

STANDARD POWER (2W CSTDMA)

## B923 CLASS B I AIS Transceiver



### DESCRIPTION

The B923 is a standard transmit power (2W CSTDMA) Class B AIS transceiver that is small and lightweight, yet delivers the very best AIS receive and transmit performance so you see more AIS information and targets at maximum range - all achieved with the lowest power consumption.

The integrated high performance VHF antenna splitter of the B923 enables the transceiver to share your existing VHF radio antenna without any loss of performance and fail-safe reliability. With built-in intelligent connectivity, integrated next generation GPS receiver & antenna and a unique FLEXI-FIT™ bracket system, safe and secure installation is simple.

### FEATURES

- | Certified AIS Class B - 2W CSTDMA
- | 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 (IPx7 & IPx6 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
- | 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
- | Fail-safe VHF radio operation



TRANSMIT & RECEIVE



2W/CS



SPLITTER



WATERPROOF



NMEA0183 & 2000



GPS

## PHYSICAL SPECIFICATION

Size	150 X 110 mm
Weight	360g

## ELECTRICAL SPECIFICATION

Power Supply	12 - 24V DC
Power Consumption	2.95W (245mA @ 12V)

## CONNECTORS

VHF Antenna Output	SO239
VHF Radio Input	SO239
GNSS Antenna	TNC
NMEA2000	Standard 5 Way Micro Connector
Power/NMEA0183	12 Way Circular Multipole
USB	Micro B

## DATA INTERFACES

Physical Data Interfaces	NMEA0183 (2)
	NMEA2000
	USB

## STANDARDS COMPLIANCE

AIS Standards	IEC62287-1 Ed 3 ITU-R M.1371-5
Product Safety Standards	EN60950-1:2006 +A11:2009 +A1:2010 +A12:2011 +A2:2013 EN62311:2008  CFR 47 PT1.1310 (2016)  Health Canada Safety Code 6  ARPANSA Radiation Protection Series No.3
Environmental Standard	IEC60945 Ed 4
Serial Data Interface Standards	IEC61162-1 Ed 5.0 IEC61162-2 Ed 1.0
GNSS Performance Standards	IEC61108-1 Ed 2.0 IEC61108-02 Ed 1.0
NMEA2000 Interface Standard	NMEA2000 Ed 3.101

## VHF TRANSCEIVER

Access Scheme	CSTDMA
Operating Frequency Range	156MHz To 163MHz
AIS Receiver Sensitivity	-111dBm
AIS Transmit Power	2W (+33dBm)

## GNSS RECEIVER & ANTENNA

Channels	72
GNSS Type & Performance	GPS/Galileo + GLONASS Or BEIDOU

## Environmental Standard

Category	Exposed
Waterproofing	IPx6 & IPx7
Operating Temperature	-25°C To +55°C

## ANTENNA SPLITTER

VHF Radio Transmit Path Loss	< 1dB
Receive Path Loss	0dB
Path Switching Time	< 10µs
VHF Radio Path Rating	> 25W
Path On Power Failure	VHF to Antenna
Antenna Fault Detection	Yes
Switch Type	Solid-state

## 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](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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**B923 CLASS B I AIS TRANSCEIVER  
INSTALLATION GUIDE**

