



Tron UAIS TR-2500

Universal Automatic Identification System



0735/04

- Shipborne, mandatory on SOLAS ships
- Easy to operate
- Flexible solutions for ships bridge integration
- Compatibility for system integration
(ECS, ECDIS and Radar systems)
- Quick and easy installation

Tron UAIS TR-2500

- the complete solution

Tron UAIS TR-2500 is a Class A ship borne transponder designed to meet the IMO regulations on installation of mandatory AIS equipment on board SOLAS vessels.

Designing the TR-2500 Jotron focused on four vital issues that we know are important to our customers.

- Easy to operate
- Flexible solutions for bridge integration
- Compatibility for system integration
- Quick and easy installation

Superior product quality, fully conforming to IMO Performance Standard, Tron UAIS TR-2500 is Jotron's latest development and contribution to enhance the level of safety at sea.

With a variety of alternatives the TR-2500 may easily be integrated anywhere on the ships bridge. The compact unit offer to operate standing alone or even fully system-integrated with ECS, ECDIS and Radar systems on board.

TR-2500 requires also, due to the compact design and complete solution, less man-hours needed for installation whenever retro-fitted or installed on new builds.

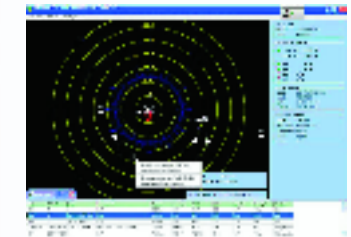
As an important part of all our products, Jotron's more than 200 dedicated representatives world wide are at your service.

Jotron Electronics have more than 30 years of experience as the worlds leading manufacturer of high quality radio communications equipment and supplier to the maritime industry.

We proudly present Tron UAIS TR-2500.



TR-2500 Header Panel Mounted



Jotron's AIS Viewer, complementary PC software for graphical display of AIS communication. This can also be distributed to other onboard PCs when connected in a network.

TR-2500 Mounted in 19-inch rack

TR-2500 Desk-Top Mounted

TR-2500 Flush Mounted

Tron UAIS TR-2500

The all-in-one compact unit offer to operate standing alone or even fully system integrated with ECS, ECDIS and Radar systems on board. With a variety of alternatives the TR-2500 may easily be integrated anywhere on the ships bridge.

Tron UAIS TR-2500 is supplied with a junction box in order to ease sensor interfacing and with a 10m cable linking the box and transponder.

Sensor inputs

Mandatory:	Optional inputs:
GPS	ECDIS/ECS
Gyro	Radar
	Long range comm.

Tron UAIS TR-2500.
Universal Automatic Identification System.

Tron UAIS TR-2500 is a VHF transponder system continuously exchanging own ship information with information from all UAIS-equipped ships within VHF range. Broadcasting Identification, Position, Course and Speed over ground as well as static and voyage related information to vessels and shore base stations.

Carriage requirements

The IMO has established mandatory carriage requirements for approved AIS equipment under the Safety of Life at Sea (SOLAS) convention. The AIS carriage requirement will apply to:

- All ships of 300 gross tonnage and upwards engaged on international voyages.
- Cargo ships of 500 gross tonnage and upwards not engaged in international voyage.
- All passenger ships irrespective of size.

All new builds must be fitted with AIS after July 1. 2002. Existing ships engaged in international voyage constructed before July 1. 2002 must be fitted according to the following time table:

- In the case of passenger ships, not later than July 1. 2003
- In the case of tankers, not later than the first safety equipment survey after July 1. 2003
- In the case of ships, other than passenger ships and tankers, of 300 gross tonnage and upwards, not later than December 31. 2004
- Ships not engaged on international voyages constructed before 1 July 2002, not later than July 1. 2008

The Administrations can implement regulation, on national basis, in advance of deadline. Ships may be exempted from complying with the carriage requirements if the ships will be removed permanently from service within two years of the implementation date.

AIS – Information from the ship

Static information about the ship	Voyage-related information about the ship	Dynamic information about the ship
Update rates: Static data are updated once every 6 minutes or on request	Update rates: Voyage data are updated once every 6 minutes or on request	Update rates: Dependent on speed and course alteration
MMSI number	Ships draught	Position
IMO Number	Type of cargo	Course and speed over ground
Name of the ship	Destination (at masters discretion)	Heading
Length and beam	Estimated time of arrival (at masters discretion)	Rate of turn
Type of ship	(Waypoints)	Navigational status
Location of the GPS antenna on the ship	(Number of persons on-board)	Position accuracy
		Time stamp (UTC)

In addition, safety related messages and other short messages may be transmitted

Specifications Transponder

General

Conforming standards	IMO MSC.74 (69) annex 3; ITU-R M.1371-1 IEC 61993-2, IEC 60945 IEC 61162-1/2
Weight (net)	2,8 kg
Dimensions	244 X 108 X 146 mm
Supply, voltage	24 VDC +30% / -10%
Power consumption (max)	< 100 W
GPS module	12 channels Accuracy 10m

VHF transceiver

Channels, standard	87 (161.975 MHz) 88 (162.025 MHz)
Channels to be used by National Authorities all in the range of	154 - 163 MHz
DSC channel	70 (156.525 MHz)
RF output power	12,5 / 2 W
Interfaces	
Communication ports, input	7 X RS-422, IEC 61162-1/2 1 X RS-232
Communication ports, output	3 X RS-422, IEC 61162-1/2 1 X RS-232
Data presentation	Integrated display or optional ECDIS, ARPA or PC / Jotron AIS Viewer

Specifications Junction box

General

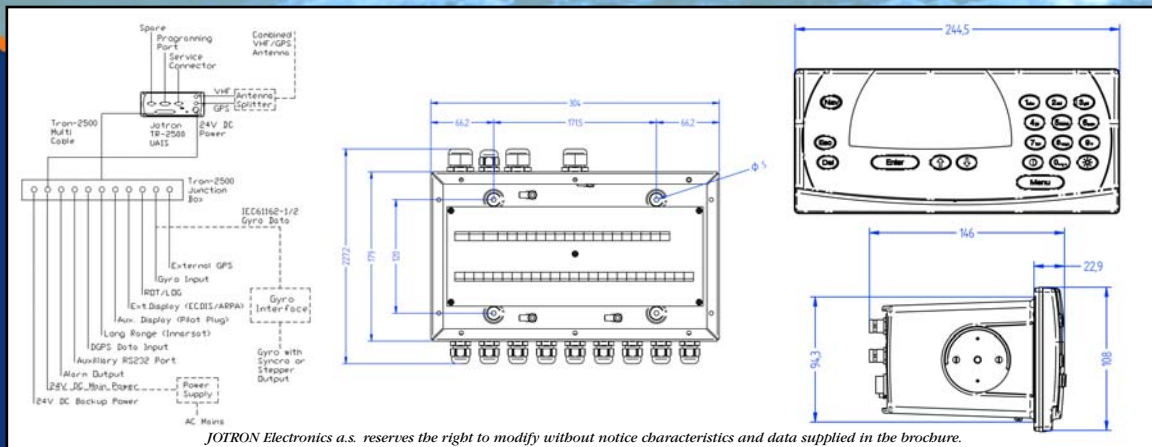
Weight (net)	1,6 kg
Dimensions	304 X 235 X 46 mm
Connection cable type	Screen signal cable
Length, connection cable	10m

Standard supply

Transponder unit
Junction box
Plug kit
Standard bracket mounting kit
AIS viewer
Product manual

Optional supply

Flush mounting kit
19" rack mounting kit
VHF antenna
GPS antenna
Combined VHF / GPS antenna
Gyro converter
AC / DC converter
Antenna Cables
Power cable



Main Office:

JOTRON Electronics a.s

P.O. Box 54, NO-3280 Tjodalyng, Norway
Tel: +47 33 13 97 00, Fax: +47 33 12 67 80
www.jotron.com

Subsidiary Office:

JOTRON (UK) Ltd.

Crosland Park, Off Crowhall Road, Cramlington
Northumberland, NE23 1LA UK
Tel: +44 1670 712000, Fax: +44 1670 590265