

HIGH TRANSMIT POWER (5W SOTDMA)

## B954 CLASS B I AIS Transceiver



### DESCRIPTION

The B954 is a high transmit power (5W SOTDMA) 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 B954 combines WiFi and Bluetooth for seamless wireless connectivity and AIS data streaming to any mobile device or PC as well as a high performance integrated VHF antenna splitter which 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 – 5W SOTDMA
- | 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 (IPx7 & IPx6 Certified)
- | 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
- | Fail safe VHF Radio operation

## PHYSICAL SPECIFICATION

Size	150 X 110 mm
Weight	370g

## ELECTRICAL SPECIFICATION

Power Supply	12 - 24V DC
Power Consumption (WiFi & Bluetooth On)	3.35W (280mA @ 12V)
WiFi & Bluetooth Off	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
WiFi Type	IEEE 802.11 (a/b/g)
Bluetooth Type	BLE 4.0 Classic

## STANDARDS COMPLIANCE

AIS Standards	IEC62287-2 Ed 2 ITU-R M.1371-5
Product Safety Standards	EN60950-1 2006 +A11:2009 +A1:2010 +A12:2011 +A2:2013 EN62311:2008 CFR 47 PT.1.1310 (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 IEC61108-2 Ed 1.0
NMEA2000 Interface Standard	NMEA2000 Ed 3.101

## VHF TRANSCEIVER

Access Scheme	SOTDMA
Operating Frequency Range	156MHz To 163MHz
AIS Receiver Sensitivity	-111dBm
AIS Transmit Power	5W (+37dBm)

## GNSS RECEIVER & ANTENNA

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

## Environmental Standard

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

## ANTENNA SPLITTER

VHF Radio Transmit Path Loss	< 1dB
Receive Path Loss	0dB
Path Switching Time	< 10us
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 and one of our experts will work with you to instantly 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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B954 CLASS B I AIS TRANSCEIVER  
INSTALLATION GUIDE

