Company Profile

Guangzhou Sinocon Automation Institute is a technical enterprise devoting in ship automation instrumentations' design、manufacture and sales, the company is founded in 1999 and is identified as a high-tech enterprise by Guangzhou Science and Technology Commission in 2000.

After ten years of unremitting efforts, we have developed a dozen of independent property rights products such as the vessel monitoring and alarm device(cargo hold、cabin and diesel engine monitoring)、host(tail shaft) tachometer、autopilot、navigation light controller、16-channel alarm、16-channel patrol instrument and rudder angle indicator, which have been equipped in hundreds of domestic and overseas ships.

This institute is located in Tianhe District, Guangzhou with convenient transportation, welcome old and new friends of the shipbuilding industry to guide our work for cooperation and development.

Our goal is to provide high-quality、reliable and economical marine products for customers，breaking the domination of foreign products in the field of navigation、monitoring and automatic controlling.

D2210/D2210A/D2210B/2210 D 16 (24)-Channels Alarm

The alarm controlled by SCM can monitor the working status of 16(24)-channel switches' alarming points, with compact design、reliable operation and flexible installation, the system can be used in vessel cargo hold、engine room、diesel、steering gear、generator and fire alarms.

For small and medium-sized ship, live and remote display can be realized by one host and 1-2 slave machines, for example to display engine alarm in drive room and chief engineer room, it only needs 4 lines to connect host and slave machines(2 power supply lines, 2 communication lines). The displaying status and function of the two machines are completely the same.

Main Features and Functions:

1. The alarm points can be normally open or normally closed contact.
2. The delay time of alarming can be set to 0-4s according to your needs.
3. The indicating light flashes when alarm is on and rests when it's answered, while the alarming signal removes the light turns off.
4. Have the function of testing、dimming、horn reset and can be controlled remotely.
5. Be able to exchange data with remote computer by RS-485 COM, 1-2 slave computers are also allowed to be linked.
6. When 1-16 alarming points works, it accordingly outputs a voltage signal of DC24V and the current no bigger than 30mA, which is used to control exterior equipments. This alarm has only 8 output terminals, when the outputs is more than 8, another terminal should be added by the OR Gate.
7. D2210B is mainly used in watertight door alarming, singular number is red light(left), double number is green light(right), when the red light works the device alarms(the door is open), otherwise the alarm rests(the door is closed).
8. D2210D-24 channel alarm

8.1 Channel of the alarm is 24.

8.2 D2210D alarm has two COM ports, one is linked to D2210D slave machine, and the other is linked to a computer (touching screen).

8.3 Three types:

D2210D-24-BJ is used for various kinds of alarming;

D2210D-24-BJ is used for steering gear's showing alarm, 1-2 channels indicate the working status of left and right bumps, 3-4 channels show the steering position, 5-24 channels are used for steering gear's alarming, COM outputs comply with NMEA0183;

D2210D-24-CJ is used for data collecting, without flashing and alarming functions.

8.4 The COM outputs comply with standard MODBUS and NMEA0183.

8.5 Output is 12-channel (24V/50mA), which can be set by software accordance with any input channel.

Product Specifications:

D2210-16 Façade

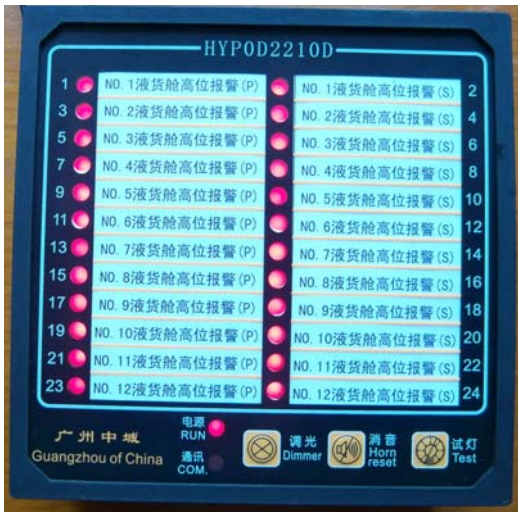
D2210-16 Back

D2210A-16 Façade

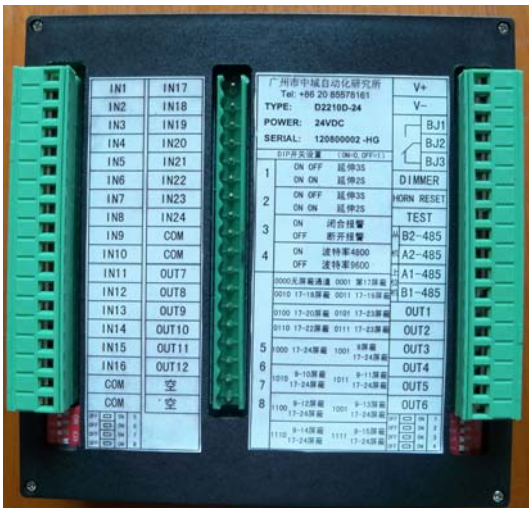
D2210A-16 Back

D2210B-16 Façade

D2210B-16 Back



D2210D-24 Façade

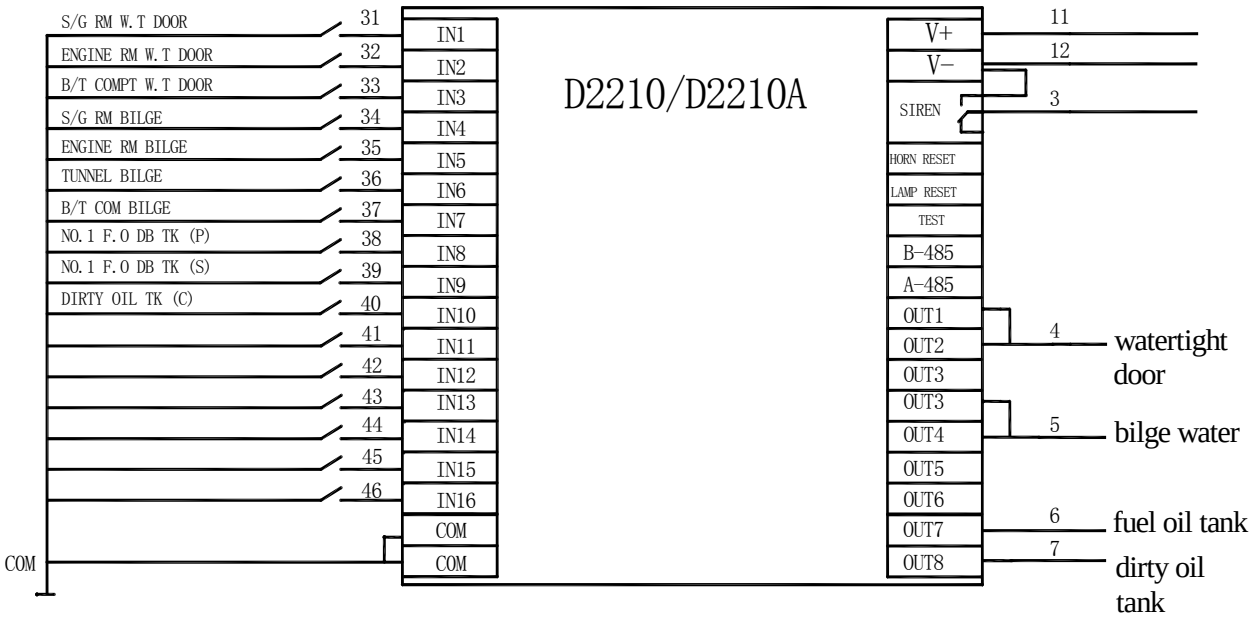


D2210D-24 Back

Outline Dimension: 144×144×60mm^3, Hole Dimension: 139×139 mm^2

The overall dimensions and panel allocation of two machines are completely the same.

Wiring diagram：



CDZ9903 Tachometer

Main Features and Functions:

The tachometer adopts non-contacting sensor while the measurement precision is 1%, biggest measurement frequency is 5KHZ, and power supply is DC24V. CDZ9903A is used to measure the one-way speed while CDZ9903B is used to measure double-way speed, CDZ9903B-m measures the double-way speed by magnetic sensors. The tachometer is composed of sensors、speed detector、speed gear and indicator, which is mainly used to measure rotational speed in various diesel、shaft、generators and electronic motors. CDZ9903A tachometer can also be used as a rotational speed relay for some equipment.

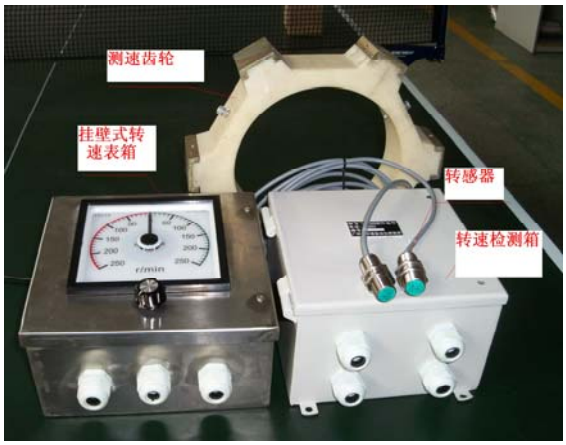
CDZ9903A model mostly outputs 4 kinds of rotational speed control signals. CDZ9903B model outputs 2 kinds of rotational speed control signals at most (passive contact). Rotational speed can be set artificially.

Note: the diameter of tail shaft should be informed when it's used for measuring the rotational speed.

1. Working temperature: -10- +55°C
2. Range of measurement: 20--30000r/min (maximum number of input pulse≤300000/min)
3. Measuring precision: 1-1.5%
4. Over speed alarming: according to customers' needs (most 4 points in one-way, 2 points in double-way).
5. Power supply：DC24V(15%)
6. Power consumption: <0.5W
7. Positive or negative rotational identification: left side denotes negative rotation (red), right side denotes positive rotation (green).
8. Output: ±5V(Imax≥30mA)、±10V(Imax≥30mA)、±1-30mA、4-20mA

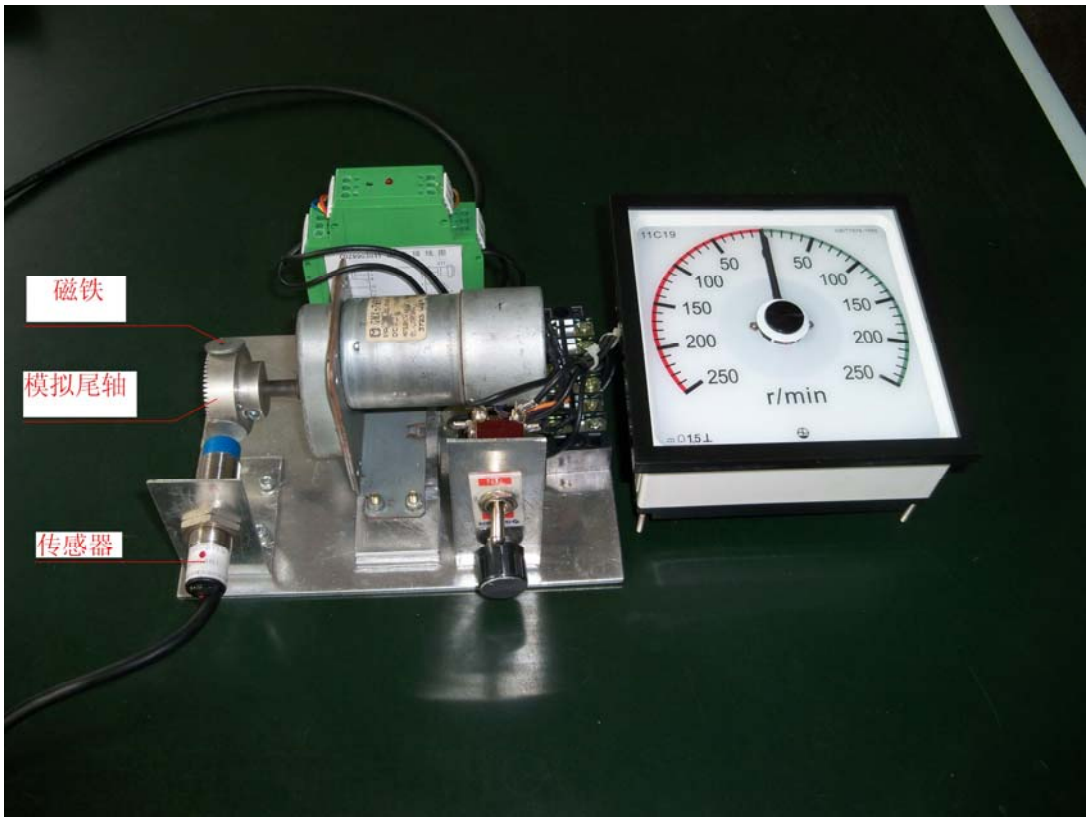
Note: CDZ9903B-m should be adopted if the diameter of the shaft is larger than 300mm, at this time the sensor is magnetic, which means saving speed gear, only one sensor is needed and the cost is lower, it is very suitable for large junk.

Product Specifications:



Component Pictures

Embedded Tachometer CDZ9903FC144



Opening Picture of CDZ9903BC210 Rotational Speed Detection Box

CDZ9903B-m Simulator

CDZ9903B Modular

Parameters:

Type	Installation Mode	Outline Dimension（mm^3）	Install Dimension（mm^2）	Notes
CDZ9903A（B）speed detector modular	DIN35 rail type	79×25×115	/	Power supply DC24V
CDZ9903-JB210 Detecting box	Wall-hanging	200×200×150		Power supply DC24V or AC220V with CDF144 indicator
CDZ9903-F144 Pointer-type indicator	Embedded	144×144×138	Hole dimension 139×139	Type and number of the indicator can be chosen according to your needs
CDZ9903-F96 Pointer-type indicator	Embedded	96×96×92	Hole dimension 93×93	
CDZ9903-B210 Tachometer box	Wall-hanging	210×210×110		
NBB5-φ18 Closing switch	Screw fixed	φ18×50	φ18	Or φ12×50
CDZ9903-4p-m Magnetic closing switch	Screw fixed	φ18×65	φ18	
Speed gear	Screw fixed	φXXX mm	Two and a half clamp	Weight and size are decided by tail shaft's diameter

CYD2 Rudder Angle Indicator

Main features and functions:

CYD2 rudder angle indicator's power supply can be AC220V or DC24V. It has advantages of high accuracy(≤0.5°), low noise, convenient installment and adjustment, low cost and strong load ability etc. The instrument is composed of a rudder angle transmitter, a controller and an indicator (embedded or wall-hung). The power switches, zero position adjustment and full rudder adjustment are on the box. It can be widely used to indicate rudder angles for various kinds of ships.

This rudder angle indicator can be used with traditional synchronic three-side rudder indicator, using this equipment, not only the cost is reduced but also the performance, load ability and accuracy are highly improved.

1. Indicating accuracy： not bigger than 1°
2. Indicating angle: ±40°
3. Working temperature: -25°C --60°C
4. Humidity： 95% Temperature: 45°C
5. Vibration:2-80HZ Acceleration≤0.7g
6. Power supply: DC24V AC 110-220V
7. Power consumption: <3VA
8. Maximum load ability: can load same type indicator of 10-channels

Product Specifications:

Three-side Rudder Indicator

CYD2(R) Controller Modular

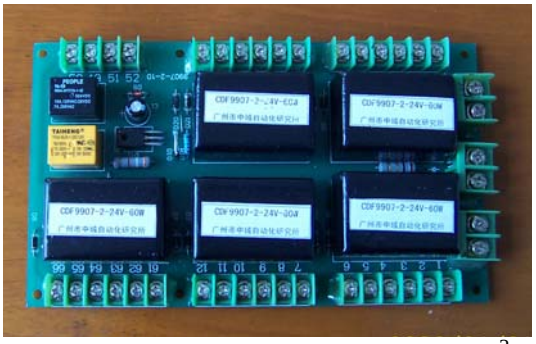
CYD2 Wall-hanging Rudder Indicator

Rudder Transmitter and Embedded Indicator

Physical Properties:

No.	Name	Outline dimension (mm^3)	Weight (kg)	Property	Note
1	CYD2 transmitter	210×210×142	2.4	splash protection	
2	CYD2 controller	98×52×149	0.7	splash protection	DC24V/AC220V
3	CYD2(R) control modular	50×80×25	0.5	splash protection	DIN35 guide roll installation DC24V
4	CYD2-F96 embedded rudder angle device	96×96×110	0.5	splash protection	With light, can substitute German product of the same type
5	CYD2-F144 embedded rudder angle device	144×144×77	0.7	splash protection	With light, can substitute German product of the same type
6	CYD2-B210 wall-hanging rudder indicator	210×210×110	2.2	water protection	adjusting light
7	ODS6A-1 three-side rudder angle indicator	200×125	7	splash protection	With adjusting light AC220V

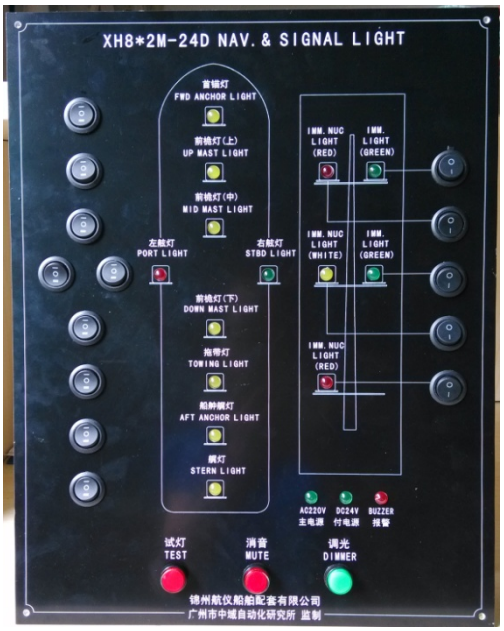
Navigation Light Control PCB

Type and Pictures	Product Profile
8-Channel Navigation Light Control PCB DC24V-60W  Outline Dimension: 132×129×25mm^3	CDF9907 navigation light control PCB adopts advanced technique with all electronic components packed on one piece of circuit board, which can be used to control 8 or 10 channels navigation light (signal light). It has apparent advantages of low consuming power(24V、0.8W, 220V、0.2W), wide rang of indicator light voltage(6.3V-24V) and brightness controlling of 16 channel indicator light by single dimming device. In addition，it has alarm function if filament breaks or automatically resets. This panel combined with fuse, button switch, indicator, and buzzer make up a good function voyage light (signal light) controller, which can substitute the old sailing light controller. note： 1. The performance and principle of 8-10 channels' navigation light control PCB are the same. 2. 220V-10 channel navigation light control PCB's supply power of high-voltage and low-voltage are isolated completely and the safety performance is good. 3. CDF9907-2-DC24V-D has the COM output of RS-485.
10-Channel Navigation Light Control PCB DC24V-60W  Outline Dimension: 132×129×25mm^3	
10-Channel Navigation Light Control PCB AC220V-60W  Outline Dimension: 132×129×25mm^3	

8-Channel Navigation Light Control PCB(with COM port)  Outline Dimension: 132×129×25mm^3	

Navigation Light Controller

Type and Pictures	Product Profile
CDF9928/8 Navigation Light Controller  Outline Dimension: 144×144×60mm^3 Hole Dimension:139×139mm^2 Weight: 0.8Kg	CDF9928/8 navigation light controller uses touch-key switch and small sized inbuilt structure. It can control 8 channels' navigation lights (power not more than 80W) on or off directly. It can depart into two types according to the power supply. Model CDF9928A's power supply is DC24V and CDF9928B's AC220V. Main Features: 1. Low power consumption Type A ＜ 8W(All 8 groups light on (24V60W)) Type B ＜ 5W(All 8 groups light on (220V60W)) 2. It has a lot of functions, such as trying a light, eliminating a sound, adjusting light and connecting external alarm. 3. There are 16 fuses on the back. 4. Convenient installment. Customers only need to connect it with power supply and sail light. 5. Power supply: a. AC220V, DC24V b. DC24V
CDF9928-8D Navigation Light Controller  Outline Dimension: 320×220×100mm^3 Hole Dimension:300×200 mm^2 Dimension of Bottom Panel：300 ×250×70mm^3 Weight: 4.5Kg	CDF9928D navigation light controller (controller for short) is a kind of new instrument designed for yacht, it has functions of trying a lamp、adjusting light、alarming when the filament broken 、 exchange of up/down light、independent of alarming and indicating、RS485 communication and so on, this device also can control the state of 8-channel DC24V 60W navigation light(signal light). The controller panel is constitute with 7 or 8 groups navigation indicating light 、 host/slave power source indicating light、trying lamp button、adjusting light knob、bullhorn and controlling switch. Power voltage: DC24V Installation method: embedded Number of controlled light: 8-channel 60W

	(24V) With RS485 communication output
CDF9928A-24 Bus Navigation Light Controller Receiver (input panel)  Installation Panel(output panel)  Dimension of Control Show Panel: 220×330×130mm^3 Hole Dimension:195×275 mm^2 Thickness: 4 mm Dimension of Install Bottom Plate: 380×380×90mm^3 Dimension of Install Hole: 350×350 mm^2 Thickness: 1.5 mm	CDF9928A-16 navigation light controller (controller for short) is a new product , it has functions of testing a lamp、adjusting light、silencing、alarming when the filament broken、independent of alarming and indicating 、independent of alarming and silencing、RS485 communication and so on, this device also can control the state of navigation light whose power is no more than DC24V-60W. The system is composed of three parts: receiver plate(input board)、install bottom plate(output board) and control display plate, the former two plates are unified circuit board, it is only need to change control display plate for different types of ship and arrangement. *Bus mode: only 6 lines are required to link input and output plates. *with COM output: can output standard data by RS485. *alarm and flash: indication light turns normally on to flash when filament broken. *independent silencing: no influence with other alarm when silencing. *standardization: input plate and output plate can be used universally, it is only need to change control display plate for different types of ship. *safe: large current is not required to flow into input board and control display plate.

16-Channel Patrol Instrument

Type and Picture	Product Profile
HYPO-M1210 Patrol and Alarm Instrument  Outline Dimension: 144×144×55mm^3 Hole Dimension: 139×139 mm^2 Weight: 700g Power Supply: DC24V Wire Diagram On the Back	HYPO-M1210 patrol and alarm instrument (16-channel analog signal) is the present newest generation of intelligent digital patrol instrument. This instrument is designed and manufactured according to characteristic and requirement of ship instrument, using high-performance SCM as the core and the square metal shell. It has advantages of working stably and reliably, compact structure and complete functions. It is especially suitable for the alarm of cabin comprehensive indication 、 pump temperature Indication 、 liquid level indication for all kinds of ships. It is also suitable to measure and demonstrate temperature pressure & the current of production process in chemical industry, metallurgy, thermal power, light industry, etc. Main Features and functions： 1.It is high measurement accuracy，and can correct the input signal of thermocouple 、 thermometer resistance and remote transmission resistance with high accuracy and nonlinear. 2.Upper limit of alarming：red light flashes，H、ALM relay output. Lower limit：yellow light flashes，L、ALM relay output. 3. Each channel can set the upper and lower limit alarm value independently. 4. Every monitor loops can choose on or off according to actual situation .when the loop is off, it is not able to display the measuring value or outputs alarming. 5. When power is off, parameters can be preserved reliably for a long time. 6. It has the switch function between itinerantly monitor and pointing monitor. Monitoring one point, it is still

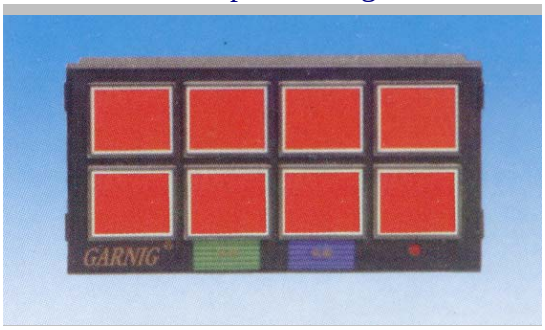
A01	B01	C01	V+
A02	B02	C02	V-
A03	B03	C03	
A04	B04	C04	HIGH RELAY
A05	B05	C05	
A06	B06	C06	LOW RELAY
A07	B07	C07	
A08	B08	C08	SIREN RELAY
A09	B09	C09	
A10	B10	C10	
A11	B11	C11	RESET
A12	B12	C12	
A13	B13	C13	GND
A14	B14	C14	B-485
A15	B15	C15	A-485
A16	B16	C16	

	monitoring the other points. If beyond up and low limits, relevant point alarms. 7. It can communicate with the host computer, and centrally monitor the locale data and control the instrument. 8. It can set the parameters flexibly on the panel, every parameter can be locked with each other and set up and low limit. 9. It can set the liquid density, and fill various liquid, the actual depth can be displayed only by inputting the liquid density. 10. Input signal type thermocouple: B, S, E, K, T, J, R, N thermal resistance：Pt100、Cu50、Cu100 Standard signal： 0-10mA 、 4-20mA 、 DC0-5V、DC1-5V

16-Channel Average Itinerant Monitor Control Device

Type and Picture	Product Profile
HYPOM1200F 16-Channel Average Itinerant Monitor Control Device  Outline Dimension:96×96×100mm^3 Hole Dimension:92×92mm2 Weight：400g Power Supply：DC24V	HYPOM1200-F 16-channel average itinerant monitor control device (monitor unit for short) can be compound used with M1200 16-channel patrol instrument which is designed by us, it is used not only as the displaying slave computer of 16-channel patrol instrument, but also to measure the mean value of host computer's exhaust hood, it still can be used to monitor alarming or controlling. Only two communication lines are needed for their connection. Using monitor device as the displaying slave computer of 16-channel patrol instrument can save lots of installation cables, also make the debugging easier. Monitor instrument can set the upper and lower limits' alarm value of measure point value and mean value, the alarming state is displayed by LED state light, and the relay alarm point is output. The instrument has the functions of patrol inspection and inspection change for given point. When patrol inspecting, 1-16 channel display value is the same as patrol instrument value, finally the mean value is displayed (denoted by E=) The mean value points of monitor device can be set artificially. Main technical index： 1. display parts: 2 LED digital tubes of 4 bits and 0.56 acres 2. Display accuracy: ±0.5%FS+1word A. set accuracy: the same as basic displaying error B. range of alarming parameters: 0~100%FS 3. numbers of measuring channel:1-16 points(can be set artificially and not change with patrol instrument's shielding points) 4. contact capacity: below 220VA, 3A

Navigation Light Controller

Type and Picture	Product Profile
CDF9910 8-Groups Flashing Alarm  Outline Dimension:160×80×60mm^3 Weight：0.2 Kg	CDF9910 8-groups flashing alarm is controlled by advanced SCM, and displays with LED plate indicator. Input signal can be normally-open or normally-closed (jump line on inner part), it also can be high level or low level. It has advantages of wide applying scope, reliable working status and low price. Power supply: DC24Vor AC 220V Setup the indicator color: All lights are red in 8groups or by customers' needs. Memory function: It can take this function if note in the order.
Oil Content Meter  Outline Dimension:336×420×216mm^3 Install Dimension:383×210mm2(φ8×4)	Model XOC-01 15PPm cabin bottom water alarm instrument is consistent with the standard of International Maritime Organization, it is a kind of new product adopts infrared measuring and SCM technology, which can be applied to monitor oil waste water on-line at the bottom of ships cabin, it has function of information memory and print, which is linked with computer and supervised in long-distance. The instrument obtains the CCS type certificates. Technical Specification: Rang Of Measuring : 0~30PPM Measure Precision: ±5 PPM Alarm Point: 15 PPM Alarm Relay Work Load Capacity: 5A/250V Output Signals: 4~20MA、0~10VDC Weight :13.5kg Power Supply: AC220V 、 AC330V 、 50HZ/60HZ Power Consumption: 20W

Autopilot

Type and Picture	Product Profile
CDH2008 Master of Autopilot  Outline Dimension: 334×181×52mm^3(08 version) 285×177×52mm^3(10 version) Weight:1.6 Kg CDH2008x Master of Autopilot  Outline Dimension: 144×144×65mm^3 Weight:1.6 Kg Servo Steering Device  Rudder Angle Transmitter 	CDH2008 autopilot can be used with Roland、magnetic compass and GPS connection, the input navigation signal is standard IEC61162 type(0183 digital signal), it is suitable for various kinds of ships. The instrument adopts advanced SCM technology and is stable, compared with the old autopilot; it has completely canceled the complex mechanical transmission. Autopilot uses independent digital tubes to display actual course and given course, resolution can achieve 0.1°, and it is easily to be observed. The device is designed modularly, and adopts plug-pull with outer device, which is more convenient for maintenance 、 replacement and overall arrangement. When it is trouble, no more than 10 minutes is taken to replace the troubled ship. Technical Specification: 1. Input power: DC24V±20% 2. Maximum output power: DC24V 2A (maximum) 3. Course accuracy: roland ≤ 0.2°; magnetic compass≤1°(minority is ±2°) 4. Keep course: 1-2 grade sea state is 1°, 4-5 grade is 2-3°. 5. Have the function of adjusting proportion、integral、weather and brightness. 6. Have the function of yaw alarm and automatic reset. 7. Environment temperature: -10-50°C Matching products: according to customers' needs.  Autopilot (vertical)

Magnetic Compass Converter

Type and Picture	Product Profile
Magnetic Compass Converter 	Magnetic compass converter is a kind of high-performance digital instrument used in ship，which can change compass course signal into standard IEC61162/NEMA0183 signal, and the signal transfers to other equipments, such as AIS, GPS, Radar, etc. The magnetic sensor should be put in the central of Magnetic compass when it is installed. Rotating magnetic sensor, cement the sensor with glue while the value displayed on the converter is the same as magnetic compass.
Electronic Compass Converter 	Electronic compass converter can change synchronous or stepping compass course signal which is output by traditional ship into standard IEC61162/NEMA0183 signal, and the signal can be transferred to other equipments, such as AIS, GPS, Radar, etc. Please refer to the instructions while using this converter, and adjust converter’s display value to the same as electronic compass converter’s.
Tail Shaft Temperature Measuring Device 	Tail shaft temperature measuring device is used to monitor the working temperature of host computer’s tail shaft, when the temperature is higher than given limits it outputs sound and light alarms, it is also can be used in other devices. Measuring temperature: -50-600 Monitoring point: 2 points Accuracy: 1% Power supply: DC24V Alarm device: arbitrary Output alarm: 2 independent channels

HYPO-D2210D Diesel Engine Alarm Control Device

Main features and functions:

D2210D diesel engine control device is composed of a local control box and remote control board. It can be used matching with Cummins diesel engine. The local control box is installed in engine room. On the panel there are tachometer ,ejected air thermometer, water thermometer, oil thermometer, oil pressure meter, voltmeter, timer and RUN, over speed stop(OS), water temperature high (HWT) , low oil pressure (LOP) and emergency stop (ES) indicator light, which are used to indicate the engine operating circumstance. In addition, power, RUN, emergency stop (ES), local/Remote switch button is assembled on the panel. There are CDZ9903 speed relay & other relative relay assembled in the box.

Remote control board is installed in driving house. On the board there are tachometer, water thermometer, oil thermometer, oil manometer, voltmeter, and RUN, over speed (OS), Low Servo Pressure (LSP),water temperature high (HWT), low oil pressure (LOP), emergency stop(ES) indicator light and bullhorn to indicate the engine operating circumstance. In addition, power, emergency stop (ES), Local/Remote switch button and Dimmer (light adjustment) is assembled on the board.

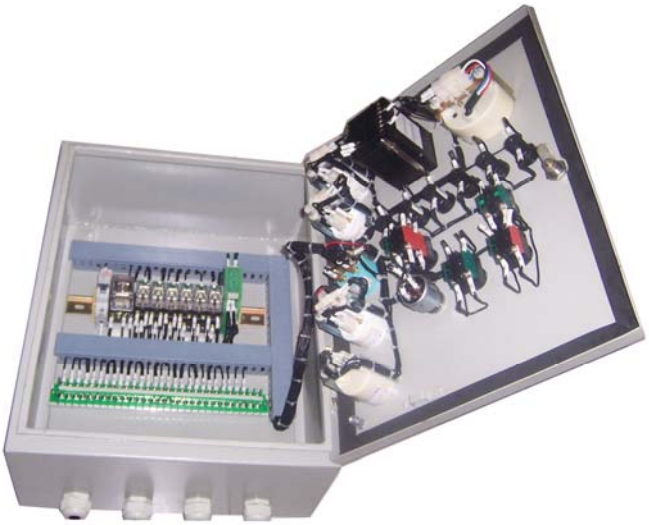
Dimension of local control box: 400mm×500 mm×200 mm

Dimension of Remote control board: 400mm×500mm×200 mm

Pictures：

Remote Control Board

Local Control Box



Opening of Local Control Box

HYPO-D2210 Diesel Engine Alarm Control Device

Main features and functions:

HYPO-D2210 diesel engine alarm control system fits on CUMMINS diesel engine, it is suitable to equip with coastal transportation ship, passenger ship and the Cargo vessel of single or double host computer, it has 16 alarm points.

Alarm box is installed in engine room with one alarm host computer of D2210 16-group, 2 PCS (or 1PCS) CDZ9903 rotational speed controllers, and one stop control panel. Display panel is installed in wheel house. Only 6 wires are needed to connect the alarm box and display panel. (2 signal wires, 2 power supply wires and 2 emergency stop wires). 1-8 groups alarm points are used to alarm and stop（for example：high water temperature、low oil pressure, over speed, emergency stop），9-16 groups are used to alarm（for example：high water temperature、low oil pressure, over speed, low oil pressure of gear wheel）, the control contents in 16 groups can be set by customer.

Both alarm box and display panel can horn reset、answer and alarm to check. They display conformably and work synchronously.

Dimension Of Alarm Box: 300mm×400mm×150mm

Power Supply Of Alarm Box: DC24V　±15%

Pictures:

HYPO—D2210 Display Panel

Alarm Control Box

CDF9916 Liquid Level、Temperature、Pressure、High Level Supervising & Alarm Units

Main features and functions:

The supervising and alarm unit is applied to chemical ship, oil ship and other liquid cargo ship to monitor liquid level、temperature、pressure、high level display and alarm. We can provide the integer device, also provide monotype. For example, CDF9916T (temperature) can be used in oil pump, load pump, sweeping cabin pump in the pump house to supervise temperature and alarm.

The supervising &alarm unit is composed of liquid level, temperature、pressure、high level sensor、safety bar, 16 groups supervising instrument, 16 groups alarm and power supply, switch, horn reset, test, lamp reset button. It has three kinds of installation styles: cabinet style, box style and board style.

1. Main performance**:**

Rang of supervising

Liquid level: 0-30m

Temperature: -199°C ~600°C

Pressure: -0.01~5Mpa

High level: 95%、98%

Precision: 1%

2. Environment temperature

Host engine (patrol instrument、alarm、safety bar, etc) -10°C -50°C

Level transmitter: -20°C ~80°C

Temperature sensor: -199°C ~600°C

Pressure transmitter: -20°C ~70°C

High level sensor: -30°C ~80°C

3. Power supply: AC 220V$^{+6}_{-10}$%、

DC 24V±10%

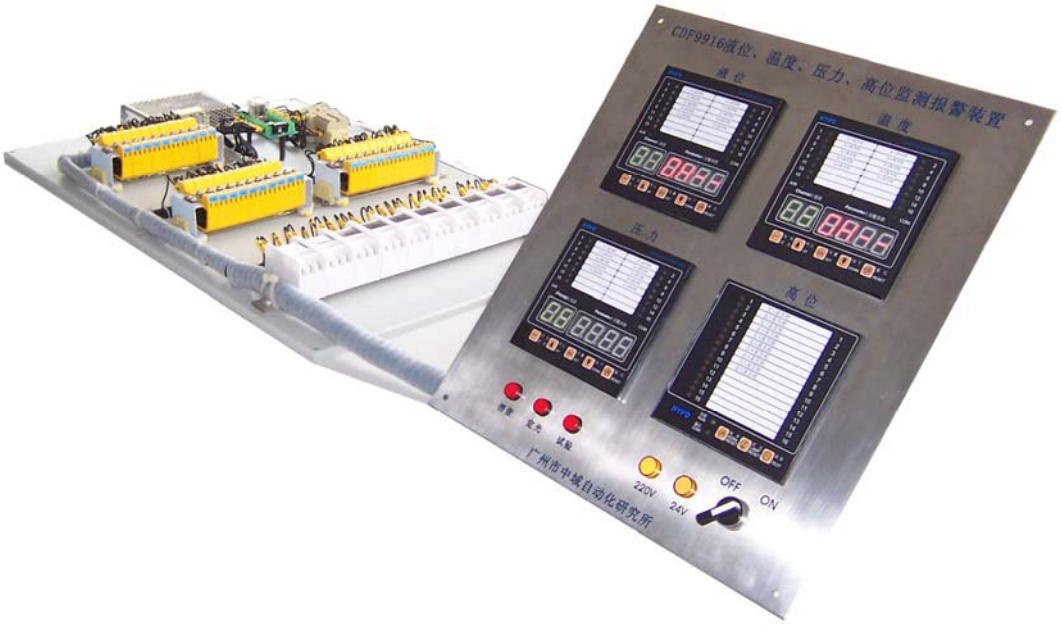
4. System consuming power 80W(12cargo cabins，48 points)
5. Substantial safe model
6. Protection model

Host engine: IP22

Sensor: IP67

7. Explosion-proof grade: ExiaⅡCT3-CT6
8. It has enacted density function in measuring liquid.
9. When fixed-point examines, others examine as usual, it alarms if beyond upper and low limits.
10. It has mutual horn reset、lamp reset、test key.
11. It has functions of alarming flash、lamp reset、horn auto reset.
12. Output by RS485, and can connect repeater (remote display).

Pictures:



Embedded Driving Platform

Cargo Hold Monitor Platform

High Level Transmitter | **Temperature Sensor**

Pressure Sensor | **Liquid Level Sensor**

中国船级社
CHINA CLASSIFICATION SOCIETY
产品证书
CERTIFICATE OF PRODUCT

This is to certify that, upon request of GUANGZHOU SINOCON AUTOMATICAL INSTITUTE

the following products have been inspected by the undersigned surveyor to the Society and are found to comply with the requirements of the specified standards.

Manufacturer: 广州市中域自动化研究所 GUANGZHOU SINOCON AUTOMATICAL INSTITUTE

Purchaser: Nil.

Product: Supervising and Alarm Units

Cert. No. of Approval: Nil.

Approval No. of drawings: GP05A00024

产品检验标准/ Product Inspection Standard

1. Section 3, Chapter 4, Part 4 of CCS Rules and Regulations for the Construction and Classification of Sea-going Steel Ships 2001 and its Amendments

2. Drawings approved by CCS

产品检验标志/ Marking

Date of issue: 2005年5月31日 May. 31, 2005

Surveyor: Jing Zhidao

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No 05006224

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中国船级社
CHINA CLASSIFICATION SOCIETY
型式认可证书
CERTIFICATE OF TYPE APPROVAL

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

监测报警装置
Supervising and Alarm Units

制造厂/ Manufacturer

广州市中域自动化研究所

GUANGZHOU SINOCON AUTOMATICAL INSTITUTE

Floor 2, No.6, Guanyu Road, Tangdong, Zhongshan Avenue, Tianhe District, Guangzhou City, China

认可标准/ Approval Standard

1. Part 4 of CCS Rules for the Classification of Sea-going Steel Ships 2009
2. Drawings Approved by CCS

证书有效期至/ This Certificate is valid until 2014年7月27日 / Jul. 27, 2014

Issued by: CCS Guangzhou Branch

Date: Jul. 28, 2010

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No 10010014