

# CONVERT, DGTISE & SHARE onboard instrument & sensor data



# WHO ARE WE

Actisense are global leaders in sensor and interfacing electronics, specialising in the marine sector.

Our technology is designed to make journeys safer and more efficient through better access to onboard instrument & sensor data.



Experts in NMEA data and connectivity

We have a long and proud relationship with the National Marine Electronics Association (NMEA), including members of the team who have chaired both the NMEA 0183 and NMEA 2000 technical steering committees, giving us intimate knowledge of common challenges and solutions to those.







Onboard devices can generate a huge amount of data. The most common challenges that installers and vessel managers face are around how to use that data for:

- Remote monitoring
- Fault-finding & diagnostics
- Predictive maintenance
- Interoperability
- Effective networking

And much more...

# COMMON CHALLENGES



### Actisense

**Our solutions fall into three key areas** 

### **Converting data to/from** differing protocols



into useful digital data

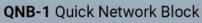
### SHARE

Sharing that data between instruments and more widely



PRO-NDC-1E NMEA 0183 Intelligent Multiplexer









NGX-1 NMEA 2000 Dual Gateway



PRO-NDC-1E2K NMEA 0183 Multiplexer / NMEA 2000 Gateway



W2K-1 NMEA 2000 to Wi-Fi Gateway



EMU-1 NMEA 2000 **Engine Monitoring Unit** 





NGX-1 NMEA 2000 Dual Gateway



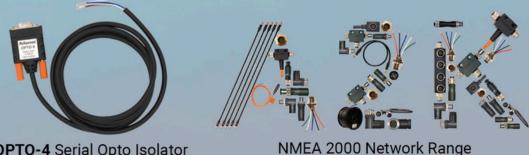
PRO-BUF-2 NMEA 0183 Intelligent Buffer

USG-2 USB to Serial Gateway





PRO-NBF-1 NMEA 0183 Buffer



**OPTO-4** Serial Opto Isolator

DST-2 Digital Depth, Speed & Temperature Transducer Interface



#### W2K-1 NMEA 2000 to Wi-Fi Gateway



**PRO-MUX-2** NMEA 0183 Intelligent Multiplexer



#### PRO-NDC-1E2K NMEA 0183 Multiplexer / NMEA 2000 Gateway

### CONVERT

One of the biggest challenges onboard is when various connected instruments want to communicate but they operate on differing protocols.

Actisense NMEA gateways provide the industry's most complete library of conversions and ensure that devices are able to send data bidirectionally, optimising interoperability at every step.

# DATA LOGGING

Several of our devices have SD-card slots to be able to record every packet of data from devices on the connected NMEA 2000 network.











# DIGITISE

Once signals can be digitised, their data is valuable for remote monitoring, diagnostics and post-journey analysis.

Engine gauge sender data can be digitised with ease and shared onboard via NMEA 2000 network or remotely for diagnostic and maintenance purposes.

Keep track of engine hours, RPM, fuel pressure, alarms and much more via NMEA 2000 PGNs.

Also available is our DST module which digitises depth, speed and temperature sensors into NMEA 0183 sentences.

<u>COMING SOON</u>: A brand new way to digitise almost any analog signal onboard!

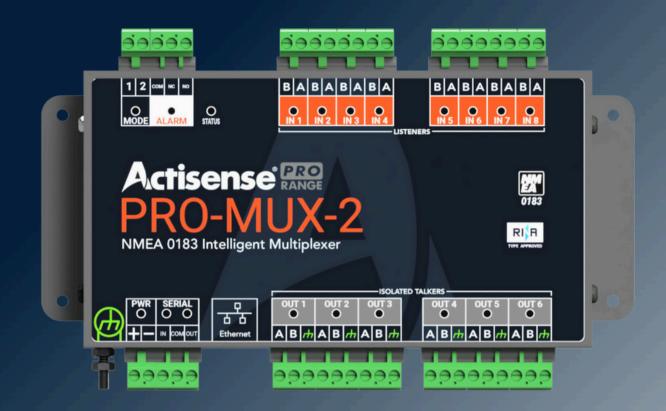


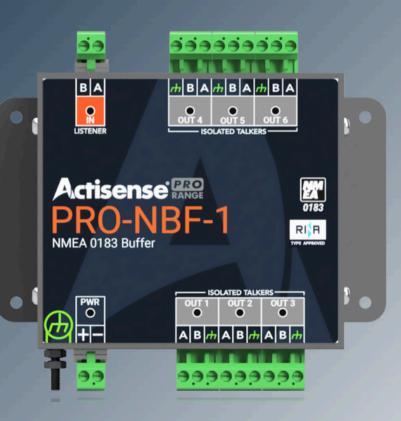
### SHARE

Route NMEA data between devices efficiently, saving on cabling cost and weight. Benefit from Type Approved products with an intuitive web-based configuration.

Safely interface with onboard computer systems without the risk of dangerous ground loops, thanks to our ISO-Drive<sup>™</sup>technology. Share hardwired or over Wi-Fi for maximum flexibility.







### Actisense







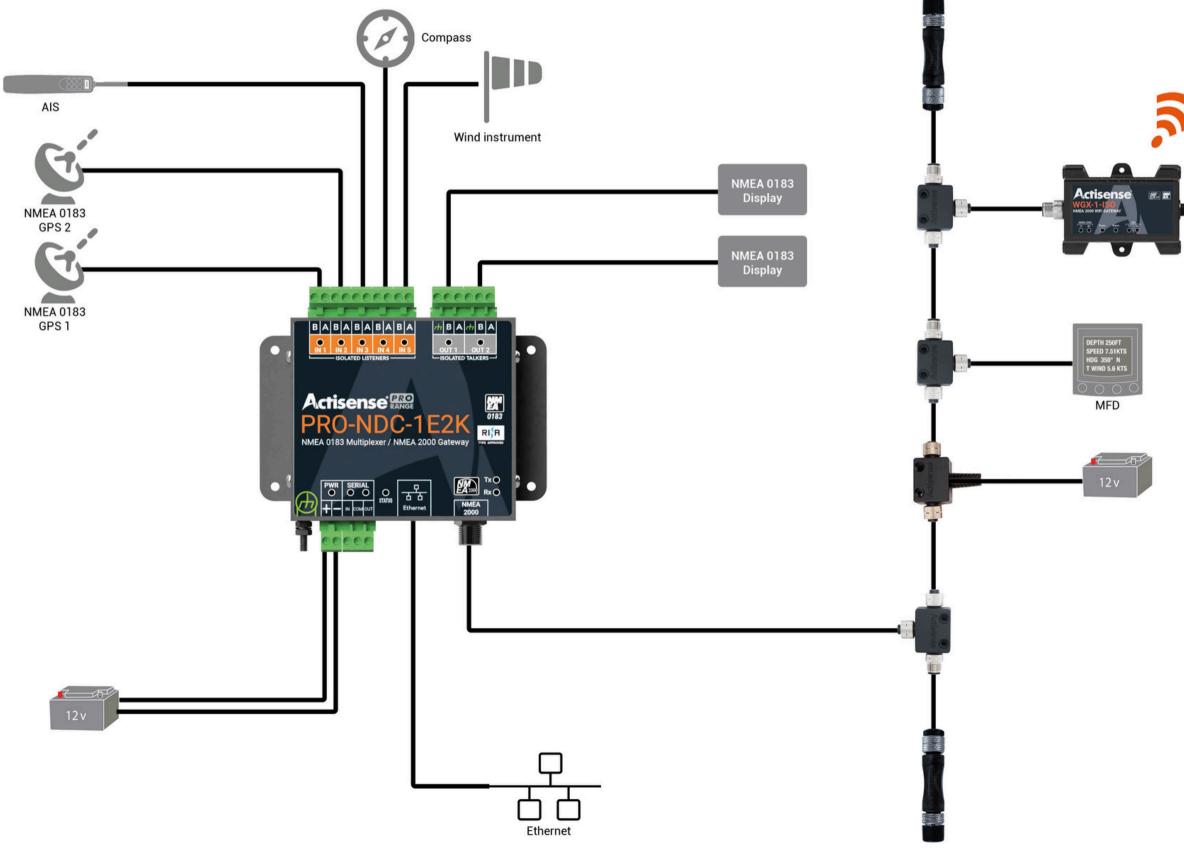
# BUILD ROBUST NETWORKS

Build NMEA 2000 networks that last, with a 5 year guarantee on all Actisense products.

The Actisense range includes everything from Bulk cable reel, power insertions, T-pieces, terminators and more.

Innovations include the SBN Self-contained boat network with built-in termination, and the TER-U Smart Universal Terminator with built-in voltage checker.





# DATA ROUTING EXAMPLE

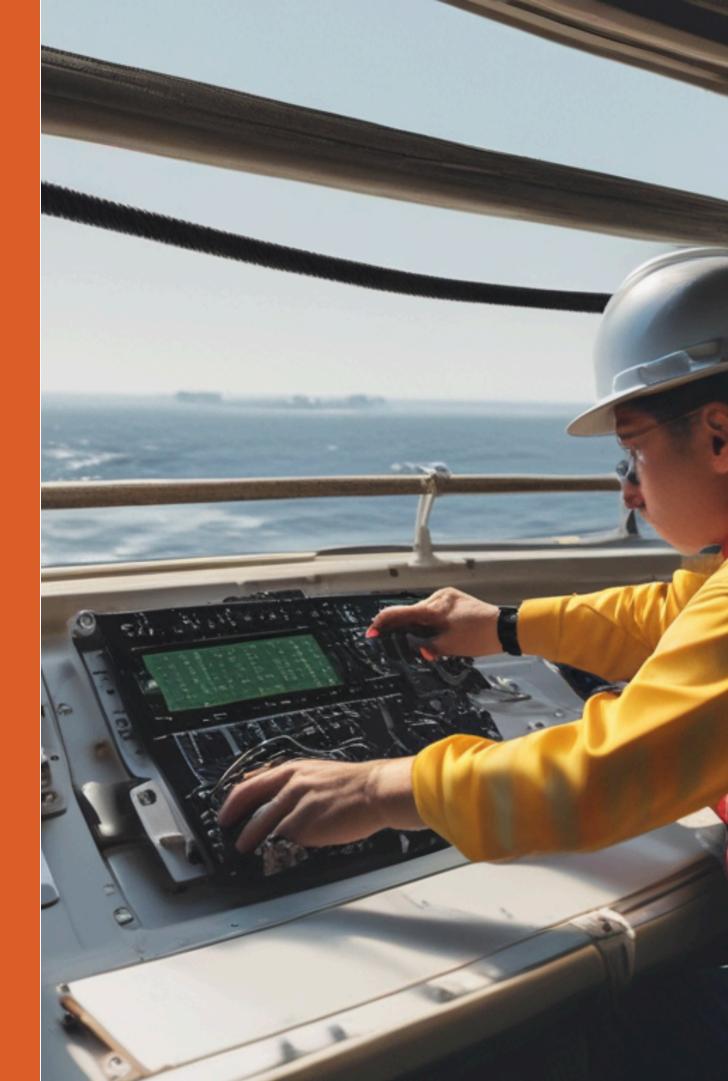
NMEA 0183 data feeds from AIS, GPS (x2), Compass and wind instrument are collected and shared with ease to:

- NMEA 0183 displays
- High speed ethernet
- NMEA 2000 network with further data-logging and Wi-Fi sharing



# WHY INSTALLERS PREFER Actisense®

- In depth NMEA knowledge
- Near-zero product return rate (0.025%) backed by 5 year guarantee on all products
- Free software including NMEA Reader & Actisense-i
- Extensive online resource library, including interactive chatbot, knowledge base and eBooks
- Dedicated support team
- Low-cost, high-value solutions
- Ability to innovate new solutions with in-house hardware and software engineering teams
- Multi award-winning products



## WHY CHOOSE Actisense®

### **Integrity & Reliability**

Actisense's ISO Drive technology eliminates common pitfalls with older NMEA 0183 equipment. In nearly 20 years of use, we've never had a system failure with the NDC-4, NBF-3, NGW-1, or NGT-1.

### **Future-Proof Performance**

Our first NDC-4, installed around 2008, solved compatibility issues with our displays by adding necessary checksums. It continues to prove its value, automatically suppressing AIS data when needed – something even newer AIS transceivers struggle with.

#### **Long-Term Value**

The NDC-4 has been a key part of our navigation system for decades, adapting to our evolving setup. It seamlessly integrates with NMEA 0183, N2K, and proprietary formats, making upgrades simple and cost-effective.

#### **Outstanding Service**

Whenever we've faced challenges, Actisense's technical support has been fast, reliable, and precise.

#### **Best-in-Class Information & Documentation**

Actisense's manuals and documentation are the best in the industry, serving as an invaluable resource for system development and training.

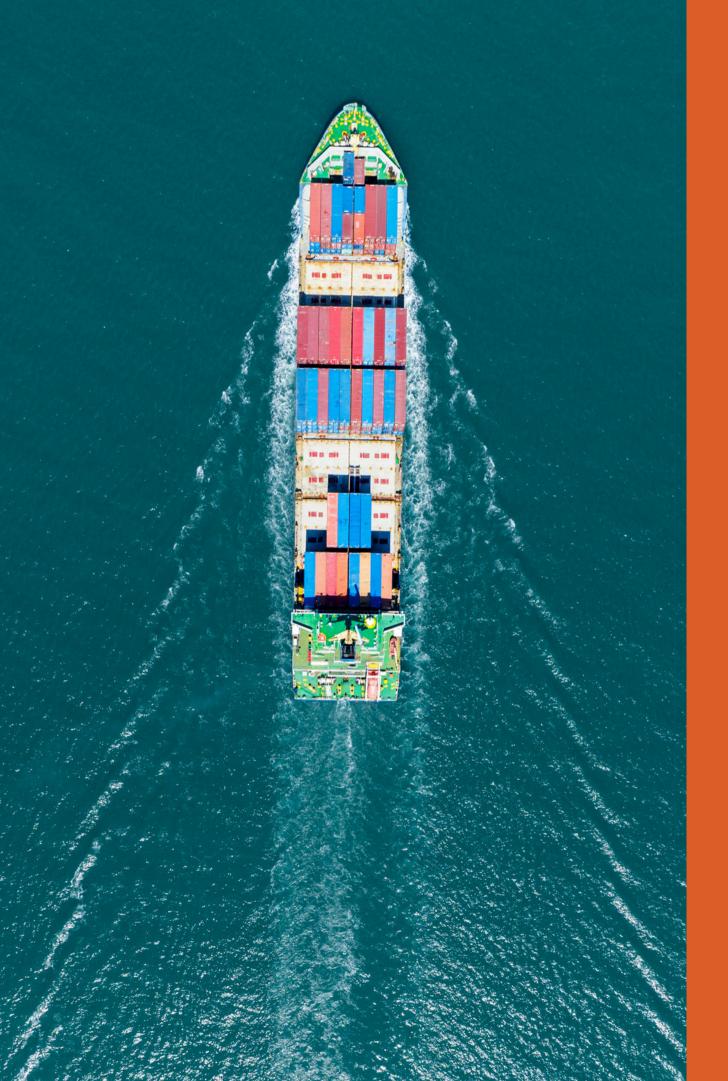
### **Final Thoughts**

Your products are worth every cent. While others spend thousands upgrading entire systems, we've built a robust, long-lasting setup with Actisense at its core. **I can only recommend Actisense.** 

### - Lutz v. Meyerinck, Project Initiator, TOP The Ohlson Project











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