Transas AIS Class B Transponder

The Transas Automatic Identification System (AIS) Class B receiver and transmitter unit is low cost, but high performance product designed specially for fishing vessels, passenger ships, coastguard, leisure and workboats. The compact AIS Class B unit is suitable for a variety of applications within the AIS environment. Certified, well-proven technology ensures users of the reliability and quality which has become the hallmark of Transas in today's fast moving marine industry.

FEATURES

Simple Design Concept

AIS Class B Transponder is an practical single PCB solution optimising the combined application of hardware and software.

Standard NMEA Interface

AIS Class B can be connected to any NMEA compatible chart plotter or suitably configured PC or PDA for graphically display of AIS targets.

Internal GPS Module

AIS Class B includes an integral GPS module to facilitate ease of installation and use.

Safety Related Message

The Safety Related Message button enables the user to transmit a distress alert to all vessels and base stations within range.

Silent Mode

AIS Class B device can be configured to operate in receive only mode with the transmitter disabled.

BENEFITS

Transmit your position

Fitting an AIS Class B device ensures you are seen by other AIS equipped vessels.

Coastal Surveillance

AIS and radar can be fused to create effective and efficient coastal tracking, surveillance and safety systems.

Vessel Protection

As part of a suitably configured network, AIS enables owners to be alerted to unauthorized vessel movements.

Port Management

AIS can be used as a highly effective port management tool allowing easy identification, control and direction of vessels.

Compatibility

Also compatible with ECDIS, ECS and RADAR if they support Class B targets.

COMPLIANCE

BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Designed in compliance with the following standards:

• IEC62287-1
IEC standard, Class B shipborne equipment
• IEC60945 Edn 4.0
IEC standard, environmental requirements
• ITU-RM.1371-1
Universal AIS Technical Characteristics
• IEC61162-1 Edn. 2.0
IEC standard, digital interfaces part 1
• IEC61108-1IEC standard, GPS receiver equipment

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TECHNICAL DESCRIPTION

Physical

• Dimensions: 190 x 175 x 91 mm (L x W x H)
(Includes fixing bracket)
• Weight: 1450g

Power

• 12V DC (9.6-15.6V)
• Average power consumption 4W
• Power consumption 0.33A continuous

Internal GPS Receiver

• IEC 61108-1 compliant

Electrical Interfaces

• RS232 38.4kbaud bi-directional
• RS422 NMEA 38.4baud bi-directional

Connectors

• VHF Antenna connector
• GPS Antenna connector
• RS232/RS422/Power

VHF Transceiver

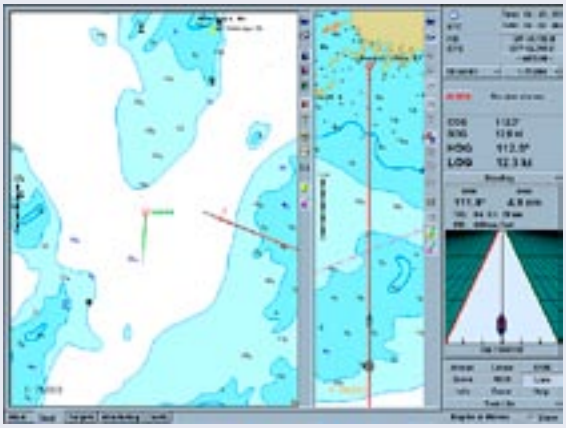
• Transmitter x 1
• Receiver x 2 (one time shared between AIS/DSC)
• Frequency: 156.025 to 162.025 MHz in 25KHz steps
• Output power:
• 33dBm ± 1.5 dB
• Channel bandwidth: 25KHz
• Channel step: 25KHz
• Modulation modes
• 25KHz GMSK (AIS, TX and RX)
• 25KHz AFSK (DSC, RX only)
• Bit rate
• 9600 b/s ± 50 ppm (GMSK)
• 1200 b/s ± 30 ppm (FSK)
• RX sensitivity
• Sensitivity - 107dBm 25Khz
• Message error rate 20%
• Co-channel 10dB
• Adjacent channel 70dB
• IMD 65dB
• Blocking 84dB

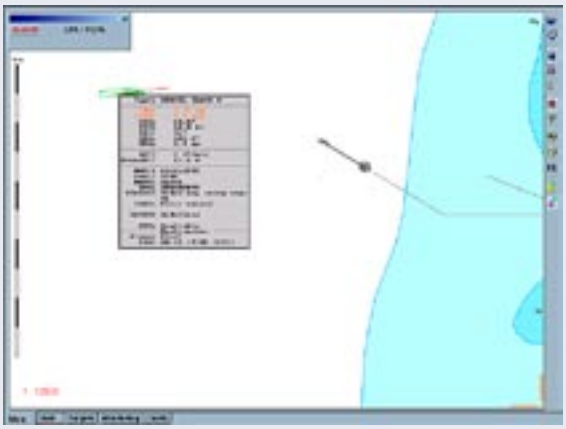
Environmental

• IEC 60945 (Cat C)
• Operating Temperature: -25oC to +55 oC

CONFIGURATION

Transas Navigator software examples





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