

HIGH TRANSMIT POWER (5W SOTDMA)

B951 CLASS B | AIS Transceiver



DESCRIPTION

The B951 is a high power (5W SOTDMA) Class B transceiver, delivering advanced performance and ultimate reliability through em-trak's next-gen technology. Small and durable, this trusted transceiver processes all AIS transmissions in real-time, with increased range and transmission priority so you always have the complete picture and the time to respond, even in the busiest waters.

em-trak's flexible, intelligent connectivity means the B951 can be paired to any chart-plotter and its next-gen GPS receiver and antenna is already integrated inside the device to provide best-in-class, ultra low power consumption and performance. em-trak's unique FLEXI-FIT® bracket system completes the package and ensures easy installation.

FEATURES

- | Certified AIS Class B - 5W SOTDMA
- | Global certification - USCG / FCC / Canada / Europe
- | SRT-AIS™ Transceiver Engine for superlative proven performance
- | 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
- | Small and lightweight
- | Ultra-low power consumption - best in class
- | NMEA 0183 & NMEA 2000
- | Automated health and performance monitoring
- | Silent mode (transmit-off) function
- | Enhanced RF screening to protect against electromagnetic interference
- | Built-in power surge protection



TRANSMIT & RECEIVE



5W/50



WATERPROOF



NMEA 0183 & 2000



GPS

PHYSICAL & ENVIRONMENTAL SPECIFICATION

Size (H x W x D)	150 x 115 x 45mm
Weight	375g
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)	135mA
Peak current	2.5A
Average power consumption (at 12V)	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

STANDARDS COMPLIANCE

AIS standards	IEC 62287-2 Ed. 2 ITU-R M.1371.5
Product safety standards	EN60950-1 2006 +A1:2009 +A1:2010 +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 TRANSCIVER

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)

USER INTERFACE

Indicators	Power, transmit timeout, error, silent mode
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IN THE BOX

1 x AIS transceiver
1 x Power and data cable (2M)
1 x FLEXI-FIT™ mounting bracket
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 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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B951 CLASS B | AIS TRANSCEIVER
INSTALLATION GUIDE

