

STANDARD POWER (2W CSTDMA)

B300 CLASS B | AIS Transceiver



DESCRIPTION

The B300 is a standard power (2W CSTDMA) AIS Class B transceiver that is small, lightweight, yet delivers the very best AIS receive and transmit performance so you see more AIS information and targets at maximum range.

The B300 is ruggedized and completely water, weather, vibration and shock proof with the lowest power consumption of any AIS Class B in the market.

The internal high performance GPS receiver with advanced redundancy is complemented by a unique internal GPS antenna, which means that in certain installations no external GPS antenna is needed.

FEATURES

- | Certified AIS Class B - 2W CSTDMA
- | Global certification - USCG / FCC / Canada / Europe
- | SRT-AIS™ Transceiver Engine for superlative proven performance
- | 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
- | Silent Mode (transmit-off) function
- | Enhanced RF screening to protect against electromagnetic interference
- | Built-in power surge protection



TRANSMIT & RECEIVE



2W/CS



WATERPROOF



NMEA 0183 & 2000

PHYSICAL & ENVIRONMENTAL SPECIFICATION

Size (H x W x D)	140 x 107 x 42mm
Weight	270g
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)	160mA
Peak current	2A
Average power consumption (at 12V)	1.9W
Galvanic isolation	NMEA 0183 inputs only, NMEA 2000

CONNECTORS

VHF antenna	SO-239
GNSS	TNC
Power/NMEA 0183/USB/silent mode	12 way circular multipole
NMEA 2000	5 way Micro-C connector

DATA INTERFACES

NMEA 0183	1 x input port 1 x output port
NMEA 2000	NMEA 2000 Ed 3.101, LEN=1
USB	PC virtual com port for NMEA 0183 data

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
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

GNSS

Systems supported	GPS
Channels	50
Internal/external antenna	Internal or optional external antenna
Time to first fix from cold start	37s

VHF TRANSCEIVER

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 Fixings pack

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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B300 CLASS B | AIS TRANSCEIVER
INSTALLATION GUIDE

