

HIGH TRANSMIT POWER (5W SOTDMA)

# B400 CLASS B | AIS Transceiver



## DESCRIPTION

Introducing the B400, a high-powered priority transmit AIS Class B transceiver that delivers ultimate reliability, enhanced range and advanced performance across the busiest waters and open ocean.

Designed for serious sailors and commercial applications, the B400 is a self-contained, fully integrated plug-and-play unit. Suitable for internal or external installation, it has been certified weather and waterproof, and offers an integrated colour display to remove the need for additional screens. Easy to install and use, the B400 can be integrated with all common bridge systems, as well as offering a full range of advanced AIS functionality including alerts, target filters, vessel information lists, real time weather updates and more.

## FEATURES

- | Certified high powered AIS Class B (5W SOTDMA)
- | High performance latest generation GPS
- | Ruggedized and impervious to extreme environments - water (IPx6, IPx7), damp, shock, vibration, temperatures
- | Suitable internal or permanent external installation
- | Robust ergonomic button and rotary-knob user interfaces with configurable multi-lingual menu options
- | Integrated high definition colour display with night mode
- | ENC chart (C-MAP) with configurable AIS target overlay
- | Multiple functionality - collision, CPA, MOB, SAR, vessel lists, text messaging, weather, active monitoring, silent mode, plus much more
- | Professional live AIS AtoN information display
- | Plug & play connectivity - integrated WiFi, NMEA 0183 & NMEA 2000
- | Enhanced RF screening to protect against electromagnetic interference
- | Built-in power surge protection



TRANSMIT &amp; RECEIVE



5W/SO



WIFI



WATERPROOF



NMEA 0183 &amp; 2000

## PHYSICAL & ENVIRONMENTAL SPECIFICATION

Size (H x W x D)	152 x 165 x 95mm
Weight	1.1kg
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)	480mA
Peak current	4A
Average power consumption (at 12V)	5.8W
Galvanic isolation	NMEA 0183, NMEA 2000, power supply, VHF antenna port

## CONNECTORS

VHF antenna	SO-239
GNSS	TNC
Power	2 way circular multipole
NMEA 0183/Silent mode	14 way circular multipole
NMEA 0183/alarm relay	18 way circular multipole
NMEA 2000	5 way Micro-C connector

## DATA INTERFACES

NMEA 0183	3 x input ports 3 x bi-directional ports
NMEA 2000	NMEA 2000 Ed 3.101, LEN=1
WiFi	IEEE 802.11 (a/b/g), client mode and access point mode supported. (5 connections in access point mode)

## STANDARDS COMPLIANCE

AIS standards	IEC 62287-2 Ed. 2 ITU-R M.1371.5
Product safety standards	EN60950-1 2006 +A11:2009 +A1:2010 +A12:2011 +A2:2013
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	External only
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	3 x receivers, 1 x transmitter
AIS receiver sensitivity (20% PER)	-11dBm
AIS transmitter power	5W (+37dBm)

## USER INTERFACE

Screens	5" 800 x 480 full colour LCD
Buttons	Rotary encoder for selection and entry, 4 menu keys and 4 direction keys
SD card interface	Micro SD card interface for logging and chart cards (not available from em-trak)

## GNSS ANTENNA

Size	85 x 70mm
Weight	470g
Ingress protection	IPx6 and IPx7
Mounting	1 inch 14 TPI pole mount required
GNSS systems supported	GPS, GLONASS, Galileo, BeiDou

## IN THE BOX

1 x AIS transceiver
1 x Mounting bracket & fixings pack
1 x Product manual and document pack
1 x Power cable
1 x Data accessory cable

## 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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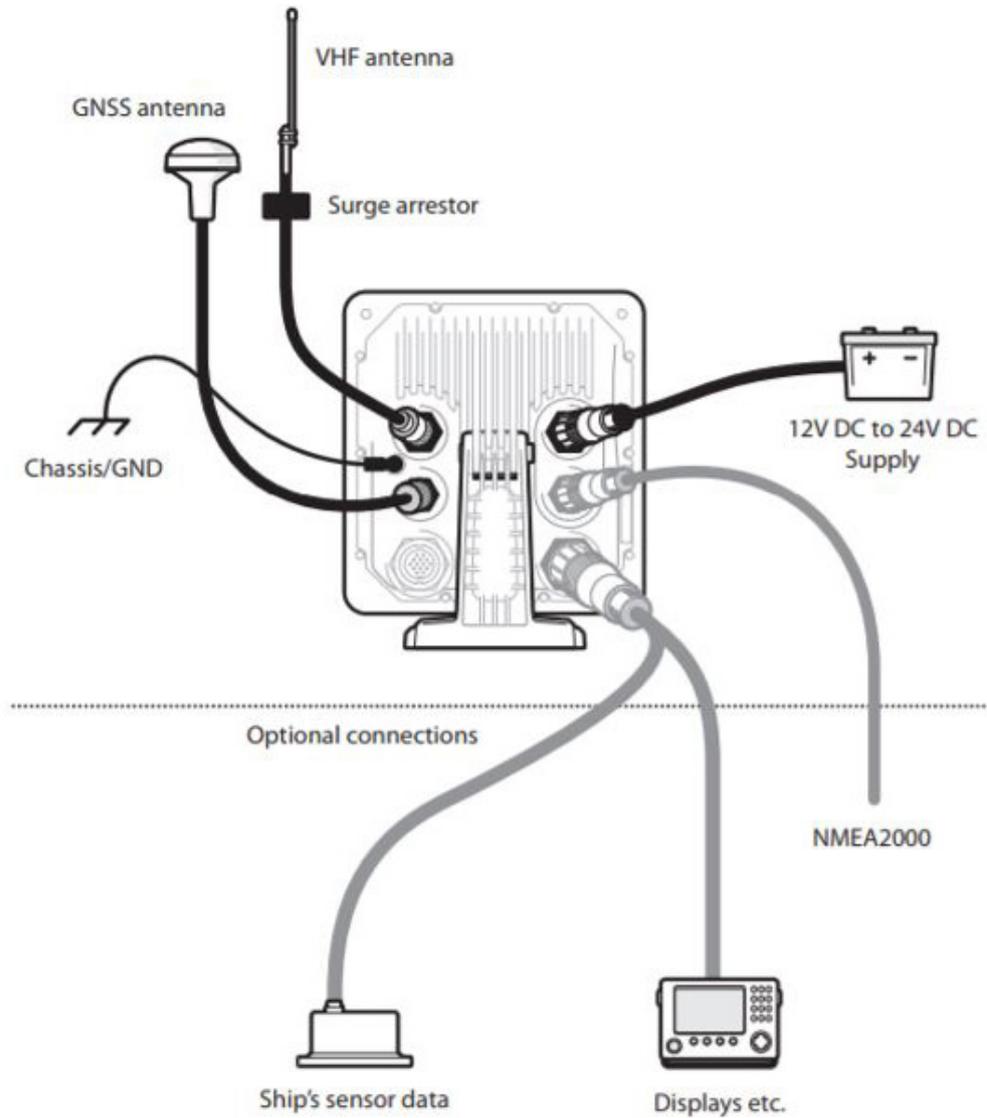
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**B400 CLASS B | AIS TRANSCEIVER  
INSTALLATION GUIDE**



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