

# AIS Tracker

## Safe Navigation via Advanced AIS Functions

i-ais-TRK is a portable Class B 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-TRK is a compact device that internally integrates VHF / GPS antennas and a re-chargeable battery. It provides 2 to 5 Watt adjustable VHF output which gives the best accessibility / availability for fishing vessels and boats.

In addition to standard Class B CS features, i-ais-TRK has advantageous functions that can be required by local authorities. It generates and transmits alarm messages according to pre-defined zones and rules (i.e. entering a prohibited zone, over-speed in a defined area); automatically switches to high power output (5W) mode for pre-defined regions (i.e. wide range inland sea) and Search and Rescue (SAR) events and provides black box feature for analysis of past events.

Thanks to its modular structure, i-ais-TRK can easily be adapted for portable or fixed operation by means of optional external antenna and power kits.



- Compact, small sized, all-in-one transponder
- Easy installation and removal
- Automatic configuration for MMSI of hosting platform
- Automatic power up / down with installation on platform
- Zone based rules and adaptive operation
- Automatic output power setting
- Special functions for fisheries management
- SAR button for emergency
- Black Box feature
- Optional external antenna inputs for VHF and GPS
- Optional solar charge stand with external batteries
- Robust housing (IP67)
- Compatible with i-SEA Platform

i-ais-TRK

## 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
- > Size 450mm x 65 mm x 35 mm
- > Weight < 650 gr.
- > Connectors None for standard configuration
- > Case Plastic
- > Case IP Rating IP-67
- > Interfaces 1 x Serial Data Interface via Charging Unit (Cradle)  
1 x SAR Button
- > Built in Lithium-Ion battery (2100mAh)
- > Charging with Universal AC/DC Adapter
- > More than 5 days Operation Time with full battery
- > 5 hours Battery Charging Time

## TRANSMITTER

- > Operating Frequency Range 156.025 – 162.025 MHz
- > Channel Spacing 25 kHz
- > Transmitter Output Power 2W (33dBm) nominal  
5W (37dBm) 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

## 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 DoC per R&TTE Directive-99/5/EC

## 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



AUTHORIZED DEALER

Technical specifications are subject to change without prior notice.