

MARINE COMMUNICATION AND NAVIGATION EQUIPMENT

AIS Class-B (8.0-inch)

AIS Class-B (8.0-inch) (1).Main Functions 1.Features FT-8700 is a universal shipborne AIS equipment, It can exchange navigation and ship data with other ships and shore stations. This d...

ISO9001 Supplier

Class Certificate

Export Supply



Key Highlights

Category	Marine Communication And Navigation Equipment
Standard	DIN
Weight / Size	MMSI, vessel name, call sign, IMO number, ship type, ship size, The loca...
Certificate	CCS

We can supply according to your requirement, drawings, class certificate needs, and delivery schedule.

Technical Specifications

Category	Marine Communication And Navigation Equipment	Model / SKU	AIS-Class-B-8-0-inch
Standard	DIN	Weight / Size	MMSI, vessel name, call sign, IMO number, ship type, ship size, The location of the GPS antenna, Flag, etc.
Certificate	CCS	Warranty	12 Months unless specified otherwise
Origin	China		

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AIS Class-B (8.0-inch)

(1).Main Functions

1.Features

FT-8700 is a universal shipborne AIS equipment, It can exchange navigation and ship data with other ships and shore stations.

This device complies with the IMO MSC74 (69) Appendix 3.A.694.ITU-RM.137-3, and DSCITU-RM.825

And in accordance with IEC61993-2 (type of test standards), IEC60945 (EMC and environmental conditions).

FT-8700 consists of Transceiver units,display-control unit, VHF and GPS antennas and related accessories.

Transceiver unit comprises a VHF transmitter, two TDMA receivers, a channel 70 DSC receiver,

An interface, communication processor, built-in GPS receiver.

2.Main information

AIS provided automatic exchange of navigational information with other ship or shore station to ensure the safety of navigation .

2.1 Static Data

Call sign and ship name

MMSI (9 digit ID)

IMO number (if any)

Length and Beam

Ship Type

Location of GPS antenna position on ship

2.2 Dynamic Data

Ship's position

UTC (universal time coordinated)

COG (Course Over Ground)

SOG (Speed Over Ground)

Heading

Navigation status (manual input data / code)

Rate of Turn (if any)

2.3 Voyage Data

Draught

Dangerous Cargo

Destination and ETA

2.4 safety-related short message

(2). Main function introduced

1.Automatic Identification System (AIS) function

Be able to the continuous autonomous receive and transmit the AIS data information.

Display AIS data around own ship when ships equipped with AIS equipment.

Static data including : MMSI, vessel name, call sign, IMO number, ship type, ship size,

The location of the GPS antenna, Flag, etc.

Dynamic data include : latitude and longitude, speed, heading, rate of turn , azimuth , distance.

Navigation data, including : condition of navigation , ship's draft ,dangerous cargo ,destination and estimated time of arrival.

When AIS target ship enter pre-setting range ,visual and audio alarm occur ,according to range varying sound changing.

Emergency information send and receive.

2.Alarm function

When ship speeds greater than 2 knots to enter own ship within the range of 0.1 to 10 nautical miles,

The red light blinks on main unit display, At the same time ,speaker alarm tone: "The direction × × degrees , × × nautical Target Approaching "Careful avoidance."

3.Target ship information display function

List of showing the target ship (range, azimuth and 9 ID)

Vector display the target ship (provide 1-100 nautical miles range selection)

The target ship displayed on Electronic chart

4.GPS navigation function

8.0-inch color LCD display, can display the coastline of the country charts, the Geographic Names Information data and

waypoints Routes and track setting, edit, and delete function.

Ship's position, speed, heading, course track, time and date display.

Waypoints, routes, tracks stored in the call.

Destination position, distance and estimated time arrival display.

Navigate arriving at the destination , course deviated alarm , alarm and prompt

10,000 waypoints can be stored 10,000 mark, 200 routes, 200000 track points.

(3). Technical specifications

1.

Main unit :

RF unit: 1 transmitter and 2 receivers

Frequency Range : 156.025-162.025MHz

Channel spacing : 25KHz

Modulation method : GMSK9600Bps, FSK1200Bps,

Frequency tolerance : $\pm 500\text{Hz}$

Display screen: TFT true color 8-inch LCD screen

Positioning time: $<120\text{s}$

Positioning accuracy: $<10\text{ m}$

Power Supply : $\text{DC}12\text{V} \pm 20\%$ (external power converter input $\text{DC}9\text{-}40\text{V}$)

Operating Temperature: $-15\text{ }^{\circ}\text{C} \sim +55\text{ }^{\circ}\text{C}$

Dimensions: 270 (W) * 200 (H) * 115 (D) mm

2.

AIS transmitter section :

Carrier power: $33\text{dBm} \pm 1.5\text{dB}$

Modulation spectrum : $< -25\text{dBw}$

$< -60\text{dBw}$

Modulation accuracy : $< 3\text{Hz} \pm 480\text{Hz}$ (Bit 2,3)

$2400\text{Hz} \pm 240\text{Hz}$ (Bit 4-199 Or 00001111 Bit format)

$1740\text{Hz} \pm 175\text{Hz}$ (0101 Bit format)

Spurious emission : $\leq -36\text{dBm}$ (9KHz-1GHz)

$\leq -30\text{dBm}$ (1GHz-4GHz)

3.AIS receiver section

Reference sensitivity: $\leq -107\text{dBm}$ (package error rate $\leq 20\%$)

Strong signal reception ability: -77dBm (package error rate $\leq 2\%$)

-7dBm (Package error rate $< 10\%$)

Co-channel interference : $> 10\text{dB}$ (Package error rates $\leq 20\%$)

Adjacent Channel selectivity : $> 70\text{dB}$ (Package error rates $\leq 20\%$)

Spurious response interference : $> 70\text{dB}$ (Package error rates $\leq 20\%$)

Intermodulation response interference : $> 65\text{dB}$ (Package error rates $\leq 20\%$)

Blocking : $> 86\text{dB}$ (package error rate $\leq 20\%$)

Spurious emission : $\leq -57\text{dBm}$ (9KHz~1GHz) $\leq -47\text{dBm}$ (1GHz~4GHz)

Note: Specifications are subject to change without notice.