



# iSeaSense

## New Product Introduction



## iSeaSense Wireless & NMEA 2000 Instrument Systems

Starter Pack

Part Number: ZDIGISSPK1

UPC: 703791696413

# iSeaSense

Digital Yacht iSeaSense is a new range of complete marine instrumentation packs based on NMEA 2000 and wireless connectivity - allowing for maximum flexibility and connectivity. Choose from using phones, iPads and tablets for boat data displays as well as 3<sup>rd</sup> party industry standard instruments and multi function displays.

Top quality and highly accurate sensors are used for boat depth, speed, wind, compass and GPS data. Data can be shared with other devices on the NMEA 2000 network too.

**iSeaSense is easy to specify.** Available as two main starter packs, everything is included for an easy install and ordering. No app is needed either as the iSeaSense wireless server creates powerful graphical and numeric display pages that can be viewed via a browser on any device.

**iSeaSense Pack 1** is a comprehensive boat depth, speed and temperature pack. A spatial sensor is also included for detecting pitch and roll and there's a sophisticated algorithm for calibrating boat speed information based on heel. A full NMEA 2000 backbone cabling pack is included and the wireless interface for connectivity. There is a spare cable and connection point for additional NMEA 2000 devices such as a multi function display

**iSeaSense Pack 2** has all the capability and components of Pack 1 but includes the WND100 wind sensor with 20m cable and a interface to "T" directly to the NMEA 2000 backbone. It means there's no heavy NMEA 2000 cabling to the top of the mast and no need for complex and unreliable mast top terminators.

Expanding the system is easy with Digital Yacht's range of GPS and compass sensors.

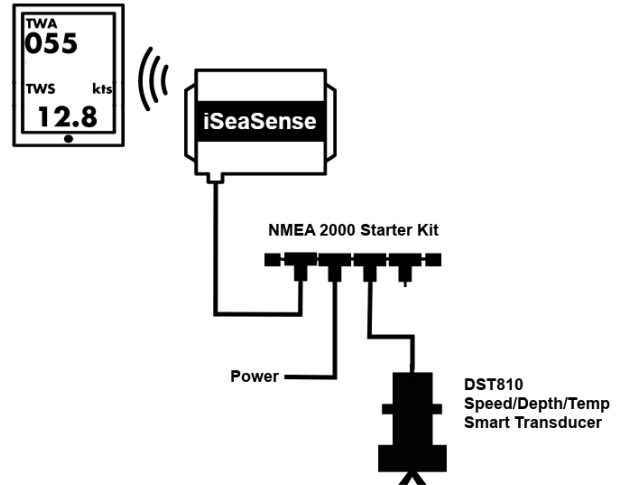
**Welcome to iSeaSense – making sense of boat instrumentation**



**“iSeaSense integrates advanced NMEA 2000 sensors with NMEA 2000 and wireless connectivity for the most flexible and easy to install boat instrument solution”**

# iSeaSense – Pack 1 Key Features

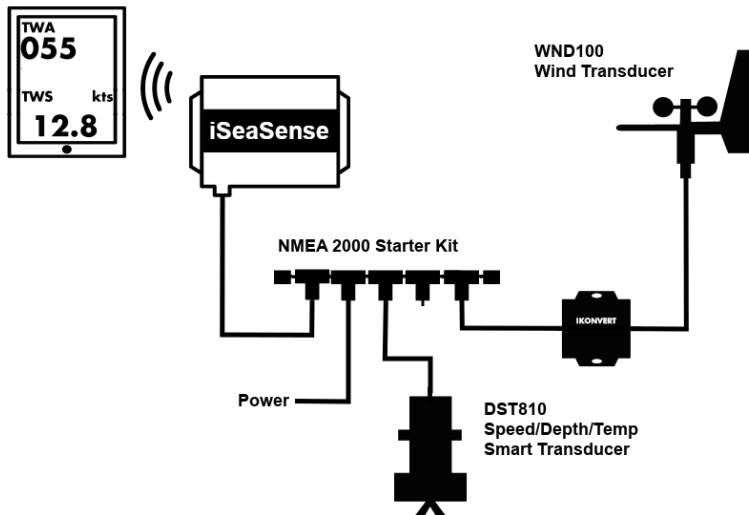
- Pack includes iSeaSense wireless server, NMEA 2000 cabling and advanced boat depth, speed and temperature transducer with pitch and roll sensor
- iSeaSense server creates beautiful graphic display pages of data with fast 5Hz updates viewable on any smart phone, tablet or iPad
- Advanced calibration routing available for the transducer with corrections for boat heel and transducer location
- Easily expand the system and add sensors for wind, compass, GPS, AIS and more



Basic cabling kit includes spare NMEA 2000 port and 1m<sup>rd</sup> connect cable for 3<sup>rd</sup> party display or device

# iSeaSense – Pack 2 Key Features

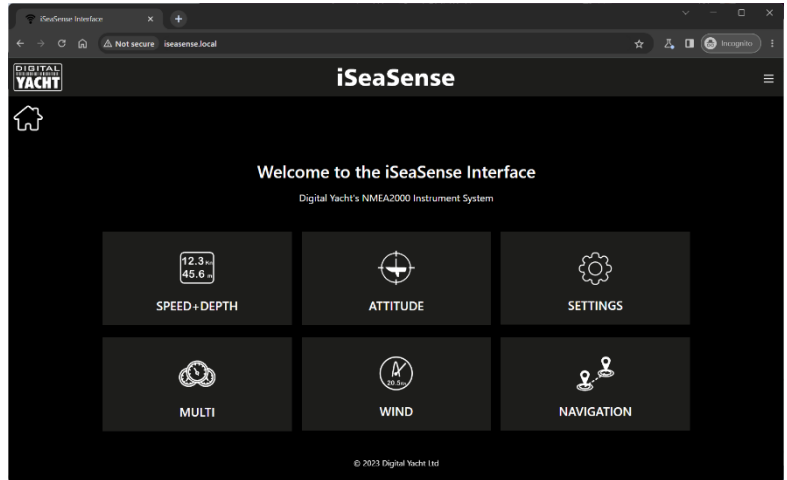
- Pack 2 contains all the features of Pack 1 PLUS also includes WND100 mast head sensor and NMEA 2000 interface – adding wind data to the network
- Displays of true and apparent wind speed and angle plus VMG calculations
- Easy to install mast head unit with 20m cable and NMEA 2000 interface
- Calibrate the WND100 via the iSeaSense server and interface
- Includes extra NMEA 2000 T piece for system expansion allowing easy addition of sensors or displays



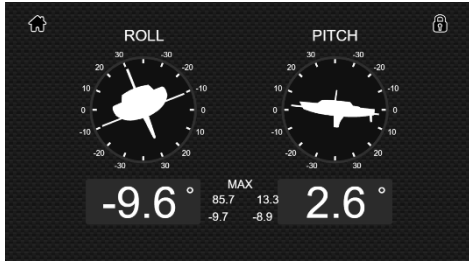
PLUS! Includes extra NMEA 2000 T piece for system expansion allowing easy addition of sensors or displays

# iSeaSense – Menu Displays

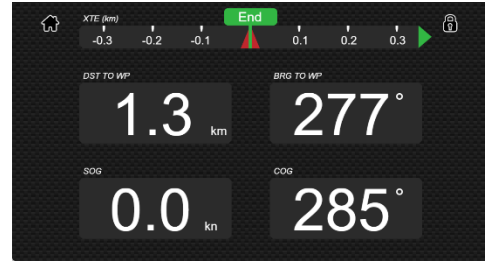
- iSeaSense features an easy to use web interface. No apps required.
- Password protected and the ability to join another wireless network on larger systems
- Simply open the browser on a connected device, navigate to <http://iSeaSense.local> and the optimised touch screen display is ready
- Works on iOS, Android, PC and MAC – any standard web browser as well as e-ink displays like Kindle and e-book
- Supports up to 3 connected devices with super fast 5Hz updates and up to 7 devices for 3<sup>rd</sup> party apps via TCP-IP/UDP connectivity



# iSeaSense – Typical Displays



Graphic displays of boat heel and pitch with recorded maximum values. The boat heel data can be used for precision speed calibration – ideal for racing and accurate TWS/TWA and VMG data

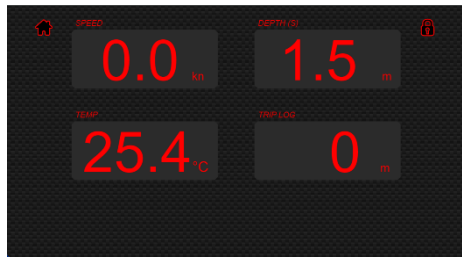


If there's a chart plotter on multi function display on the NMEA 2000 network with active nav information such as a GOTO or route, iSeaSense will display current navigation data such as XTE, bearing and distance to waypoint.

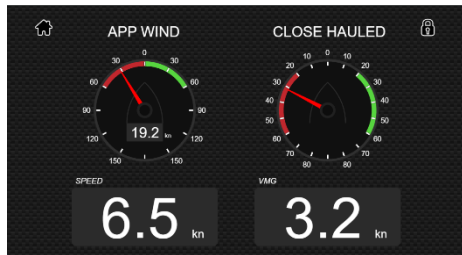
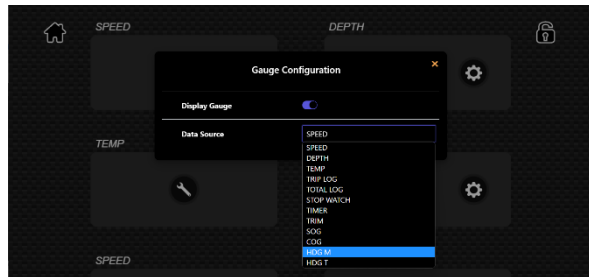


Simple digital displays of key instrument data – easily configurable for any value on the network

# iSeaSense – Typical Displays



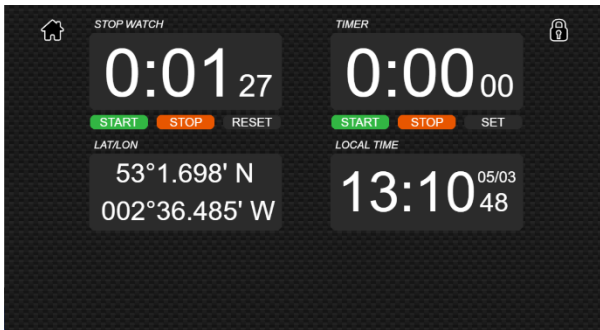
Night (red illumination) and day modes are easily selectable



Analogue displays of wind information with true and apparent wind speed and angle available. Close hauled and speed trim displays too.

With iSeaSense you're in control of the data you see. Any data box can be configured for the information you want and you can easily add and remove data boxes to build your perfect display. The configuration can also be saved and shared – ideal for standard configurations for production boats and OEMs

# iSeaSense – Typical Displays



A useful NMEA 2000 diagnostics page shows all the devices on the network with address and type

The Multi page is a general purpose page where you can configure eight databoxes with any of the available data displayed. The Speed + Depth page limits the choice of data to instrument data but on the Multi page you can combine that data with GPS and navigation information for a custom display

The screenshot shows the 'NETWORK DEVICE LIST' page in the iSeaSense application. It features a table with columns for ADDR, MANUFACTURER, CAN NAME, DIN, CLASS, and FUNCTION. Each row represents a device on the network, with a status indicator (green heart) and a refresh icon (circular arrow) to the right of the function column.

ADDR	MANUFACTURER	CAN NAME	DIN	CLASS	FUNCTION
100	Digital Yacht	45e1bd35008932c0	0	Inter/Intranetwork Device	NMEA 2000 Wireless Gateway
0	Vetus Maxwell INC.	edf1a083008a32c0	0	Unknown	Unknown
1	Vetus Maxwell INC.	edf1a083059164c0	0	Propulsion	Thruster Engine
2	Vetus Maxwell INC.	edf1a083039b64c0	0	Propulsion	Motor
3	Vetus Maxwell INC.	edf1a08304aa46c0	0	Electrical Generation	Battery
6	Digital Yacht	0700a036008732c0	0	Inter/Intranetwork Device	NMEA 0183 Gateway
36	Victron Energy	f901c02c02a846c0	0	Electrical Generation	Power Converter Battery Charger
224	Victron Energy	f901c02c01aa46c0	0	Electrical Generation	Battery

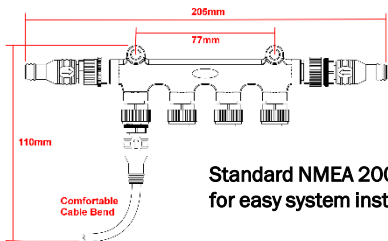


# Specifications – iSeaSense Interface



Integrated 1m NMEA 2000 cable provides power and interface for the system

- NMEA 2000 interface and wireless gateway for iSeaSense system. Integrated instrument display page server.
- Configurable display pages for depth, speed, temp, time, GPS, wind, navigation and compass
- Network diagnostics, settings and calibration capability
- Data logging
- Self powered from NMEA 2000 backbone
- Integrated WiFi antenna typically footprints boat up to 20m
- Supports additional TCP/IP and UDP data connections for 3<sup>rd</sup> party apps on up to 7 connected devices (outputs GPS, AIS, depth, wind and speed information from NMEA 2000 bus)



Standard NMEA 2000 connectivity and reliability for easy system installation and expansion

# Specifications – iSeaSense Transducer



**Includes blanking plug to allow active element to be removed for cleaning or maintenance. Skin fitting features a “self seal” flapper valve to minimise water ingress when transducer removed and blanking plug inserted.**

- Transducer for depth, boat speed, water temperature and boat heel/pitch with fast, super accurate 5Hz speed updates from 0.3 to 45 knot
- Data Update Rate:
  - Depth: 1X/second
  - Speed: 5X/second
  - Heel/Trim: 10X/second
- 235KHz depth operation to minimise interference with 50/200KHz fish finders and sounders
- Max depth 100m
- Supports up to 22 degree hull deadrise
- Supplied with 6m NMEA 2000 cable and self powered from iSeaSense NMEA 2000 backbone
- Standard 2” thru hull size/diameter
- Includes Bluetooth interface for advanced calibration and set up features if required
- Stainless steel and bronze skin fittings available as option

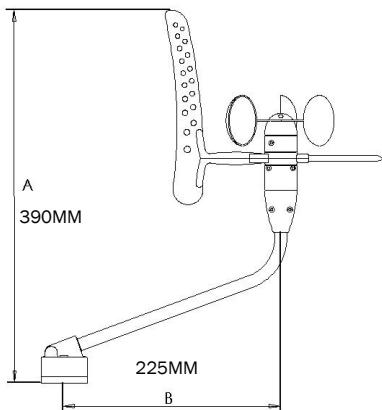
# Specifications – WND200 Wind Package



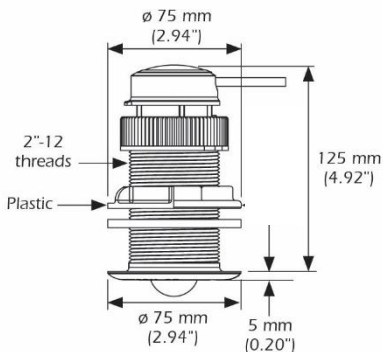
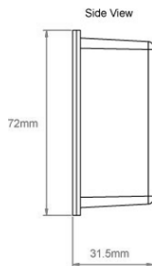
The WND200 package comprises WND100 mast head unit plus iKonvert NMEA 0183-2000 interface supporting 5Hz fast wind mode

- Pack 2 adds wind capability to the standard system with the WND200 system pack included.
  - Comprises mast head unit, NMEA 2000 interface and additional NMEA 2000 T connector for further system expansion
- 8-18V power with ultra low 25mA power consumption
- Supplied with 20m ultra thin 4mm masthead cable for easy cable runs through mast (4 core screened)
- iKonvert NMEA 2000 interface included for system integration
- Wind angle accuracy better than 4 degrees
- Wind speed accuracy better than 3%
- Min wind speed 1.7 knots – max 80 knots
- Settling time typically 1.3 seconds

# Specification – Physical Dimensions



WND200 Pack includes mast head unit, 20m cable and NMEA 2000 interface. Included as standard in Pack 2



iSeaSense wireless gateway

iSeaSense depth, speed and temperature transducer with integrated heel and pitch sensor. Fitted with 6m NMEA 2000 cable

# System Expansion

- Add GPS with GPS160N2K Pack
- Add compass with HSC200 Pack
- Add AIS with any Digital Yacht NMEA 2000 AIS transponder
- Add advanced NMEA alerting with NAVALert and optional internet/SMS alerts when integrated with 4G Xtream



# Expansion with 3<sup>rd</sup> party products & apps

- Add your favourite displays or MFD's via industry standard NMEA 2000 connection
- Compatibility with dedicated iOS and Android navigation apps too – get NMEA 2000 data to popular apps like Navionics, NV Charts, AquaMaps, NavLink, TZ iBoat, Sailgrib, iSailor, Weather 4D and 100's more
- Run iSeaSense instrument data alongside popular charting apps



# Installation & Setup



Scan this QR code for our iSeaSense setup video



Scan this QR code for a copy of our NMEA 2000 networking guide

- Cables, connectors and terminators included in system pack for “out of box installation” without any specialist cables required
- Top quality, waterproof NMEA 2000 metal connectors for reliability
- Transducer and wireless interface powered via NMEA 2000 network
- Simple “padlock protected” UI for page set up and tools – no hidden menus or complex structure
- Designed for touch screen displays

# Target Markets and Applications

## NEW BOAT & OEM

- High quality, value priced instrument solution for OEM installation with flexibility to add any brand of MFD, have iPad based navigation solution for next generation navigation or a hybrid solution



## AFTER MARKET UPGRADE

- Easy and competitive retro fit to up-spec boat to latest NMEA 2000 system with maximum flexibility, expandability.
- Out of box system solution for DIY or professional installation

## WORKBOAT & COMMERCIAL

- Perfect solution for simple multiple crew operation
- Integrates well with Furuno TZ PC charting and Furuno radar/sounder systems
- Flexible interfacing with 3<sup>rd</sup> party displays





# Ordering Information

iSEASENSE PRODUCT PACK 1	Description
Manufacturer Description Part Number	DIGITAL YACHT iSEASENSE WIRELESS SPEED, DEPTH & TEMP INSTRUMENT PACK ZDIGISSPK1
UPC	703791696413
What's in the box	iSEASENSE NMEA 2000 DST & ATTITUDE TRANSDUCER (6m cable) iSEASENSE WIRELESS SERVER (1m cable) NMEA 2000 BACK BONE PACK WITH <ul style="list-style-type: none"><li>• NMEA 2000/System Power cable</li><li>• Multi port NMEA 2000 connector with terminators x 2</li><li>• Integrated NMEA 2000 cables with transducer &amp; wireless server<ul style="list-style-type: none"><li>• 1m NMEA 2000 cable (for 3<sup>rd</sup> party device)</li></ul></li></ul>
Shipping weight Commodity code Country of origin More information	1.4kg 90148000 UK <a href="http://www.digitalyacht.co.uk">www.digitalyacht.co.uk</a>

# Ordering Information

iSEASENSE PRODUCT PACK 2	Description
Manufacturer Description Part Number	DIGITAL YACHT iSEASENSE WIRELESS SPEED, DEPTH,TEMP AND WIND INSTRUMENT PACK ZDIGISSPK2
UPC	703791696420
What's in the box	iSEASENSE NMEA 2000 DST & ATTITUDE TRANSDUCER (with 6m cable) iSEASENSE WND200 NMEA 2000 WIND SENSOR PACK (with 20m MHU cable) iSEASENSE WIRELESS SERVER (with 1m cable) NMEA 2000 BACK BONE PACK WITH <ul style="list-style-type: none"><li>• NMEA 2000/System Power cable</li><li>• Multi port NMEA 2000 connector with terminators x 2</li><li>• Additional NMEA 2000 T piece for cabling expansion</li></ul> <ul style="list-style-type: none"><li>• Integrated NMEA 2000 cables with transducer &amp; wireless server<ul style="list-style-type: none"><li>• 1m NMEA 2000 cable (for 3<sup>rd</sup> party device)</li></ul></li></ul>
Shipping weight Commodity code Country of origin More information	3kg 90148000 UK <a href="http://www.digitalyacht.co.uk">www.digitalyacht.co.uk</a>