

Class B CS AIS Transponder Pro

Safe Navigation via Advanced AIS Functions

i-ais-TB CS is an advanced Class B "Carrier Sense" AIS Transponder which improves the safety of navigation by assisting in the efficient navigation of ships and small craft, protection of the environment and operation of Vessel Traffic Services (VTS).

i-ais-TB CS Class B AIS Transponder is capable of providing vessel information automatically, continuously and with the required accuracy and update rate. It can be used for collision avoidance (in a ship-to-ship mode), traffic management (as a VTS tool in ship-to-shore mode) and obtaining information about the craft.



In addition to standard Class B CS features; i-ais-TB CS has advantageous functions that can be used by local authorities. It generates and transmits alarm messages according to pre-defined rules (i.e. entering a prohibited zone, over-speed in a defined area); automatically switches to high power output (12.5W) mode for pre-defined regions (i.e. wide range inland sea) and Search and Rescue (SAR) events. Moreover, it filters MMSI numbers of other fisheries vessels to hide hunting regions, informs the authorities in case of intentional power cut-offs to prevent tracking and provides black box feature for analysis of past events.

- **Zone based rules and adaptive operation**
- **Automatic output power setting**
- **Special functions for fisheries management**
- **SAR Buttons (Fire, Security, Health, Accident)**
- **Information for intentional power cut-offs**
- **Collision warning messages**
- **Black box feature**
- **Compatible with i-SEA Platform**

GENERAL

- > Operating Temperature Range -15 °C to +55 ° C
- > Storage Temperature Range -30 °C to +70 ° C
- > Humidity Up to 93% at 40°C non-condensing
- > Power Supply Voltage 12V DC
- > Supply Current 290mA nominal @ 12V
- > Size 174mm x 140mm x 96mm
- > Weight 1.5 kg
- > Connectors VHF Antenna: BNC Female
GPS Antenna: TNC Female
DB-25 for RS-422 & I/O
DB-9 for Service RS-232
- > Case Aluminum Alloy (AlMg0,5Si) 6063
- > Case IP Rating IP-54
- > Interfaces 2 x RS-422 (IEC6162-2 comp.)
1 x RS-232 (NMEA Service port)
2 x Relay Output

TRANSMITTER

- > Operating Frequency Range 156.025 – 162.025 MHz
- > Channel Spacing 25 kHz
- > Transmitter Output Power 2W (33dBm) nominal
12.5W (41dBm) special mode
- > Modulation GMSK

RECEIVER

- > # of Receivers 2 (simultaneous operation)
- > Operating Frequency Range 156.025 – 162.025 MHz
- > Channel Spacing 25 kHz
- > Receiver Sensitivity Better than -107dBm
- > Co-Channel Rejection Better than 10 dB
- > Adjacent Channel Selectivity > 70 dB
- > Spurious Response Rejection > 70 dB
- > Intermodulation Response Rejection > 65 dB
- > Blocking or Desensitization > 86 dB
- > Spurious Radiation (conducted) < -57 dBm

GPS RECEIVER

- > # of Channels 50
- > Time to First Fix 29s Cold Start
29s Warm Start
<1s Hot Start
- > Receiver Sensitivity -160 dBm Tracking
-160 dBm Reacquisition
-144 dBm Cold Start

STANDARDS

- > AIS IEC 62287-1 Ed. 2
ITU-R M.1371-4
IMO Res. MSC.74(69), Annex 3
- > Environmental & EMC IEC 60945
- > Safety IEC 60950-1

APPROVALS

- > CE Type Approval per R&TTE Directive-99/5/EC
- > BSH, Statement of Conformity per IEC62287-1 & ITU-R M.1371-4

AUTHORIZED DEALER

Technical specifications are subject to change without prior notice.