

MARINE COMMUNICATION AND NAVIGATION EQUIPMENT

AIS Class-B (12.1-inch)

AIS Class-B (12.1-inch) (1). Main function introduced 1.Automatic Identification System (AIS) function Be able to the continuous autonomous receive and transmit the AIS data information;

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ISO9001 Supplier

Class Certificate

Export Supply



Key Highlights

Category	Marine Communication And Navigation Equipment
Standard	DIN
Material	Beacon lights, hazardous materials increased add-on editing features;
Weight / Size	MMSI, vessel name, call sign, IMO number, type of ship, The size of the ...
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-12-1-inch
Standard	DIN	Material	Beacon lights, hazardous materials increased add-on editing features;
Weight / Size	MMSI, vessel name, call sign, IMO number, type of ship, The size of the vessel, the GPS antenna position, Flag, etc.	Certificate	CCS
Warranty	12 Months unless specified otherwise	Origin	China

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AIS Class-B (12.1-inch)

(1). Main function introduced

1. Automatic Identification System (AIS) function

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

Can display AIS data around own ship when ships equipped with AIS equipment

Static data include: MMSI, vessel name, call sign, IMO number, type of ship,

The size of the vessel, the GPS antenna position, Flag, etc.

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

Navigation data, including: condition of navigation, ship' 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

Send and receive emergency information by Chinese or English

AIS fleet management, AIS ship against alarm and found the ship list of alarms set;

AIS target ship's basic data display (ship name , id no , flag.....etc.)、 tracking record

2. AIS target Approaching, sound (audio) and light (visual) alarm function

Distance alarm : When AIS ship enter within setting range of own ship, sound and light alarms will start

CPA alarm: When AIS ship enter TCPA, DCPA's alert setting area , sound and light alarm will start .

Note: while alarming, AIS targets on the screen turns red icon, flashing alarm indicator on the front panel,

At the same time speaker alarming tone: "The direction × × degrees apart × × nautical target Approaching Careful avoidance."

3. Target ship information display function

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

Target ship can display on Radar chart (display range of 1-128 nautical miles)

Target ship can display on Electronic chart

4. GPS navigation function

Can display the coastline of the country charts, the Geographic Names ,river map, and beacon lights , dangerous object

Ship's position, speed, heading ,course, track, time, date, and fishing areas display;

Beacon lights, hazardous materials increased add-on editing features;

Cursor position can read tides, port information, calendar, satellite images show the function;

Waypoint marker points, routes, track line storage and call

Can store up to 8000 waypoints, 10,000 mark point, 1000 route 100 000 track points

Cursor, waypoints, routes, track line navigation functions;

Destination position, distance and estimated time arrival display

Has arrived, course deviated , and take the anchor, speeding, route steering, the bridge alarm and prompted

(2). Technical specifications

1.

Main unit :

RF unit : 1 Transmitter, 2 TDMA Receivers

Frequency Range : 156.025-162.025MHz

Channel spacing : 25KHz

The Default Channels : A: 161.975MHz, B: 162.025MHz, DSC: 156.525MHz

Modulation method : GMSK9600b / s, FSK1200B / s (± 50 ppm)

Frequency tolerance : ± 500 Hz

Display screen : TFT color 12.1 inch LCD screen

Operating mode : CSTDMA / SOTDMA

Compass Distance : 0.8m

Power Supply : DC :9-16V / 3A or 9-38V/3A (option)

Protection class : IP45

Display resolution : 800 * 600 TFT color LCD

Data Interface : 4800 bps , 38400 bps, RS-232 / RS-422/TTL (three inputs, three outputs)

RF socket : 50 Ω (VHF) , BNC 50 Ω (GPS)

Audio power output : ≤ 5 W / 8 Ω (adjustable)

Operating Temperature : -20 $^{\circ}$ C ~ +60 $^{\circ}$ C

2.

AIS Transmitter section :

Carrier power : 33dBm $\pm$ 1.5dB

Modulation spectrum : < - 25dBw

< - 60dBw

Modulation accuracy : < 3400Hz (Bit 0,1)

2400Hz $\pm$ 480Hz (Bit 2,3)

2400Hz $\pm$ 240Hz (Bit format 4-199 or 00001111 Bit format)

1740Hz $\pm$ 175Hz (0101 Bit format)

Power on the characteristics of the time : the transmit delay : 2083us

The ramp-up : ≤ 313 us

Ramp-down : ≤ 313 us

Transmit long : ≤ 23333 us

Spurious emission : < -36dBm (9KHz-1GHz)

< -30dBm (1GHz-4GHz)

3. AIS Receiver section

Reference sensitivity : -115dBm (package error rate of less than 20%)

High input tolerance : -77dBm (package error rate <2%)

-7dBm (Packet error rate < 10%)

Co- channel interference : > 10dB (package error rate <20%)

Adjacent channel selectivity : > 70dB (package error rate of less than 20%)

Spurious response interference : > 70dB (package error rate of less than 20%)

Intermodulation response interference : > 65dB (package error rate of less than 20%)

Blocking : > 78dB (package error rate of less than 20%)

>86dB (Package error rate < 20%)

Spurious emission : < -57dBm (1GHz ~ 4GHz)

< -47dBm (9KHz~1GHz)

4.GPS section

Receiving frequency : L1 : 1575.42 MHz

Sensitivity : $\leq$ -150dBm

Data update : once per second

Positioning errors : 2.5m

Positioning time : Cold start : < 60s , Hot start : < 1s

Note: Specifications are subject to change without notice.