

World class marine
technology you
can trust

Product guide



em-trak 

■ World class marine technology **you can trust**



em-trak AIS transceivers deliver the best performance, functionality, quality and value, and are the preferred choice of professional and commercial boat operators worldwide.

Our products are class-leading, leveraging 30 years of R&D to develop advanced core technologies that transform performance and energy efficiency. Combined with the highest standards of engineering and manufacturing, we aim to redefine customer expectations continuously.

Our focus has always been to ensure all mariners have the AIS performance they need, and it's our commitment to that principle that has made us the most trusted AIS transceiver supplier globally. We are passionate sailors and maritime professionals. We understand the real-world challenges faced by mariners, which is why every one of our products is designed and developed in-house, from scratch, with the users' needs always central to the process.

It's also why every product is tested in the most extreme environments, so you can rest assured that your em-trak transceiver won't let you down.

Our products are available direct at www.em-trak.com or through a global network of more than 4,500 trained and certified dealers. And, no matter where you buy your em-trak AIS transceiver, each and every product is backed by our gold standard global 3 year warranty and 24/7 expert technical support, whenever you need it.

#SOLAS
#InlandWaterway
#Workboats
#CommercialFishing
#EmergencyServices
#Tenders&JetSki's
#RecreationalSailing

■ Uncompromising **reliability**

Powerful performance

em-trak's advanced core technology consumes less power whilst providing the very best AIS performance – ensuring every transmission is translated in real-time, without error, so you always have the complete picture and the time to respond.

Trusted reliability

em-trak AIS transceivers use the highest quality components to provide years of continuous, maintenance-free operation. Our products are engineered for even the harshest marine environments and undergo extensive testing to ensure they are waterproof and unaffected by extreme temperatures, shock, vibration, and sun/UV.

Quick and simple installation

With features such as FLEXI-FIT bracket, integrated GPS antenna, VHF antenna splitter, and unlimited connectivity options, including NMEA2000 and 0183, Bluetooth and Wi-Fi, our AIS transceivers have been designed for straightforward set-up and installation on any vessel.

Plug-and-play connectivity

em-trak's transceivers can connect and share data simultaneously to multiple devices and on any type of display – chart plotter, PC, tablet, mobile phone or wearable. This flexibility ensures you get the most from your em-trak AIS product and related onboard equipment every day, including all AIS-related functionality such as weather, MOB, anti-collision, anchor safety, vessel tracking and more.

Best-in-class warranty and support

Our AIS transceivers are maintenance-free, come with a three-year global warranty as standard, and our in-house tech support is backed by over 4,500 local dealers around the world.

Global compliance

em-trak products are rigorously tested and certified to meet international AIS standards, so you have total peace of mind, wherever you are. This includes FCC, USCG, ISEDC, MED, CCNR (inland) and RED(EU) test and certification.



Full Product range

Select the **perfect model** for your vessels and application.

	Class A	VHF	Class B								Accessories		
	High Power				Standard Power				Small Vessel Tracker				
Features													
	A200	X100	B400	B200	B951	B952	B953	B954	B921	B922	B923	B924	I100-X
2w CSTDMA									✓	✓	✓	✓	
5w SOTDMA		✓	✓	✓	✓	✓	✓	✓					
12.5w SOTDMA	✓												
Wi-Fi	✓	✓	✓	✓		✓		✓		✓		✓	
Bluetooth		✓		✓		✓		✓		✓		✓	
Integrated VHF antenna splitter		Includes internal splitter					✓	✓			✓	✓	
Integrated full colour display	✓	✓	✓										
NMEA 0183 & 2000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Integrated GPS receiver and antenna	Separate GPS antenna provided	✓	Separate GPS antenna provided	Separate GPS antenna provided	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal battery				✓ Battery back-up in the event of power loss									✓ Can also be powered from the vessel
Protection against water, damp, vibration, extreme temperature	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IPx7 waterproof	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IPx8 waterproof													✓
Ultra low power consumption	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Product code	425-0012	431-0001	427-0003	429-0007	430-0009	430-0011	430-0013	430-0015	430-0001	430-0003	430-0005	430-0007	417-0077
Catalogue page number	6	9	7	8	9	9	9	9	9	9	9	9	11

A200 Series Class A

The A200 AIS Class A is SOLAS and Inland Waterway certified, and offers superior performance through its advanced, next-gen technology. The A200 has been engineered for even the harshest marine environments, undergoing extensive testing by independent experts to ensure it is waterproof and unaffected by extreme temperatures, shock and vibration, so you don't need to worry about reliability issues impacting performance or longevity.

The A200 is easy to install and will seamlessly connect to your ECDIS and other bridge systems. In addition, the A200 delivers comprehensive AIS functionality, such as alerts, target filters, vessel information lists, and more.

With its integrated colour display, the A200 plays an important role in tracking and collision avoidance when vessels are in busy port areas. The combination of advanced performance, trusted reliability and competitive price make the A200 the best value AIS Class A in the market by far.

Product code: 425-0012



Key features

- IMO SOLAS Certified AIS Class A
- EU Inland Waterway certified
- Ruggedised and impervious to extreme environments – water (IPx6 and IPx7), damp, shock, vibration and extreme temperatures
- Suitable for internal or external installation
- Integrated colour display with night mode
- Electronic chart feature (C-MAP) with configurable AIS target overlay
- Integrated high-performance Wi-Fi
- NMEA 0183 and 2000
- Pilot plug cable and junction box accessory options



Transmit & Receive



12.5W/SOTDMA



Wi-Fi



NMEA0183 & 2000

Suitable for

- Container Ships
- Superyachts
- Cargo Vessels
- Sports Fishers
- Commercial Fishing Vessels

Product code: 427-0003



Key features

- Certified high-powered AIS Class B (5W SOTDMA)
- Ruggedised and impervious to extreme environments – water (IP67), damp, shock, vibration and temperatures
- Suitable for internal or external installation
- Integrated high-definition colour display with night mode
- Electronic chart feature (C-MAP) with configurable AIS target overlay
- Multiple functionality – CPA, MOB, SAR, vessel lists, text messaging, active monitoring, silent mode, plus much more
- Professional live AIS AtoN information display
- Plug-and-play connectivity – integrated Wi-Fi, NMEA 0183 and NMEA 2000
- Enhanced RF screening to protect against electromagnetic interference



Transmit & Receive



5W/SOTDMA



Wi-Fi



NMEA0183 & 2000

Suitable for

- Superyachts
- Offshore Sailing
- Sports Fishers
- Sailing Yachts
- Small commercial fishing

The B400 is a high-powered priority transmit AIS Class B transceiver that delivers ultimate reliability, enhanced range and advanced performance across the busiest waters and open ocean.

Designed for serious sailors and commercial applications, the B400 is a self-contained, fully integrated plug-and-play unit. Suitable for internal or external installation, it has been certified weather and waterproof and offers an integrated colour display to reduce the need for additional screens. Easy to install and use, the B400 can be integrated with all standard bridge systems and offers a full range of advanced AIS functionality, including alerts, target filters, vessel information lists, and more.

B400 Series Class B

B900 Series Class B

Enhance your on-the-water experience with the B900 series – a market leading range of standard and high transmit power AIS Class B transceivers designed for real-world conditions. Small, lightweight, and built to last, every product in the range delivers em-trak's advanced performance and ultimate connectivity – giving you the complete picture and the time to respond.

With easy installation and connectivity options, the B900 series offers flexible, wireless or wired usage, helping you to get the most from your transceiver and related on-board equipment every day.

- Product codes: 430-0009, 430-0011, 430-0013, 430-0015, 430-0001, 430-0003, 430-0005, 430-0007

Choose the model that's right for you.

	2W CSTDMA	5W SOTDMA	Wi-Fi & Bluetooth	Integrated VHF antenna splitter	Integrated GPS receiver and antenna	IPX7 waterproof	NMEA 0183 & 2000	Ultra low power consumption
B921	✓	–	–	–	–	✓	✓	✓
B922	✓	–	✓	–	✓	✓	✓	✓
B923	✓	–	–	✓	✓	✓	✓	✓
B924	✓	–	✓	✓	✓	✓	✓	✓
B951	–	✓	–	–	✓	✓	✓	✓
B952	–	✓	✓	–	✓	✓	✓	✓
B953	–	✓	–	✓	✓	✓	✓	✓
B954	–	✓	✓	✓	✓	✓	✓	✓



- Designed for real-world conditions, the B900 series is ruggedised and weatherproof



Key features

- Bluetooth
- Wi-Fi
- Integrated GPS
- Splitter
- NMEA0183 & 2000
- Certified AIS Class B - both 2W CSTDMA and 5W SOTDMA variants
- Global Certification – USCG / FCC / Canada / Europe
- SRT-AIS™ transceiver engine for superlative proven performance
- FLEXI-FIT™ bracket system for easy, convenient and secure installation
- Integrated high-performance GPS receiver & antenna (external antenna optional)
- Water, pressure spray and damp proof – IPx6 & IPx7
- Ruggedized – protected from vibration, shock and extreme temperatures
- Small and lightweight
- Ultra-low power consumption – best in class
- NMEA0183 & NMEA2000
- Automated health and performance monitoring
- Silent Mode (transmit-off) function
- Enhanced RF screening to protect against electromagnetic interference
- Built-in power surge protection

Suitable for

- Speed Boats
- Commercial Fishing Vessels
- RIBs
- PWCs
- Day Sailing
- Offshore Sailing

B200 Series Class B

The em-trak B200 is a high transmit power (5W) priority AIS Class B transceiver designed for serious ocean sailors and offering enhanced safety through maximum range and transmission priority.

The high-powered, advanced AIS engine provides reliability that you can depend on and the very best AIS performance in its class. Weatherproof (IPx6 and IPx7 certified) and ruggedised to withstand shock and vibration, the B200 has been extensively tested in the most extreme marine environments and will provide years of maintenance-free operation. The dual NMEA2000 and 0183, coupled with serial ports, Wi-Fi, and Bluetooth, also make connecting to all your tablets, PCs, and display and navigation devices easy and simple.

Peace of mind is further enhanced with an internal battery that ensures continuous operation for up to 24 hours in the event of total power loss. The B200 also supports silent mode, where transmissions are switched off but receiving continues and can be enabled through the integrated switch or via your mobile phone using em-trak's CONNECT-AIS app.

Product code: 429-0007



Key features

- Certified AIS Class B – 5W SOTDMA
- Ruggedised and impervious to extreme environments – water (IPx6, IPx7), damp, shock, vibration, temperatures
- Internal battery back-up for up to 24 hours operation – charge is automatically maintained by primary vessel power and automatically switches to the battery if lost
- Wi-Fi and Bluetooth wireless connectivity
- NMEA 0183 and NMEA 2000
- Low power consumption
- Enhanced RF screening to protect against electromagnetic interference
- Built-in power surge protection



Bluetooth



Wi-Fi



Battery



NMEA0183 & 2000

Suitable for

- Sports Fishers
- Commercial Fishing Vessels
- Sailing Yachts

Product code: 417-0077



The Identifier I100-X is a ruggedised, fully self-contained AIS Class B vessel tracking transponder, ideal for small vessel tracking and monitoring.

I100-X can power itself using its own internal rapid-recharge battery (5 days continuous operation when transmitting at 5 minute intervals.), or be connected directly to another onboard power source such as engine, battery or solar with the battery then acting as a backup.

I100-X is fully water and weather proof (IPx8 certified) and ruggedised to operate reliably without maintenance in even the harshest of environments - extreme heat/cold, humidity, shock and vibration.

Each I100-X is supplied as a complete kit which includes the I100-X transponder, mounting bracket and rapid charging dock. Accessories such as direct connect power cable and alert indicator box are also available.

Key features

- Certified AIS Class B Transmitter
- Flexibility to power from engine/battery/solar
- Ruggedised for long term external use
- Fully integrated GPS and VHF antennas
- CE & RED certified

Power Cable 301-0130

Power I100-X directly from power source – battery or solar-powered system.

Indicator Box 417-0068

The I100-X Indicator Box will allow you to view the LED status. NOTE: the Indicator Box can only be used when the I100-X is permanently powered. The Indicator Box is supplied with all cables required for the indicator installation.

Configuration Dock

417-0074 The I100-X must be programmed before use and requires a configuration dock. This can be used to programme multiple I100-Xs and can also be used as a spare charger.



Transmit



1W/CS



Waterproof



Battery



GPS

Suitable for

- PWCs
- Non motorised watercraft

I100-X SERIES

AIS Transceiver
AIS Small Vessel Tracker

X100 defines a new horizon of functionality, performance and convenience in marine radio communications and navigation safety. Integrated DSC/VHF radio and high powered AIS Class B combine with a range of innovative functionalities that make your boating safer and more convenient.

Overview

ENGINEERED & BUILT FOR BOATING LIFE

- Ruggedized, water and weather-proof
- CLEAR-WAVE digital audio processing
- Full colour direct-sunlight visible display
- WiFi & Bluetooth
- NMEA2000 & 0183
- Integrated GPS (external antenna optional)
- Integrated zero-loss VHF antenna splitter – only one antenna required for both AIS and VHF
- Ergonomic intuitive controls and UI
- Flush, desk top, ceiling mounting options

■ X100 Base



X100

VHF | DSC | AIS



■ CONNECT-X Mobile Device Apps



OUTSTANDING FUNCTIONALITIES THAT ENHANCE YOUR BOATING

- CONNECT-X - Transform your smart phone or smart watch into a full feature wireless command mic. You can use to make and receive calls, monitor VHF/DSC, AIS traffic and nav alerts anywhere on your boat.
- VHF/DSC – X100 is a certified Class DVHF/DSC marine radio with a full feature globally certified Class D VHF/DSC radio.
- Chat to anyone on the boat using the Connect-X private intercom functionality.
- Enable MOB function and be alerted to any connected device that leaves the boat.
- High powered AIS that receives and transmits. Integrated navigation alerts and even allows you to go silent and stop transmitting when you want.
- Single system wide phonebook for Vessel DSC, AIS & On-board Intercom for consistent communication by whatever means vessel-wide.
- Wi-Fi Access Point mode for installation standalone, or Station mode for integration within existing vessel Wi-Fi infrastructure for a scalable solution that will meet the needs of solo mariners on small boats to medium to large Motor Yachts and Sailing vessels.
- Streaming of all received AIS data to navigation apps on tablets and phones over Wi-Fi to easily integrate 3rd party navigation apps into your system.
- Autoset DSC “Nature of Distress” when in a MOB situation for quicker triggering of DSC distress following a MOB situation.
- Initiation of DSC calling from: Phonebook, AIS List/Plot or via direct entry of MMSI to make using DSC much more convenient, quicker and feature rich without having to enter MMSI numbers directly.

Advanced features for enhanced safety and communication

VHF/DSC

Full feature Class D VHF/DSC radio with advanced Clearwave digital audio processing.



Wireless Command-Mic

VHF/DSC in your pocket or on your wrist. Use your smart phone or watch as a full feature wireless radio command-mic.



AIS

AIS Class B. Show all targets, transmit own position, ID vessels, CPA alerts.



Private Intercom

Connect multiple phones and watches and talk privately to each other or group call.

MOB

Connect multiple mobile devices. MOB and PLB alerts with locate instructions.



One Touch Calling

Select any DSC or AIS target and make a direct DSC/VHF call. DSC you can easily use.





- Why em-trak AIS is the best



- Inside every em-trak transceiver is a highly sophisticated, fully integrated AIS transceiver engine

Advanced performance

Superior technology is what defines the performance you can expect from your AIS transceiver. By that, we mean its ability to receive and process all and any AIS transmissions in real-time without error or loss at maximum range. Our core technology is multi-generational, evolving continuously over the last thirty years by our in-house engineering teams.

Inside every em-trak transceiver is a highly sophisticated, fully integrated AIS transceiver engine, which uses the most advanced electronic architecture that integrates the very best components with powerful firmware. The result is the delivery of exceptional performance and reliability, plus ultra-low power consumption within a small but robust form.



Product engineering

Over thirty years of accumulated experience in developing communication products for professionals has provided us with a unique insight and understanding of the challenges faced by products in the real world.

Every em-trak product is designed for continuous use in the most extreme marine environments. This drives unseen product features, such as exceptionally robust UV impervious enclosures, use of marine-grade stainless steel connectors and internal screws, robust waterproof sealing, vibration and shock resistance, and high-grade electronic components designed to operate at extreme temperatures.



■ Ultimate connectivity

Manufacturing

All our products are manufactured in one of the world's most advanced electronic production facilities in Europe. Our processes conform to the highest standards, with every component tracked, and every product going through multiple rigorous testing gateways during its manufacture to ensure a lifetime of reliable operation. Furthermore, before leaving the factory, each product undergoes extensive testing that checks over 1,000 parameters, as well as a waterproof test.

Connectivity

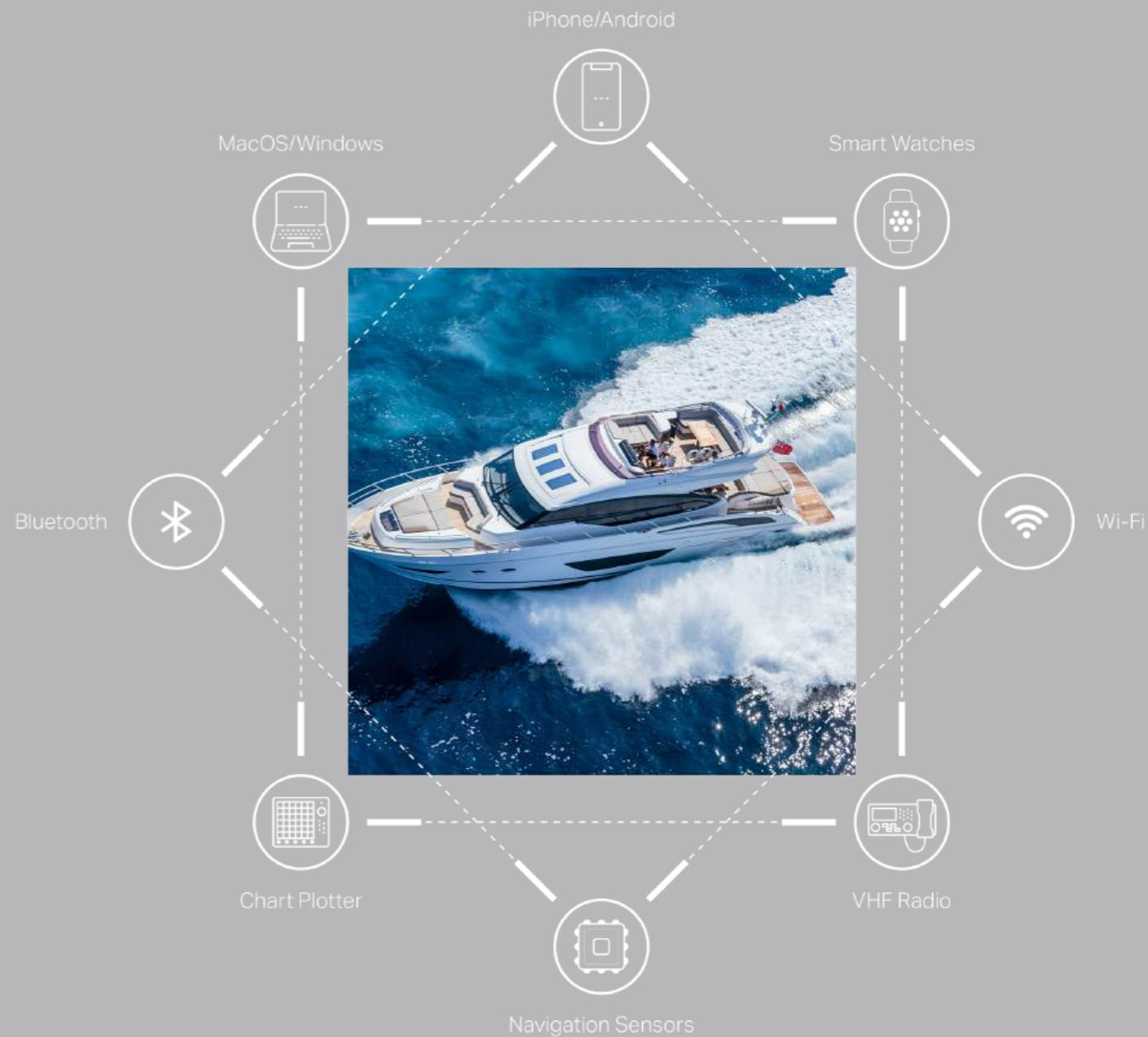
There are many types of chart plotters and navigation systems fitted on boats, coupled with an increasing selection of navigation apps for watches, phones, tablets and PCs. Our products give you the freedom to connect with any of these technologies simultaneously, so you can swap between them all if you want. To this end, all em-trak transceivers have dual NMEA0183 and NMEA2000 data outputs and a selection of interfaces, wired and wireless (Wi-Fi and Bluetooth).

Functionality

Our AIS transceivers will support all the AIS-related functionality available in your chosen display, giving you the freedom to access the vast array of functionality these systems offer. em-trak transceivers will receive and decode all AIS transmissions from any transceiver type – these include Class A, Class B, SART, MOB, AtoN and base stations. This means you have access to live weather and sea information, as well as the ability to receive and send text messages, giving you complete situational awareness and the time to respond.



■ AIS anywhere



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