TYPICAL SUCCESSFUL CASES

COSCO GROUP
● Has depended on the HLD-VMS for fleet data collection for many years.

Ministry of Transport of the People's Republic of China
● Has 16 ships and 11 offices equipped with HLD-VMS as part of China's maritime rescue coordination infrastructure
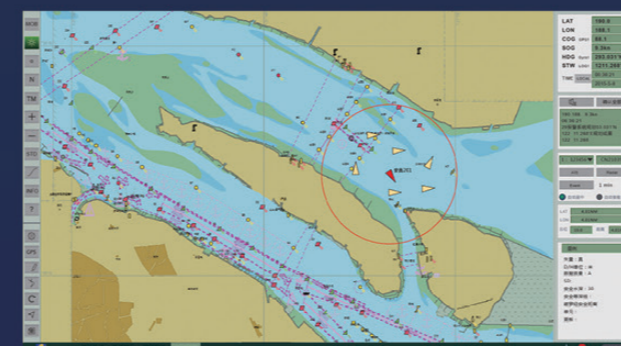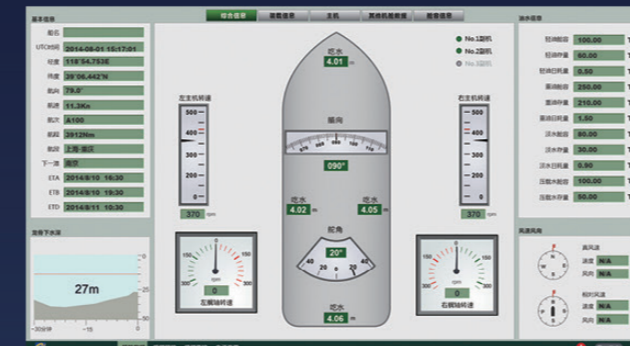
Formosa Plastic Group
● Whole fleet fitted with HLD-VMS.

China National Offshore Oil Corporation ("CNOOC")
● Uses HLD-VMS in its oil and gas seismic survey vessels.

PetroChina Company Limited (PetroChina)
● Uses HLD-VMS in its oil and gas seismic survey vessels.
● Institute of Oceanology, Chinese Academy of Sciences and Institute of Coastal Zone Research, Chinese Academy of Sciences
● Operates an extensive HLD-VMS for ship-to-shore data collection.

VMS⁺ HLD-VMS200
VESSEL MONITORING SYSTEM

● Remote monitoring
● Fleet management
● Data analysis

Hi-CLOUD

TECHNICAL PARAMETERS

VMS200

12 channels standard NMEA 0183/IEC 61162 input interface;
● 16 channels analog video input interface, integrated fanless host
● Standard RJ45 interface
● Transmission rate: 1-25 frames/s
● Support QCIF, CIF, D1, 720P, 1080P display modes
● Power input: DC24V
● Dimension: 275*110*203mm
● Weight: 5.6kg
● Including: Host, monitor, keypad and mouse, sound box, microphone, stand

PRODUCT CONFIGURATION

Standard configurations:

Item	Members	No.	Remarks
Ship-side equipment VMS200	Host	1	
	Monitoring unit	1	Including sound box, microphone, keypad, mouse and monitor
	Outdoor stand	1	Integrated equipment
	Indoor stand	1	Integrated equipment
	Mobile camera	1	

Options:

Item	Construction	Remarks
Options	Central server	
	Indoor stand	Integrated equipment
	Outdoor explosion-proof stand	Integrated equipment
	Data acquisition unit	Acquire non-standard signals to enable VMS to transmit such signals

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海兰信 Highlander

SYSTEM OVERVIEW

Highlander's vessel monitoring system HLD-VMS harnesses a number of modern technologies in order to provide automated fleet management services. The full spectrum of ship data - navigation, propulsion, video and cargo - is transmitted shoreside.

The at-sea recovery operations of the Shenzhou 7, Shenzhou 9 and Shenzhou 10 manned space vehicles were aided with the HLD-VMS for which special recognition was awarded by the PLA General Armaments Department. The HLD-VMS is used in Chinese scientific vessels as well as in commercial shipping companies such as COSCO Group, Formosa Plastics Group and CNOOC.

ATTRIBUTES AND BENEFITS

- Realize ship-to-shore information symmetry, by which the ship owner can view the ship condition -by themselves
- Possessing accurate and complete ships' navigation and propulsion data can be used for KPI performance measurement.
- On-board equipment can be closely and accurately monitored by shore staff.
- A wide variety of communications standards can be used with the HLD-VMS. reduce the cost of communication
- Reasonable software modular design to provide the user with personalized services
- All mobile devices (iOS and Android) can be used with the HLD-VMS
- Cloud services and ship big data escort the navigation and the production operation

MAIN FUNCTIONS

Remote audio/video services

- Acquire multi-channel analog/digital CCTV signals;
- Remote video monitoring and history video playback;
- Advanced data compression for meeting bandwidth constraints.
- Ship-to-shore video conferencing.

Ship-to-shore office automation

- Online Electronic reporting
- Statistical data analysis,assist the decision making
- Crew management and certificate management etc.
- Alerts in timely
- User authority management of various levels

Shore-side electronic chart service

- B/S structure;
- Ship navigation data can be stored for an unlimited amount of time.
- AIS data is meshed with ship data on playback.

Ship data services

Acquire multi-channel of IEC-61162/NMEA0183 standard signals
- GPS: position, speed, course, date, time.
- Anemometer: wind speed and direction.
- Gyro compass: heading.
- AIS: data for ships in one's own fleet as well as for the traffic surrounding the ships in one's fleet.
- Echo sounder: depth under keel.
- Propulsion: engine status,engine rpm, shaft rpm and other engine data. Plus alarms.
- Generator: generator status,engine rpm, power output, alarms.
- Steering gear: status,pump data plus alarms.
Other ship equipment data acquisition etc.
Upload data to the database server at fixed time

HLD-VMS COMMUNICATIONS

Hi−Cloud Vessel Remote Information Service System

VESSEL DATA
- Location/Direction/Speed
- Wind/Depth/AIS
- Voice/Images/Videos
- Engine/Stress/Equipment Status
- Management Data

VMS+

SERVICES

Navigation Tracking	Remote Data Download and Replay
Remote Engine Monitoring	Route Optimized
Remote Diagnosis & Maintenance	Fuel Economy Analytics
Remote Monitoring(Video/Image/Datas)	Vessel Management

IPAD   PHONE   PC

FBB/VSAT   3G 4G   H-Cloud