



SIBO GROUP
Since 1992

Advanced Maritime Solutions For Safer, Smarter & More Sustainable Voyages

 **SIBO GROUP**
Since 1992

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SIBO GROUP



SAILING TOWARDS SUSTAINABLE SEAS

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Company Introduction

About Us

SIBO Group is a leading provider of marine electrical and advanced automation systems. We engineer robust, intelligent solutions designed to optimize vessel performance, safeguard crews, and streamline complex engine room operations.

From Integrated Alarm and Monitoring Systems to Switchboards, we deliver a unified, digitalized approach to shipboard infrastructure. Our systems are built on a foundation of reliability and adaptability, ensuring seamless integration across diverse maritime segments.

34+

Years of Excellence

8,000+

Vessels with SIBO products

354

Skilled Engineers and Professionals

5

Premier Full-Service Partners

24/7

Global Customer Support

Our Expertise



Marine



Railway



Meteorology



Sustainability

Our Core Commitments

Integrated Innovation

We deliver streamlined automation solutions that reduce operational complexity, lower lifecycle costs, and maximize performance.

Proven Reliability

We manufacture ruggedized, class-approved systems tested to withstand the harshest marine environments.

Lifecycle Partnership

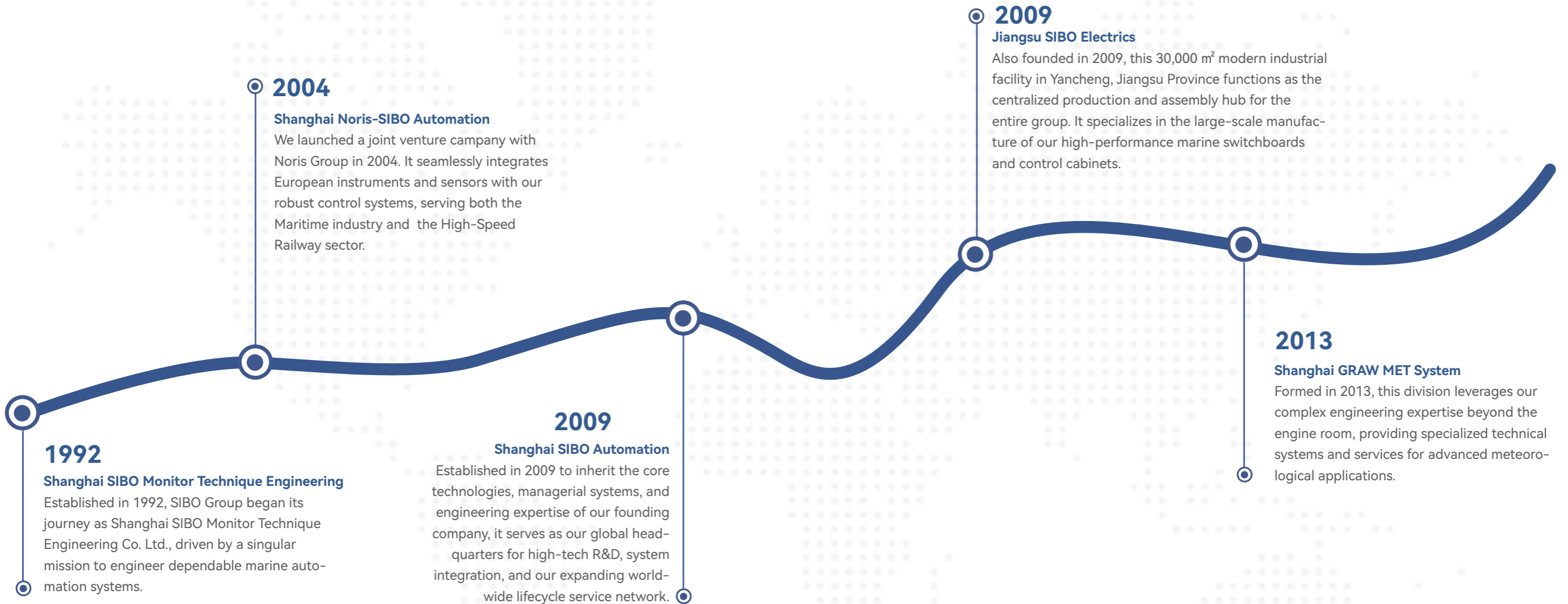
We back our technology with a responsive global service network, ensuring your fleet operates safely and efficiently from its maiden voyage to its final port call.

SIBO GROUP

Evolution of The SIBO Group Portfolio

Today, our integrated corporate structure allows us to maintain rigorous quality control from initial design to final commissioning. Our comprehensive capabilities are anchored by our founding company, **Shanghai SIBO Monitor Technique Engineering**, and driven forward by four specialized affiliate entities.

Class Certificate Obtained



SB Series: Integrated Alarm, Monitoring & Control System



Product Overview

Our SB Series provides a reliable, user-friendly "command center" for the complex network of systems and processes within a vessel's engine room. Through consolidating thousands of multi-vendor sensory data into one unified digital ecosystem, our Alarm, Monitoring & Control Systems empower crews to make confident, data-driven decisions while ensuring total safety in even the most demanding marine environments.

We offer two tiers in the SB Series to meet different vessel requirements:

SB-2001

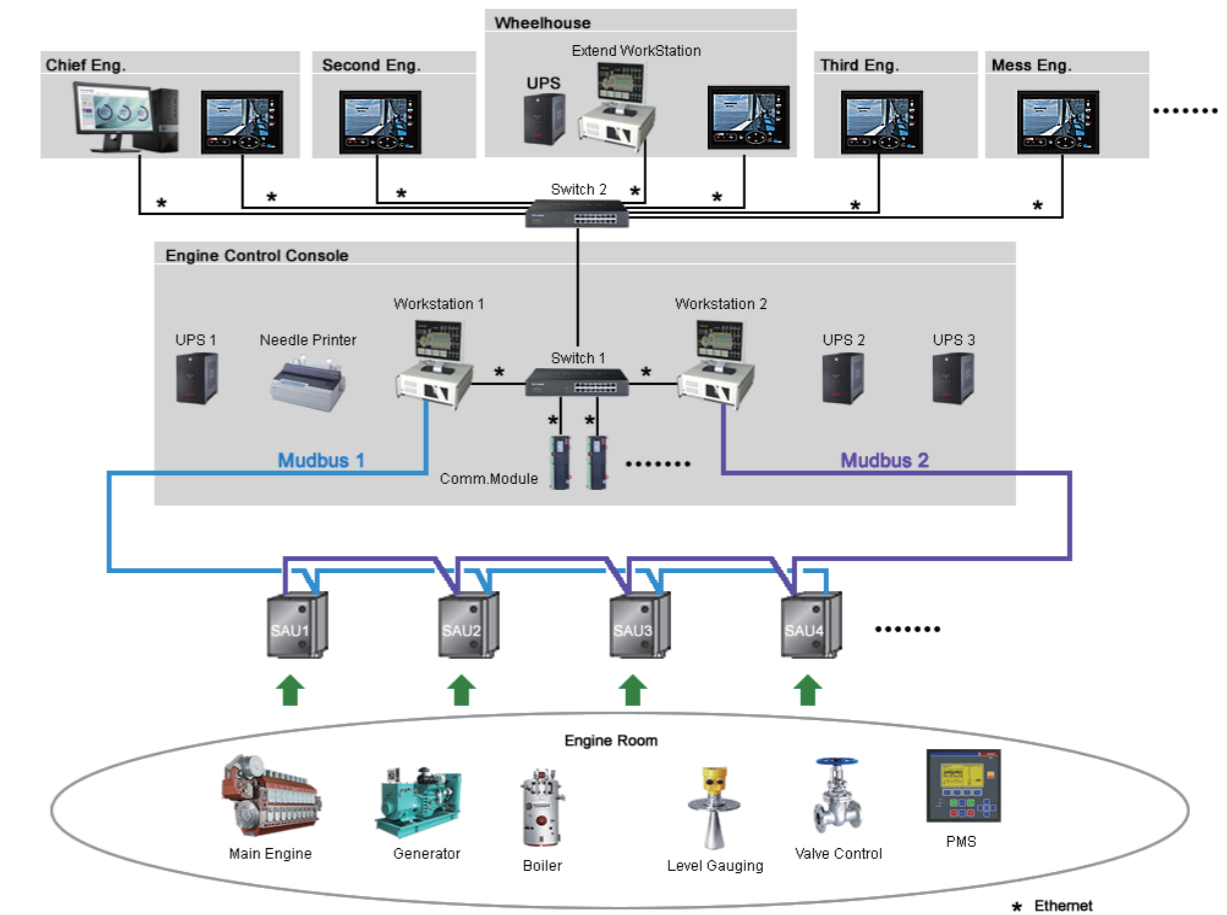
A **highly effective, centralized** system designed for high-density I/O environments and unmanned engine room operations. Running on a Microsoft-based architecture with specialized substations, it is built for advanced condition monitoring and long-term data archiving of complex maritime networks.

Designed for medium to large vessels, SB-2001 can handle **10,000+ hardwired I/O points** and **20,000+ communication points**, providing the scalability required for multi-system integration and lifecycle data management.

SB-3000

A **streamlined, cost-effective** solution engineered for maximum adaptability and efficiency. It is engineered for operators who require a robust, small-footprint automation layer that simplifies installation and maintenance.

Optimized for smaller vessels, SB-3000 supports up to **600 hardwired I/O points** and **500+ communication points**, delivering a practical and efficient control & monitoring option where compact design and cost control are priorities.



SB-2001 System Architecture Diagram

SB Series: Key Features

Simplify Command and Control

Both systems feature high-resolution displays designed to provide real-time mimics of the engine room and auxiliary systems.

Customizable HMI: Features intuitive displays that can be tailored to specific requirements.

User-Friendly Operation: Navigate complex data effortlessly using an all-in-one trackball for smooth and stable control.

Integrate and Scale with Ease

Our AMS suite functions as a universal data aggregator for diverse shipboard hardware and is configurable for all ship types, from small work-boats to large vessels.

Universal Signal Adaptability: Both systems support a wide range of inputs, including 4-20mA current, frequency, thermocouple, and binary signals, ensuring compatibility with any installation.

Standardized Fieldbus & Network Integration: Seamlessly connects to the vessel's LAN using Modbus RTU, Modbus TCP/IP, Profibus, UDP, etc.

Detect Abnormalities and Initiate Safeguards

Proactive monitoring allows for the detection of abnormal situations before they become costly setbacks.

Advanced Protection: When used as a safety system, our SB-3000 features auto-shutdown and auto-slowdown pre-alarms to safeguard both the crew and the vessel.

Self-Diagnostics: Integrated sensor failure self-check functions ensure the system is always performing at its peak.

Streamline Service and Sustain Reliability

Both systems are built for reliable long-term operation, with maintenance-friendly design that simplifies service and reduces onboard workload.

Efficient Upkeep: SB Series are designed with common hardware components to reduce the need for extensive on-board spare parts and specialized training.

Automated Archiving: SB-2001 automatically archives alarm history and daily graph data to hard disks for long-term maintenance planning.

Proven Reliability Across the Globe

LADY BME



LH EVERBLOOM



CCCC Tianjin Dredging 13,000 m³ Trailing Suction Hopper Dredger



RIVER GRACE



SK Series: Propulsion Control System

Product Overview

SK series serves as a high-performance Propulsion Control System, translating maneuvering commands into optimized propulsion performance through automated engine and load protection logic. By integrating automated load limitations and process safeguards, the system prevents engine overspeed and thermal stress during rapid maneuvers. Built for dynamic environments, the SK series ensures every command is executed with pinpoint accuracy while maintaining peak mechanical efficiency.

A Unified Standard in Maneuvering

SK series allows for a tailored approach to propulsion, offering two types of products to suit your vessel's mission:



SK510: Enhanced Redundancy

SK510 is our flagship modular solution designed for high-stakes maritime operations. It features redundant field bus (CAN) communication, ensuring that control is maintained even if a primary data line is compromised. This system is uniquely versatile, offering specialized versions for multiple propulsors, including Controllable Pitch Propeller, Fixed Pitch Propeller, Azimuth Thruster and Propeller with Reverse-Reduction Gearboxes.

SK520: Optimized Versatility

SK520 provides a modern, integrated structure that focuses on essential reliability. While it maintains modular programming logic, it is optimized for efficient handling of standard Controllable Pitch Propeller systems and Propellers with Reverse-Reduction Gearboxes. It is the ideal choice for operators seeking a robust, all-in-one control solution that is easier to install and maintain.

Main Features

Proactively Safeguard Critical Machineries

Load Control Programs: Automated speed-increase and decrease logic prevents dramatic thermal stress caused by rapid RPM changes.

Critical Speed Avoidance: Automatically skips dangerous resonance RPM ranges to prevent hull vibration and mechanical fatigue.

Operational Context: Operators can select In-Harbor or At-Sea modes to optimize engine response, fuel efficiency, and overall operational stability under different operating conditions.

Support Seamless Command Transfer

Dual-Power Security: Automatic switch-over between AC220V main and DC24V backup power with localized failure alarms.

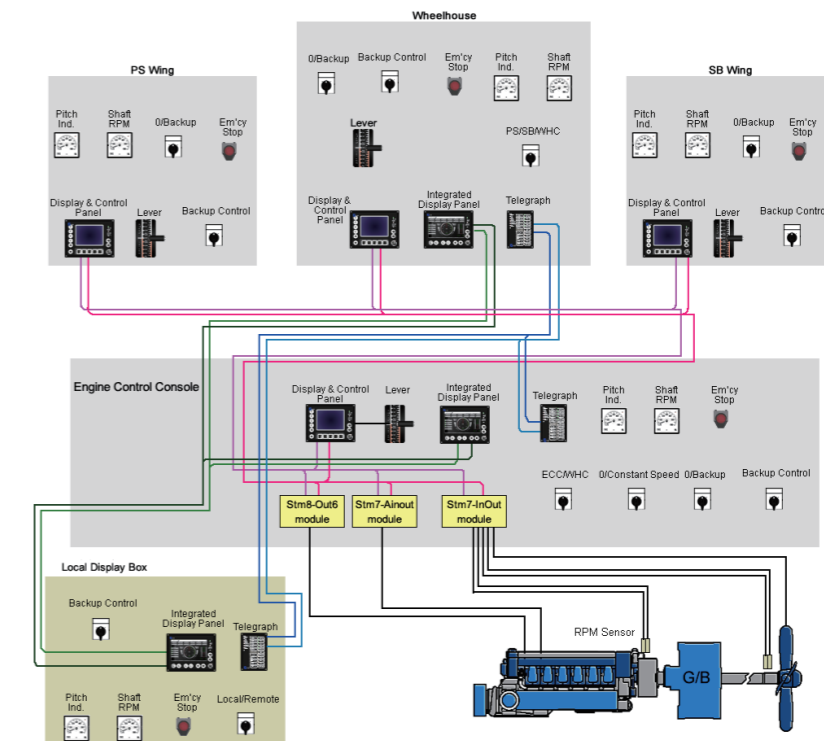
Data Transparency: Includes standard RS485 interfaces for direct connection to Voyage Data Recorders (VDR).

Multi-Station Mastery: Supports seamless control handovers between the Bridge, Bridge Wings, and ECR with "one active station" safety logic.

Ensure Secure and Reliable Operations

Safety System Cooperation: Executes auto-shutdown or auto-slowdown commands based on fault severity.

Emergency Overrides: Dedicated buttons allow captains to bypass non-critical slowdowns during emergency maneuvers.

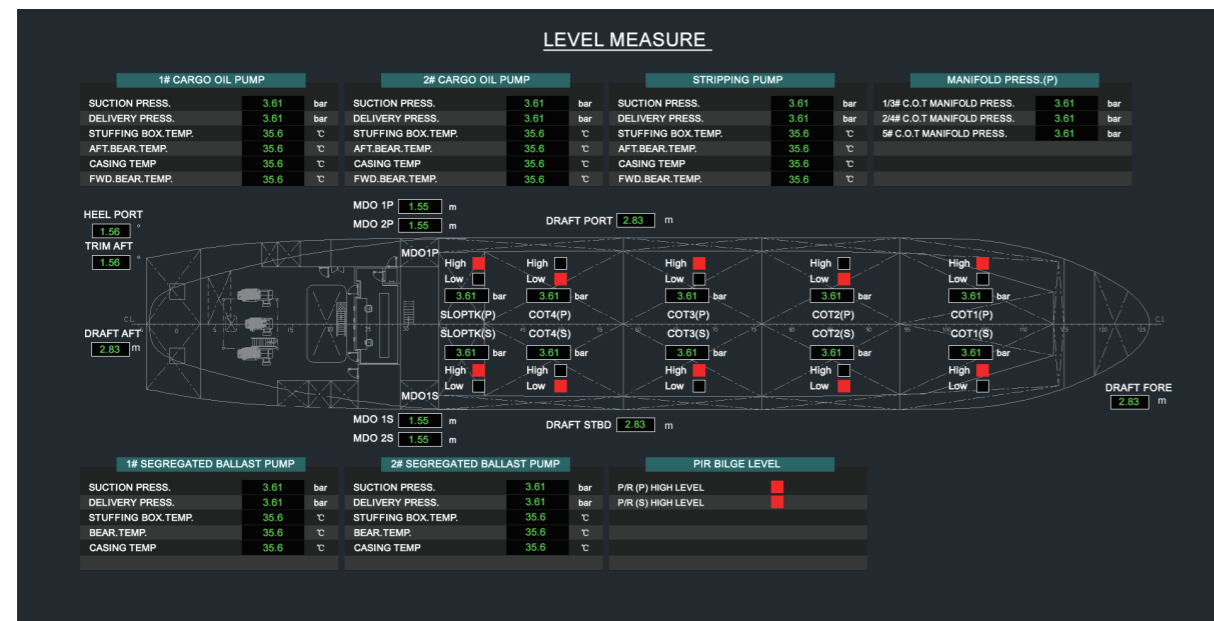


SK510-CPP System Architecture Diagram

SB-LV: Valve Remote Control & Level Gauging System

Product Overview

SB-LV delivers a powerful and highly adaptable solution for the comprehensive monitoring and control of shipboard piping networks and tank inventories. The system combines valve control with high-accuracy gauging technology to ensure rapid response and dependable long-term operation. Our gauging technology is purpose-built to deliver accurate, real-time data under the most demanding sea conditions. This allows for precise stability control and strict adherence to environmental safety regulations across all fluid paths and vessel holds.



Key Features

Versatile High-Torque Actuation

Supporting hydraulic, pneumatic, and electric actuators, our solutions deliver reliable mechanical force in a space-saving design.

Adaptive Level Monitoring

Supports a diverse range of high-accuracy sensors, including electro-pneumatic, pressure, and radar transmitters, ensuring compatibility with all liquid types and tank geometries.

Centralized Control Cabinets

Modular control cabinets manage power and fluid distribution with precision across all valve types. Each unit includes local manual overrides to ensure operational continuity in the event of a power loss.

Real-Time Position Feedback

Continuous monitoring delivers absolute confirmation of the system's state, providing discrete full open & close status for binary valves and precise percentage feedback for analog throttling valves.

Integrated Control Console

Product Overview

Our consoles are the central hub of your ship's control room, combining navigation, engine controls, and automation into one easy-to-use workspace. Custom-fit for any bridge or engine room layout, our consoles showcase high-end aesthetics with peak operational performance. The sleek, modern design provides a premium, professional appearance while ensuring your crew can work efficiently and maintain total control.



Design Highlights

Modular Setup

A flexible design that is easy to customize or expand with new equipment.

Built for Operators

Controls and screens are placed exactly where you need them for a clear view and quick access.

Heavy-Duty Build

Made with marine-grade materials to handle constant vibrations and tough sea conditions.

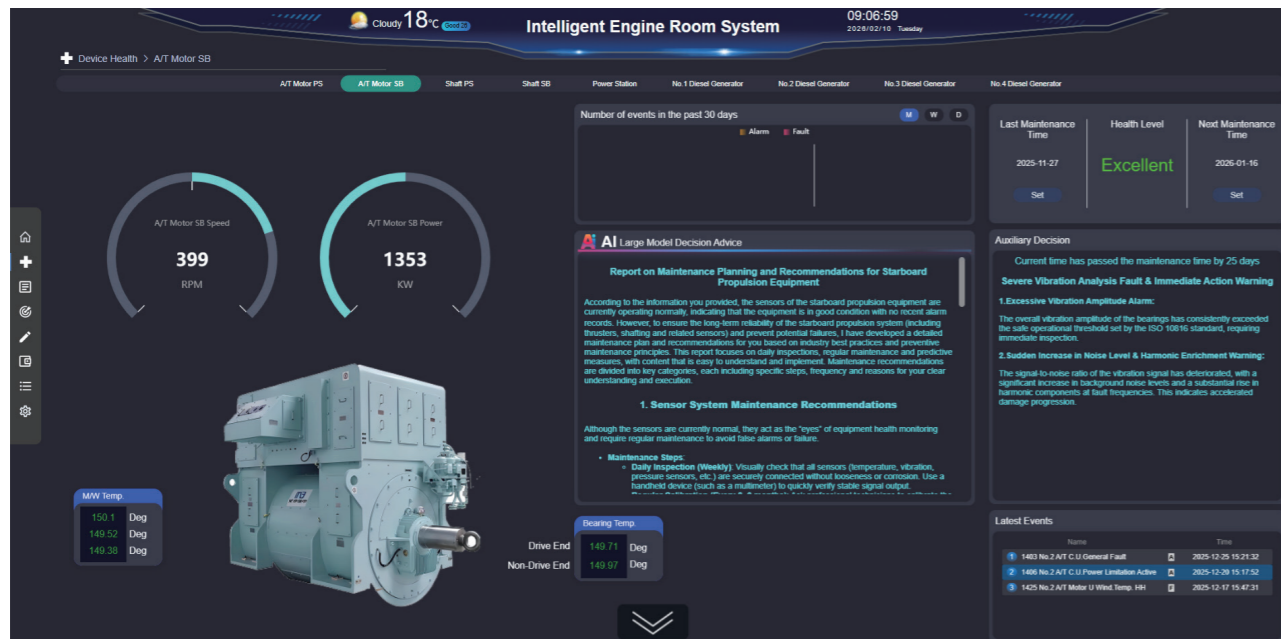
Custom Fit

Scalable designs available for any vessel, from small workboats to large ships.

SG-CW-1000: Intelligent Engine Room System

Product Overview

SG-CW-1000 empowers a new paradigm in shipboard operation by transitioning fleets from reactive, calendar-based repairs to proactive, condition-based maintenance. This intelligent system provides 24/7 lifecycle monitoring and early warning alerts by establishing a comprehensive digital profile of your engine room. Leveraging advanced AI algorithms and multi-source data fusion, SG-CW-1000 detects latent mechanical degradation long before functional failures occur to protect your crew, your assets, and your bottom line.



Multi-Source Data Fusion

SG-CW-1000 integrates an array of high-fidelity diagnostic sensors to cross-reference equipment health in real-time.

Vibration Analysis

Captures high-frequency vibration data (acceleration, amplitude) from cylinder heads, crankcases, and turbochargers. It utilizes Fast Fourier Transform (FFT) spectrum analysis to pinpoint exact fault modes such as rotor imbalance, mechanical looseness, or gear meshing defects.

Precision Displacement Tracking

Eddy current sensors monitor critical shaft dynamics, evaluating shaft orbits and eccentricity to detect bending or oil-whirl instability.

Tribological & Oil Condition Monitoring

Continuously tracks wear particles, moisture levels, and viscosity in lubrication and hydraulic systems to detect fluid contamination or abnormal component friction.

Robust Hardware Architecture

Built for reliability, the system features redundant servers, dedicated data gateways, and scalable fieldbus networks to ensure uninterrupted data collection and analysis.

Key Operational & Strategic Benefits

Investing in SG-CW-1000 is a strategic decision that drives continuous, measurable financial returns throughout the vessel's lifespan.

Eliminate Unplanned Downtime:

AI-driven diagnostic models automatically evaluate real-time data against historical baselines, generating predictive maintenance suggestions before critical failures stop your vessel.

Optimize Maintenance Budgets:

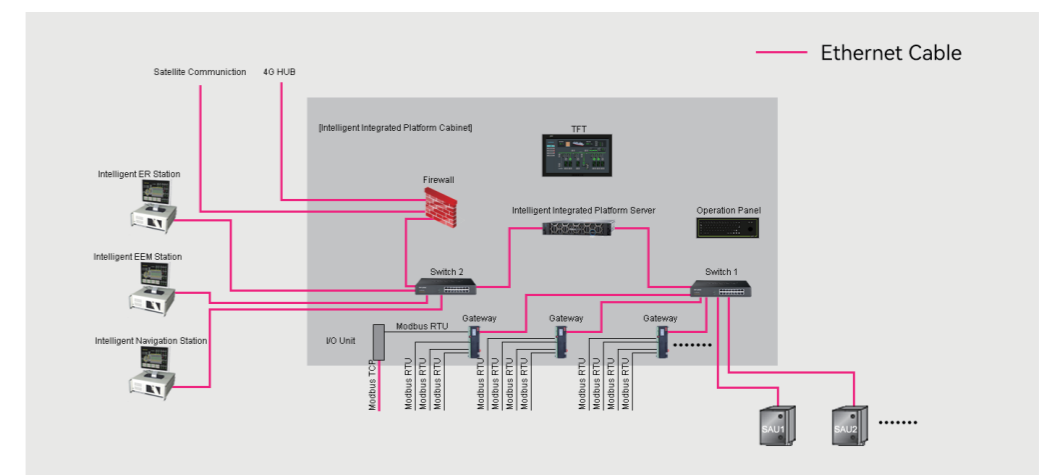
By servicing equipment only when actual degradation is detected, operators can avoid over-maintenance and reduce spare parts and labor costs by 15% to 25%.

Extend Equipment Lifespan:

Proactive interventions prevent cascading mechanical damage, effectively extending the operational life of high-value machinery by 10% to 20%.

Protect Asset Value:

A proven, digitally documented history of optimal maintenance enhances the vessel's commercial competitiveness, financing capability, and residual asset value by 5% to 15%.



SG-CW-1000 System Architecture Diagram

Switchboards

Product Overview

Our Switchboard provides a centralized Energy Management Solution, translating raw power generation into optimized grid stability through advanced protection logic. The system is engineered to provide a tailored fit for diverse vessel specifications and unique client requirements with its highly configurable modular architecture. By integrating our Main Switchboard and Emergency Switchboard, we deliver a unified electrical infrastructure designed for maximum reliability in high-stakes maritime environments.

Core Features

Advanced Grid Automation

Precision Load Sharing: Automated synchronization and proportional load distribution across multiple generator sets prevent grid strain.

Seamless PMS Integration: Flexible interfaces for Power Management Systems optimize engine runtimes and fuel efficiency.

Active Regulation: Automated frequency and voltage regulation ensures consistent power delivery to sensitive onboard electronics.

Sophisticated Protection Logic

Dynamic Load Shedding: Integrated preferential tripping automatically disconnects non-essential equipment during peak demand to safeguard critical operations.

Comprehensive Safeguards: Multi-level protection against short circuits, overcurrent, and reverse-power events can prevent damage to high-value machinery.

Isolation Integrity: Continuous insulation monitoring and earth-fault detection provide real-time security for the crew and hardware.

Robust Operational Resilience

Rapid Blackout Recovery: Emergency Switchboard provides instant, automated emergency generator starting and load transfer upon loss of main busbar voltage.

Shore Power Ready: Built-in shore power integration with safety interlocks ensures a seamless transition during harbor stays.

Ruggedized Architecture: Constructed with modular, vibration-resistant frames and IP-rated enclosures designed specifically for harsh engine room environments.



SB-PMS: Power Management System

Product Overview

Our Power Management System (SB-PMS) provides the advanced logic required to maintain the stability and efficiency of the vessel's electrical grid. It dynamically balances generator capacity with real-time demand to minimize fuel consumption and prevent operational downtime.

SB-PMS can be seamlessly integrated within our Switchboards and SB Series Automation architecture.



Switchboard Coordination

SB-PMS can function as the command layer for the Main Switchboard and Emergency Switchboard to manage the automated opening and closing of circuit breakers, coordinate bus-tie operations, and ensure seamless transitions between main, emergency, and shore power modes.

Automation System Synergy

SB-PMS is fully compatible with our Alarm, Monitoring and Control systems (SB-2001 & SB-3000) to feed real-time electrical data directly into the vessel's central monitoring consoles. This allows crews to monitor power flows, manage generator status, and analyze historical fuel metrics through a unified human-machine interface.

SB-NL & SB-SL: Navigation Lights & Signal Lights Control Panel

Product Overview

Our Light Control Panel provides a centralized way to manage and monitor your vessel's navigation and signaling lights. It ensures you stay fully compliant with international safety standards, keeping your ship visible and its status clear in all weather conditions.



Core Features

Dual Power Compatibility

Operates on both AC220V and DC24V to ensure continuous operation.

Instant Fault Alarms

Automatically triggers an audible and visual alarm if any exterior light fails.

Adjustable Dimming

Built-in dimmer function to optimize panel brightness and protect bridge night vision.

Bidirectional Communication

Features an RS-485 port to seamlessly send and receive alarm confirmations with external systems.

SB-T Series: Engine Order Telegraph & Printer

Product Overview

We provide a complete solution for propulsion command and logging. SB-TE-M Engine Order Telegraph ensures reliable, instant communication of propulsion orders between the bridge and the engine room. Working alongside it, SB-TR Automatic Telegraph Recorder securely logs all telegraph commands and main engine RPMs, replacing manual logbooks with legally robust digital records.



Automatic Telegraph Printer (SB-TR)

Digital Logbook: Automatically records telegraph orders and main engine RPMs, providing essential legal data for marine liability or arbitration.

High-Capacity Storage: Safely saves at least 2,000 sets of data, secured by password protection.

Flexible Printing: Features real-time automated printing alongside the ability to print historical data from a specific time range.

Engine Telegraph Unit (SB-TE-M)

Comprehensive Command Positions: Standardized commands include Dead Slow, Slow, Half, Full, and Navigation Full for Ahead, plus corresponding Astern commands and Stop.

Versatile Control Locations: Utilizes lever-type units on the bridge and Engine Control Room (ECR), with push-button units typically installed locally in the engine room.

Intelligent Alarms: Emits acoustic and visual alerts for mismatched commands, system faults, power loss, or if the main engine runs in the opposite direction of the order.

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