



SPAT-1000B- II

Ship-borne Equipment of Automatic Identification System (Class B)(12.1")

Main Features

All-in-one type has been adopted for the SPAT-1000B Ship-borne Equipment of Automatic Identification System (Class B)(12.1"), and AIS Class B and GPS receiver have been integrated inside.

Actively and continuously sending static and dynamic information and relevant information of voyage of the ship.

Automatically and continuously exchange information such as position, speed, track etc. with other AIS equipments (base station, berth, navigation mark, SART etc.).

Support S-57 and S-63 data formats and S-52 display standard, and integrate electronic chart display and information system, comprehensive sailing system, system configuration and data sending and receiving, and security system etc.

Able to connect certain website through 3G module, realizing the exchange of information and data conveniently.

Integrated modules make it easy to operate.

Design and test satisfy ITU-RM.1371-3, IEC 60945, IEC 62287-1, IEC 62288, IHO S-52, IHO S-57 and other international standards.

Basic Functions

AIS static and dynamic information sending and receiving display: treat AIS signal and transfer to the display interface through the integrated AIS transceiver, examining the static and dynamic information of other ships around in real time, and calculate the DCPA and TCPA with the target ship, avoiding ship collision accident.

AIS List Information

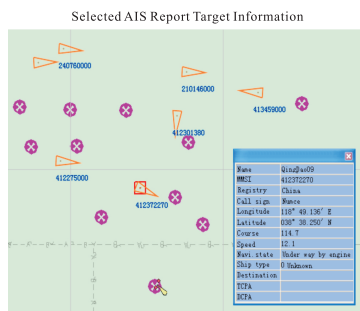
SN	MMSI	Name	Distance	Azimuth	Speed
261	41220770		996.39	198.50	3.50
262	41220900		997.09	221.50	11.30
263	41220540		997.70	4.50	0.60
264	4131102		1000.30	0.00	0.00
265	41243230	JING YE 1	6245.22	0.00	0.00
266	16131		6245.22	0.00	0.00
267	41340710	HONG HAI T...	6245.22	0.00	0.00
268	123456789		6245.22	0.00	0.00
269	515520100	HAI TONG	6245.22	0.00	0.00
270	412301140		6245.22	0.00	0.00
271	412272000	ZHEN FENG...	6245.22	0.00	0.00
272	412203580		6245.22	0.00	0.00
273	111111111		6245.22	0.00	0.00
274	370702000	SEA AZE	6245.22	0.00	0.00
275	412466170	TOR XU HA...	6245.22	0.00	0.00

Ship Inquiry

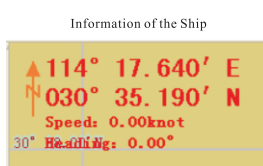
Classify:

Condition:

Inquiry



Through receiving the data of sensor, such as GPS, heading sensor, 3G module etc, display the position, course, speed etc. of the ship in real time. It is able to indicate the status of the external sensor with different color.



Connection Status and Number of Target and Sailing Warning Indicator



Warning function: the ship warns the distance and time ahead of time to the dangerous target in the front in sailing, and the system will automatically determine and warn according to the set time and distance, and provide indication in text or sound. Meanwhile, if the ship deviates from the schedule route in sailing, it will warn automatically.

Warning Parameters Setting

Precaution Parameter Setting | Navi. Warning Setting

Warning Parameter Setting

Precaution time approaching safety isobath: (min)

Precaution time approaching guard area: (min)

Precaution time approaching a danger Obj: (min)

Precaution vertical distance approaching one danger Obj: (m)

Precaution distance deviating from route: (m)

Warning Sound Setting

System Volume: Audio Alarm: ☐ On

Warning Type Selection

☒ Approach safe isobaths ☒ Approach warn area

☒ Approach independent hazard ☐ Deviate from route

Set up

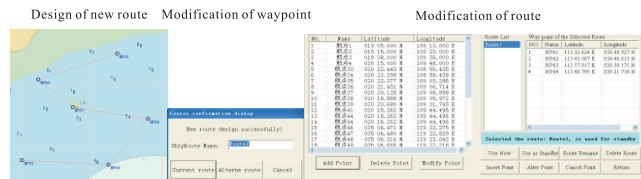
Deviation Warning

Precaution Parameter Setting | Navi. Warning Setting

Time	Content
2011-5-28 15:23:45	Deviate the route !
2011-5-27 15:23:45	Deviate the route !
2011-5-28 15:23:45	Deviate the route !
2011-5-28 15:23:45	Deviate the route !

Delete selected Clear list Clear unread info

Route management functions: operations such as removal, change and insertion of waypoints or return of ships can be achieved quickly and easily by pointing the mouse at the designed, planned and alternate routes on the sea chart through the route management menu.



AIS parameters setting of the machine: it can set the ship MMSI, ship name, call signals, number of people, draft, navigation status, ship type, port of destination, arrival time and the AIS working mode, etc.

System Menu

AIS Parameter Setting | AIS Parameter Inquiry

Message: Distance:

Draught: Distance:

Man. state: Distance:

Class type: Distance:

Destination: Call sign:

Date: Call sign:

Time: AIS type:

Setting Time: Power on:

Search: Wake mode:

Click Factory Test

Setting

The machine connects external sensor communication interface settings.

AIS Mainboard Serial Ports Configuration

422 Serial Port 232 Serial Port

Type: Type:

Speed: Speed:

Set

Real-time message receiving (navigable fairway, alarm, scheduling, notice, plotting and other information sent by the navigation administration).

Maritime Information Plotting Information

Object	Type	Chara	Description	Expiration
990	Side	Limit	a sham battle. n	2011-5-28
991	Side	Limit	deposit area	2011-5-28
993	Line	Limit	embargo	2011-5-28

Selected Info: Review Selected Map

Marked Area Information

Expiration: 2011-5-28

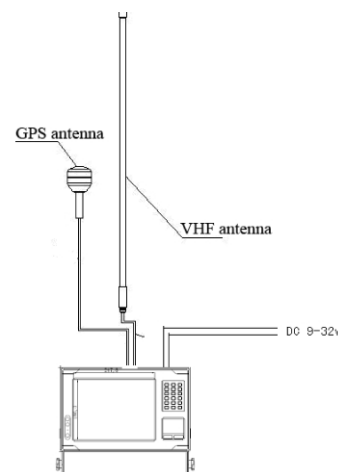
ID: 990

Type: Side

Property: Limit Speed Area

Description: a sham battle, no entry!

Equipment Connection



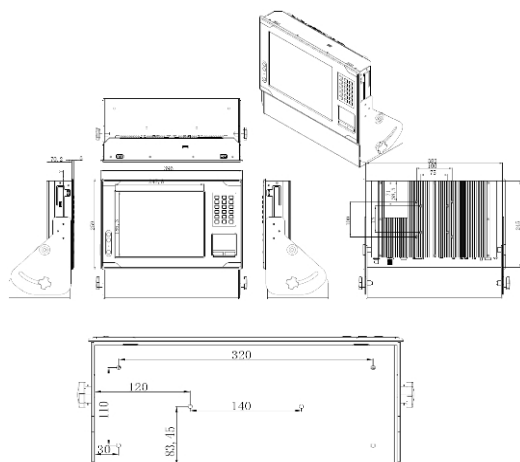


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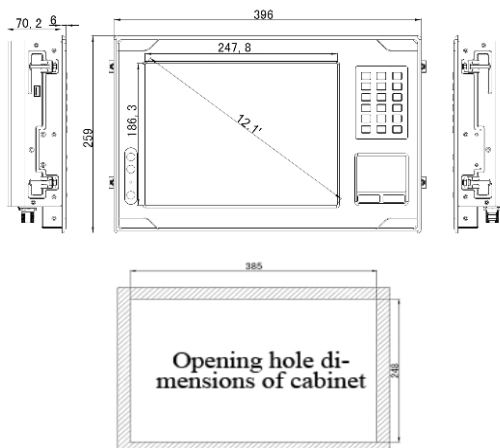
Ship-borne Equipment of Automatic Identification System (Class B)(12.1")

Product Size >

Fixed-mode installation



Embedded-mode installation



Technical Specifications >

AIS Receiver		
Operation frequency band		156.025MHz～162.025MHz
Operation frequency		CH2087（161.975MHz）
		CH2088（162.025MHz）
Receiving sensitivity		<-107dBm
AIS Transmitter		
Operation frequency band		156.025MHz～162.025MHz
Operation frequency		CH2087（161.975MHz）
		CH2088（162.025MHz）
Transmitting power		2W
GPS Receiver		
Receiving sensitivity		<-140dBm
Number of receiving channel		50 channels
Receiving frequency		1575.42MHz
Positioning accuracy		<10 m
Display Parameters		
Display		12.1" TFT LCD
Resolution		800×600
Chart format		IHO S-57、S-63
Display mode		True north-up/head-up
Ownship		Time, location, SOG, COG, heading direction
Route		Route planning and monitoring
Scale		1:2,000-1:76,000,000
Interface Description		
RS232 serial port		1（4800bps～115200bps settable）
RS422 serial port		1（4800bps～115200bps settable）
Audio frequency interface		1
USB2.0		4
LAN interface		1，10M/100M
Power Supply		
Nominal voltage		DC 13.8/24V
Power supply range		DC 9.6～31.2V
Environment		
Operating temperature		-15℃～55℃
EMC		Meet IEC60945
Humidity		Meet IEC60945
Vibration		Meet IEC60945
Equipment list		
Standard configuration	Main unit	1
	Power cord	1
	Data wire	1
	Installation accessories (fixed-type)	1
Optional	VHF antenna	1
	VHF Cable	1
	GPS antenna	1
	Installation accessories (embedded-type)	1