Transponder Technical Specifications

- Power requirement
- Number of transmitter
- Number of receiver
- Frequency rate
- Channel spacing
- TX to Rx turnaround time
- Channel selection time
- Baud rate
- Modulation scheme
- Carrier power (adjustable)
- Sensivity 20% MER
- GNSS receiver
- DGNSS support

21,6-31,2 V DC

- 1
 - 3 (2 AIS TDMA, 1 DSC)
 - 156.025 –162.025 MHz
 - 12.5 ve 25 kHz
 - < 1 ms

< 26 ms

9600 bps

25 kHz FSK (DSC)



33 ve 41 dBm (2 ve 12,5W) 50 Ohm load

- < -107 dBm AIS for 25 kHz
- < -98 dBm AIS for 12,5 kHz
- 12 parallel channels

Yes

Transponder Technical Specifications

- Environmental EC 60945
- Electrical interfaces
 - Sensor interfaces 1 to 3 RS485 IEC61162-1 to 2
 - Pilot/Auxiliary
 - External display
 - Long range
 - DGNSS correction input
- Physical characteristics
 - Size (WxHxL)
 - Weight
 - Cooling

RS485 IEC61162-2 RS485 IEC61162-2 RS232 RTCM-5C-104

IEC61162-2

IDC-AL

175x81x276 mm.

3,9 kg.

RS485

Not required



Minimum Keyboard and Display (MKD)

The MKD is equipped with a text display containing four lines with 20 characters each and a 16-button keyboard.

When the system is powered up for the first time the view below will be displayed on the MKD.

Data that needs to be configured when starting a new system for the first time



MKD 1,2 kg. 120x180x45 mm.

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Connection Unit (CU)

The power supply to the transponder is provided via the Connection Unit.

The Connection Unit is used for convenient connection of ship's equipment such as sensors and external systems for monitoring and control of AIS information.

The Connection unit have EMC filters on all signal interfaces and the power input.

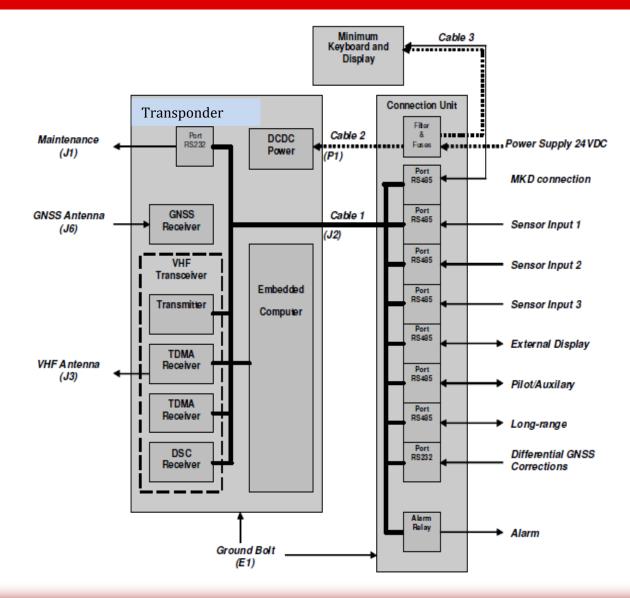
The bridge alarm can be connected at the Connection unit.



Connection Unit 1,1 kg. 175x345x75 mm.



External Interfaces





Power Supply Interfaces

The input power to the systems should be connected to the screw terminal in the Connection Unit.

The systems delivered with an interface cable to connect the Transponder connector P1 with the Connection Unit.

Mechanical interface: Screw terminals

Electrical Interface: 24 V DC (-10%, +30%), max 3A, negative return



Data Link Interfaces

All ship's sensors needed for the AIS Class A and other equipment shall be connected to the Connection Unit via screw terminals.

Port	Туре	Designation	Electrical interface	Logical interface
1	Input	Sensor 1	RS-485	IEC 61162-1 configurable as -2
2	Input	Sensor 2	RS-485	IEC 61162-1 configurable as -2
3	Input	Sensor 3	RS-485	IEC 61162-1 configurable as -2
4	Input/output	Pilot/Auxiliary	RS-485	IEC 61162-2
5	Input/output	External Display	RS-485	IEC 61162-2
6	Input/output	Long Range	RS-485	IEC 61162-2
7	Input/output	MKD	RS-485	CNS proprietary
8	Output	Alarm Relay	Closed/Not closed	Normally Closed
9	Input	DGNSS corr.	RS-232	RTCM-SC-104 Type 1 and Type 9



Other Interfaces

- Maintenance Interface (J1)
- VHF Antenna Interface (J3)
- GNSS Antenna Interface (J6)



