<b>GPS time to first fix</b>	Cold start 50 sec, Satellite Reacquisition 5 sec
<b>Interface</b>	Full touch screen (multi-touch) and full keypad control, OP50 remote controllers
<b>Charts Included</b>	Insight for USA models: Base map for rest of world models
<b>Radar</b>	Broadband Radar, Halo Pulse Compression Radar, HD Pulse Radar
<b>Sonar</b>	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
<b>Weather</b>	SiriusXM via WM-3 (USA only), GRIB
<b>AIS</b>	Receive AIS data over NMEA 2000 or *NMEA 0183 (has to be wired to all NSS processors)
<b>Auto pilot integration</b>	Full auto pilot control and commissioning
<b>Autopilot steering modes</b>	Auto, Nav., No Drift, Follow up, Non-follow up, Turn patterns, Standby, *Wind, *Wind NAV. (*Boat type set to Sail)
<b>Autopilot manoeuvres turn patterns</b>	U-turn, Spiral-turn, C-turn, Zig-zag, Square-turn, Lazy S-turn, Depth contour tracking
<b>Supported Charts</b>	Insight, Navionics (Gold, NAV+ Platinum+), C-MAP (MAX N, MAX N+) NV Digital (Raster US Charts)
<b>Digital switching</b>	BEP C-Zone, Naviop
<b>External storage</b>	2 MicroSD slots, max. 32GB each. Larger if formatted to NTFS
<b>Internal storage</b>	16 GB
<b>Multi-media</b>	via SonicHub2, FusionLink, *Sirius, **JL Audio. (*USA only, **AUST. & NZ only)
<b>Waypoints, routes &amp; tracks</b>	6000 waypoints, 500 Routes with 100 max route points, 50 tracks with up to 12,000 track points.
<b>Laanguage Support</b>	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

# Revision History

Revision	Date	Notes
0.1	19 <sup>th</sup> Sep 2016	Initial Draft
1.0	1 <sup>st</sup> Nov 2016	First release



**Go With Confidence**