

R4 CLASS B AIS Transponder



The R4 Class B Transponder from Saab TransponderTech is the quality choice for low cost AIS tracking applications. It is also an ideal tool for improved situation awareness in smaller commercial vessels or recreational craft.



The R4 Class B Transponder complies with IEC 62287 FDIS. The transponder can either be used as a stand-alone unit for tracking or be connected to an AIS-enabled chart plotter or to an

Electronic Chart System. An external alarm key can be connected as well as optional application specific I/O. The R4 Class B Transponder has a built-in GPS which generates position information for broadcast.

The Class B transponders communicate on the same radio frequency as Class A transponders as well as Search and Rescue aircraft. This means that a complete situation picture of all AIS equipped ships within VHF range can be displayed and that a vessel in distress can be seen from a SAR unit.

Advantages

- Improved safety through improved situation awareness. The location of Class A and Class B equipped ships can be displayed on a chart plotter or ECS system
- Search and Rescue (SAR). Vessels in distress can be located faster and more accurately if they are equipped with AIS
- Surface traffic can be made safer through monitoring of ships location and movement from shore AIS base stations
- Improved fleet management and control through monitoring from a control centre

Optional functionality

- Alarm Key
- Sensor inputs
- Digital outputs



SAAB

World wide sales & support network



Physical

Size W x H x D: 182x39x137 (mm)
Weight: 0.6 kg

Power

Input (main) 9.6-15.6 V DC,
Power Consumption: 4 W
Peak current: 2 A

GPS Receiver

Receiver: 12 channels
Frequency: L1 (1575 MHz)
Update Rate: 1 Hz

Indicators

Power/Operate
TX time-out
Error
SRM

Specification subject to change without notice

Electrical Interfaces

1 RS422 bi-directional data port 38,400 bps
1 RS232 bi-directional data port 28,400 bps
GPS 50 ohm antenna connector (TNC female)
VHF 50 ohm antenna connector (BNC female)

VHF Transceiver

Frequency: 156.025-162.025 MHz
Channel Bandwidth: 25 kHz
Channel step: 25 kHz
Output power: 33 dBm (± 1.5 db)
Bit Rate: 9600 bps (GMSK) 1200 bps (FSK)
Modulation: 25 kHz GMSK (AIS, TX and RX) 25 kHz
AFSK (DSC, RX only)
One transmitter
Two receivers (one receiver time shared between AIS and DSC)

Applicable standards

IEC 62287 Draft standard for Class B AIS
IEC 60945 Ed. for environmental requirements
ITU-RM.1371-1 Universal AIS
IEC 61162-1 Ed. 2.0 for digital interfaces
ITU-R M.493-9 and ITU-R M.825-3 for DSC in the maritime service

Membership Organizations



SAAB SYSTEMS

Saab TransponderTech AB • Låsblecksgatan 3 • SE-589 41 Linköping •

Sweden

Tel +46 13 18 80 00 • Fax +46 13 18 23 77

www.saabgroup.com/transpondertech

