

STANDARD POWER (2W CSTDMA)

B924 CLASS B | AIS Transceiver



DESCRIPTION

The most feature-rich 2W CSTDMA AIS transceiver in the B900 range. The B924 includes WiFi & Bluetooth for seamless wireless connectivity and AIS data streaming to any mobile device, PC or wearable, with an integrated VHF antenna splitter to enable your transceiver to share your existing VHF antenna without any loss of performance. Like all B900 transceivers, it also includes an integrated next-generation GPS receiver and antenna and is designed for em-trak's unique FLEXI-FIT® bracket system to make installation as easy as possible.

Exceptionally light-weight and completely weatherproof, the B924 delivers the very best (2W) AIS receive and transmit performance so you see all AIS information and targets, even at maximum range. Your transceiver will also work with our CONNECT-AIS mobile phone app to make programming, configuration and transceiver health monitoring simple and convenient.



FEATURES

- | Certified AIS Class B - 2W CSTDMA
- | Integrated WiFi and Bluetooth
- | Integrated VHF antenna splitter
- | 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
- | Guaranteed connectivity and interoperability with any app, chart plotter, smart phone, tablet or PC
- | 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

PHYSICAL & ENVIRONMENTAL SPECIFICATION

Size (H x W x D)	150 x 115 x 45mm
Weight	425g
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)	280mA
Average current (at 12V) (wireless off)	245mA
Peak current	2A
Average power consumption (at 12V)	3.4W
Average power consumption (at 12V) (wireless off)	2.9W
Galvanic isolation	NMEA 0183 inputs only, NMEA 2000, VHF antenna port

CONNECTORS

VHF antenna	SO-239
VHF radio	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
WiFi	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

STANDARDS COMPLIANCE

AIS standards	IEC 62287-1 Ed. 3 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	CSTDMA
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	2W (+33dBm)

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 VHF radio accessory cable
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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B924 CLASS B | AIS TRANSCEIVER
INSTALLATION GUIDE

