

HIGH TRANSMIT POWER (5W SOTDMA)

## B952 CLASS B | Secure AIS Transceiver



### DESCRIPTION

The B952 is a high power (5W SOTDMA) Class B AIS transceiver, offering unmatched performance and ultra-lowpower consumption. Small and light-weight, it combines integrated WiFi & Bluetooth capabilities for seamless wireless connectivity and AIS data streaming. It is compatible with any mobile device, PC or wearable – ensuring everyone on board gets the most from your transceiver and related onboard equipment every day.

The B952 transceiver works seamlessly with em-trak's CONNECT-AIS app to make programming, configuration and device monitoring easier than ever before. The class-leading device is engineered to deliver real-time data processing, with increased range and transmission priority and its flexible connectivity means it can be used by up to nine different devices simultaneously.

The B952 includes a user selectable secure operating mode. When operating in secure mode AIS position reports are encrypted and vessel position is not visible to other AIS system users. An internal Voyage Data Recorder logs vessel activity for up to 90 days.

### FEATURES

- | Certified AIS Class B – 5W SOTDMA
- | Integrated WIFI & Bluetooth
- | Global certification - USCG / FCC / Canada / Europe
- | Secure mode with encrypted position reporting - user selectable
- | FLEXI-FIT™ bracket system for easy, convenient and secure installation
- | Internal high-performance GPS receiver and antenna (external antenna optional)
- | Water, pressure spray and damp proof (IPx6, IPx7 certified)
- | Protected from vibration, shock and extreme temperatures
- | Internal Voyage Data recorder
- | Ultra-low power consumption – best in class
- | Guaranteed connectivity and interoperability with any app, chart plotter, smart phone, tablet or PC
- | NMEA 0183 & NMEA 2000
- | Automated health and performance monitoring
- | Enhanced RF screening to protect against electromagnetic interference
- | Built-in power surge protection



## PHYSICAL & ENVIRONMENTAL SPECIFICATION

Size (H x W x D)	150 x 115 x 45mm
Weight	385g
Operating temperature	-25°C to +55°C
Storage temperature	-25°C to +70°C
Ingress protection	IPx6 and IPx7

## ELECTRICAL SPECIFICATION

Supply voltage	12V or 24V DC
Supply voltage range	9.6V - 31.2V DC
Average current (at 12V)	170mA
Average current (at 12V) (wireless off)	135mA
Peak current	2.5A
Average power consumption (at 12V)	2.0W
Average power consumption (at 12V) (wireless off)	1.6W
Galvanic isolation	NMEA 0183 inputs only, NMEA 2000, VHF antenna port

## CONNECTORS

VHF antenna	SO-239
GNSS	TNC
Power/NMEA 0183/silent mode	12-way circular multipole
NMEA 2000	5-way Micro-C connector
USB	USB Micro-B

## DATA INTERFACES

NMEA 0183	2 x bi-directional ports
NMEA 2000	NMEA 2000 Ed 3.101, LEN=1
USB	PC virtual com port for NMEA 0183 data
Wi-Fi	IEEE 802.11 (a/b/g), client and access point mode supported (2 connections in access point mode)
Bluetooth	BT Classic 4.0, 7 concurrent connections

## USER INTERFACE

Indicators	Power, transmit timeout, error, silent mode
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## STANDARDS COMPLIANCE

Encryption	256bit AES Encryption for all AIS messages
AIS standards	IEC 62287-2 Ed. 2 ITU-R M.1371.5
Product safety standards	EN60950-1:2006 +A11:2009 +A12:2010 +A12:2011 +A2:2013 EN62311:2008
Environmental standards	IEC 60945 Ed. 4
Serial data interface standards	IEC 61162-1 Ed 5.0 IEC 61162-2 Ed 1.0
NMEA 2000	NMEA 2000 Ed 3.101
GNSS performance standards	IEC 61108-1 Ed 2.0 IEC 61108-02 Ed 1.0

## GNSS

Systems supported	GPS, GLONASS, BeiDou, Galileo (two of any combination, three including GPS, Galileo)
Channels	72
Internal/external antenna	Internal or optional external antenna
Time to first fix from cold start	26s

## VHF TRANSCEIVER

VDL access scheme	SOTDMA
Operating frequency	156.025MHz - 162.025MHz
Channel bandwidth	25kHz
Receivers/transmitters	2 x receivers, 1 x transmitter
AIS receiver sensitivity (20% PER)	-111dBm
AIS transmitter power	5W (+37dBm)

## IN THE BOX

1 x AIS transceiver
1 x Power and data cable (2M)
1 x FLEXI-FIT™ mounting bracket
Secure mode switch
Complete with screws & optional fixing tape

## WARRANTY

With em-trak you can buy with confidence. If you are unhappy with your new product for any reason, within two days of receipt and subject to the product and packaging being complete and undamaged, you may return it to us for a full refund. We are sorry, but we cannot accept the return of any product if you have not advised us in writing within 48 hours of receiving your em-trak product,

or if it has been used and/or damaged or if any of the package is incomplete. All em-trak products benefit from our three-year global warranty. In the unlikely event of a problem, please contact our Customer Support department (24/7) at

[support@em-trak.com](mailto:support@em-trak.com) and one of our experts will work with you to resolve your issue or arrange the repair or replacement of your em-trak product. The warranty is invalidated if the product has been incorrectly used, damaged or tampered.

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B952 CLASS B | AIS TRANSCEIVER  
INSTALLATION GUIDE

