

Together to the Future!

Dream for PEOPLE Technology for LIFE



Marine Electronics
marineworks

01

Smart
Ship
Platform

02

Smart
Network

03

Cyber
Security

04

ECDIS
Chart

05

KVH
VSAT

Smart Ready Solution

A specialist of Marine ICT, Marine Electronics/marineworks



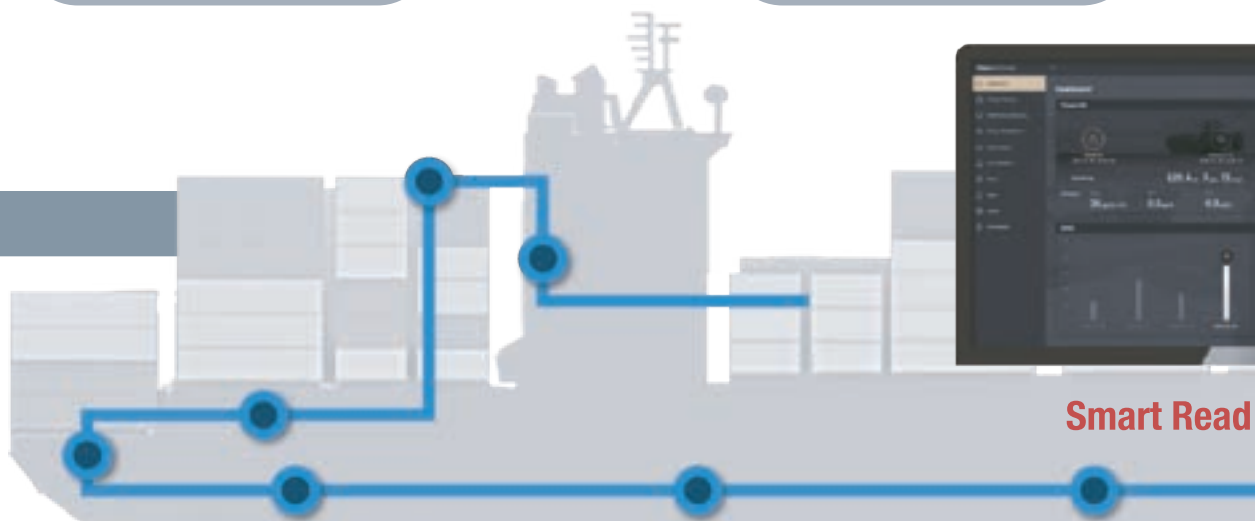
Onboard Solution

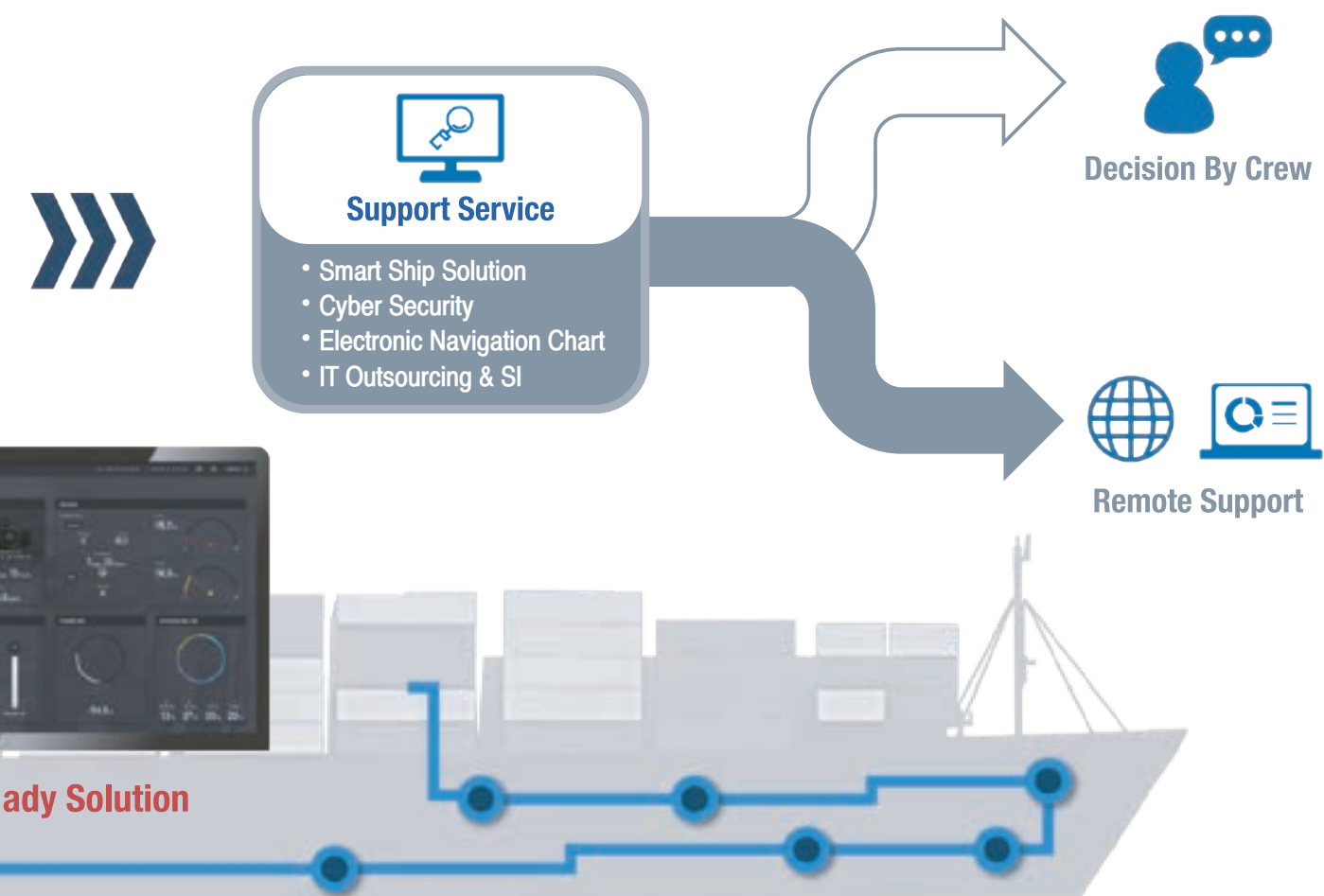
- Ship Integration Network
- Ship Management Solution
- ECDIS, Chart Master
- KVH VSAT



Onshore Solution

- Fleet Management Solution
- Vessel Traffic Service
- Simulator
- Integrated Control Center

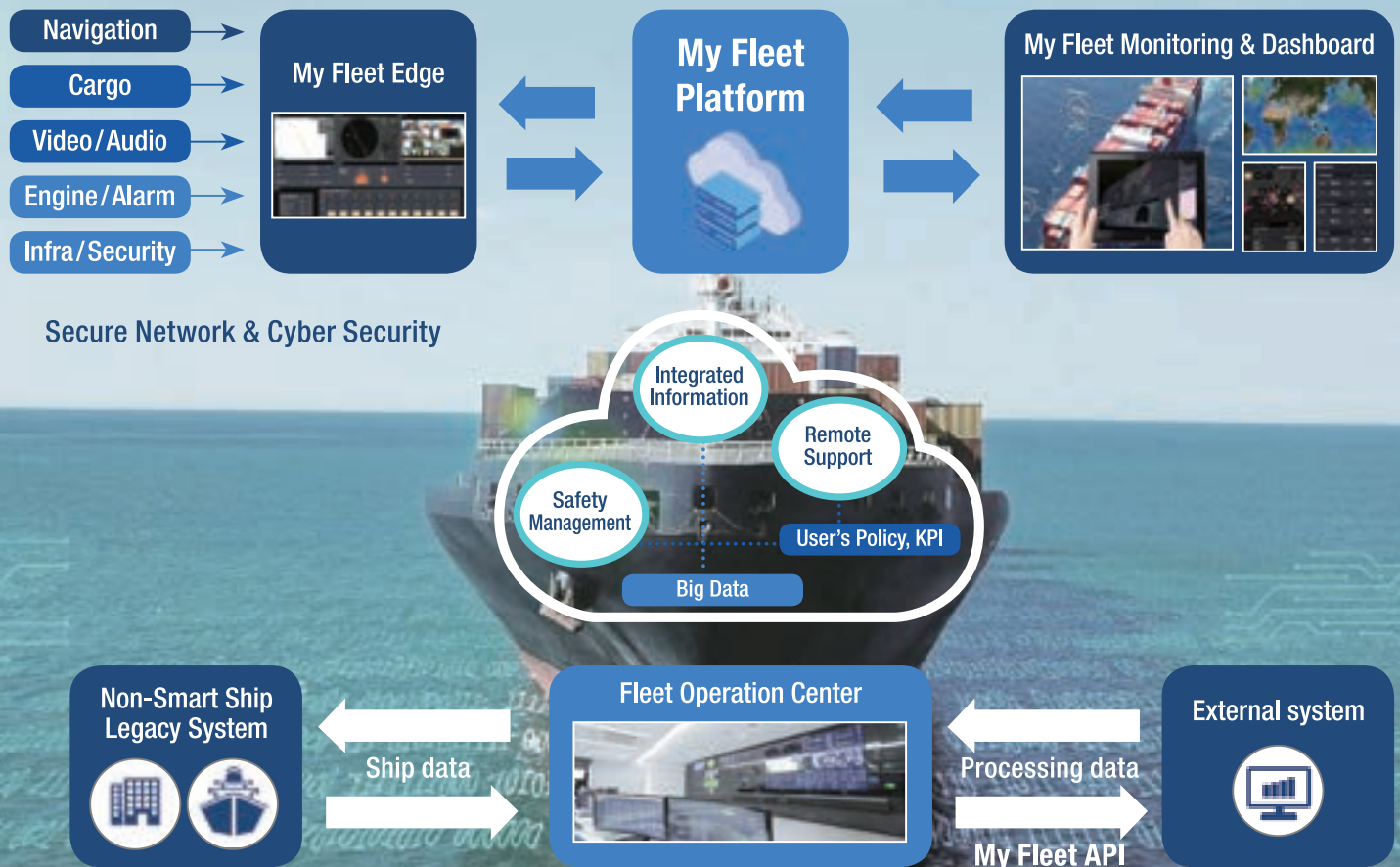




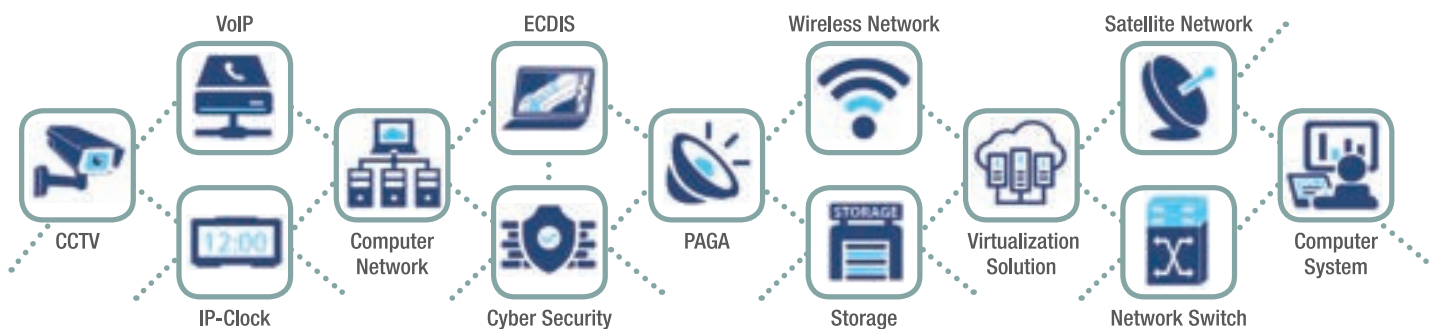
My Fleet Monitoring

My Fleet, Risk & Operation Management

The best solution for CyberSecurity compliance during the Ship digitalization era and smart ship operation management with big data configuration centered on ship owners is to support safe operation of 20 largest container ships through comprehensive fleet management, anti-goal and early recognition.



Smart Ready Solution Configuration



Smart Ship Project Performance

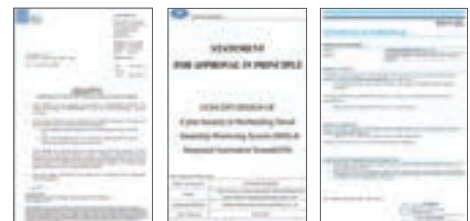
■ HMM 24k/16k ULCC Smart Ship ■



■ System Integrator ■



■ Cyber Security & Pen Test ■



My Fleet Master

Optimal ship management system

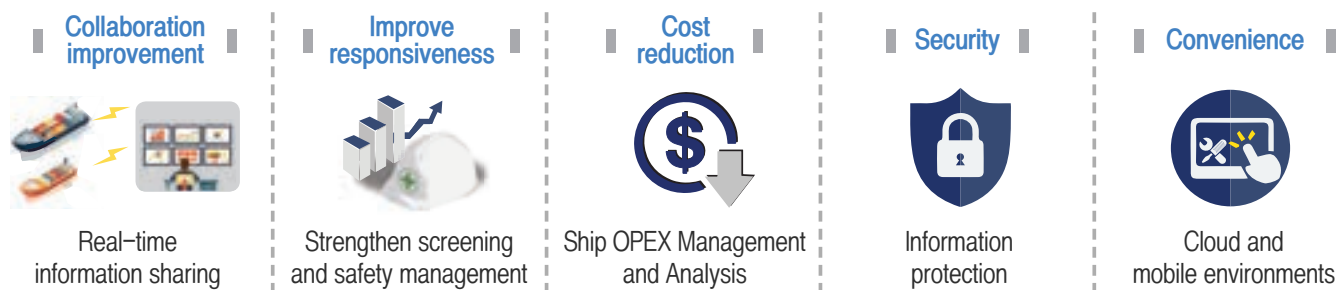
Fleet Master is a total ship management solution for the next generation ship management environment such as e-Navigation, environment regulation, ship cyber security and marine cloud environment based on the experience of developing ship management system for many years.



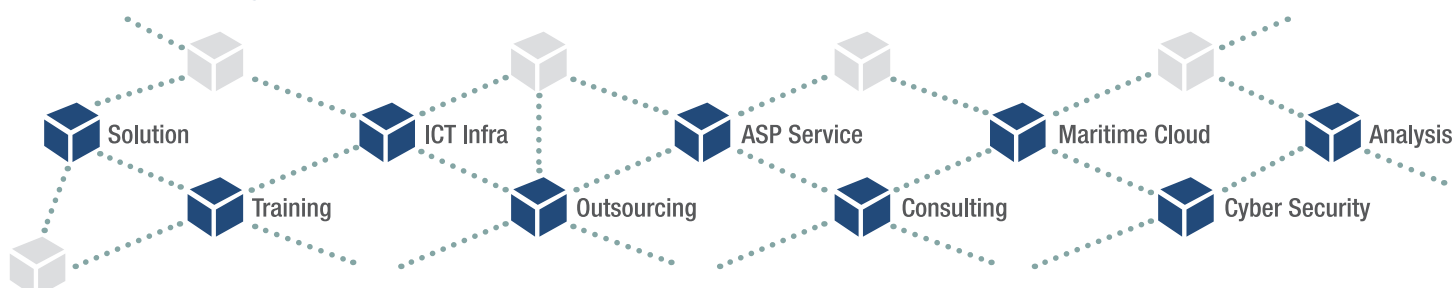
Main Function

Crewing	Technical	Monitoring	Dashboard	Procurement	Quality & Safety
Personnel record management Qualifications/ Training management Boarding management Evaluation management	Plan maintenance Maintenance history management Request for repair Inventory management	Real-time monitoring Navigation report Response to greenhouse gas regulation Fuel usage management	PMS performance analysis Accident/ Examination analysis Budget/Result analysis Performance management	Purchasing management I/O history management Performance management by company ERP/I/F	ISM/ISPS PSC/FSC Nonconformity/ Corrective action Manuals and drawings

Main Features



Service Category



Fleet Master can further enhance the value of the ship management process.

CHART MASTER

Smart Hardware for Ship's Environment

Equipped with ECDIS S/W developed with its own technology, ECDIS functions can be used in the same way, and paper chart can be stored and used inside the CHART MASTER to replace the sea table.



Status Board



Easy Maintenance



Chart Table



Customized BODY
FRAME design

ECDIS S/W

It is equipped with Electronic Chart Display and Information System (ECDIS) S/W to perform all ECDIS functions such as route planning on 55" display.

*ARPA display, RADAR OVERLAY, etc. available when linking with our ECDIS



Replace Chart Table

It is possible to replace the existing chart table by installing a shelf in the Chart Master so that the A0 size paper chart can be placed on the display with a holding device (a magnet).

ECDIS S/W Free Update

We support free update of ECDIS S/W according to IEC regulation/IHO standard revision

Various Usability

It can be used for ; ship introduction, status, multi-entertainment (Video, PPT, etc.)

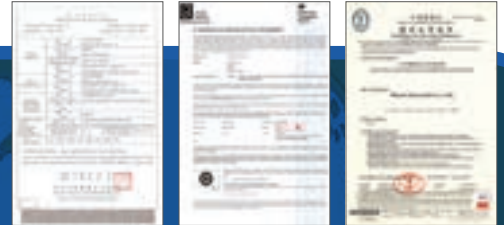
Customized BODY FRAME design

Body frame design for installation environment and location to reflect customer requirements

ECDIS (Electronic Chart Display Information System)

Key equipment of vessel's safe navigation

Based on the electronic chart display solution, various navigation/institutional sensor information is displayed based on electronic chart to support ship safety. It aims to play a role as a central safety management device for ships through the development of S-100 standard application.



SOLAS, IMO MSC.232(82), IEC 60945, 61174, 62288, 61162, 62923

Satisfaction of the standards of domestic navigation equipment in accordance with international regulations and standards under the Ship Safety Act

NO MORE STRESS WITH ECDIS!

Electronic Chart Display and Information System

We are expanding our supply to domestic and overseas shipping companies by increasing the navigation stability and drastically reducing expenses of equipment introduction, maintenance and training.



Navigation stability

- Increase the reliability and safety of equipment satisfying 100% of various rules (IMO/IHO) and IHO ECDIS Data Set Test



Equipment introduction cost

- Low introduction cost compared to foreign equipment



Maintenance cost

- Provide free software update according to change of IMO/IHO rules
- Low maintenance cost by eliminating the cause of failure and reducing the frequency of failure



Training cost

- ECDIS Generic training is conducted by various institutions or shipping company training center (Haeyoung Maritime Services, G-Marine Service, KIMFT, Korea Maritime University etc.) using our products.
- After installing the equipment, free training and familiarization certificates (Type specific training) are issued to the crew members of the ship concerned
- Provide free issuance of familiarization training (Type specific training) certificates CBT programs and certificates



Supply of more than 700 ECDIS units in total

Major Shipping Company



Public Institution



Navy & Coast Guard IBS



- DDG(Aegis ship) No.1~3
- FFG BATCH-I No. 1~6
- FFG BATCH-II No. 1~6
- LST-II No.2~4
- ASR-II
- Minesweeper No.4~6
- ATS-II No.1~2
- ATX



- Coast Guard ship 3,000tons / 6ships
- Coast Guard ship 300tons / 4ships
- Coast Guard ship 500tons / 4ships
- Coast Guard ship 1,000tons / 4ships
- Coast Guard ship 1,500tons / 5ships

ENC (Electronic Navigation Chart)

Complete Care Service for Electronic Navigation Charts

We support the selection, purchase, installation and update of ENC as a service to provide ENC(Electronic Navigation Charts) that are important for identifying hazardous areas in operation in the ECDIS on board ships. Many employees with navigation experience provide integrated care solutions, including supplying/installing ENC, resolving possible problems and suggesting other ways to utilize ENC during navigation.



Why marineworks?

■ Integrated Management Services ■

- Regular simultaneous ECDIS and ENC inspection
- Single point of contact significantly reduces response time

■ Smart ECDIS Purchase ■

- ECDIS discount applied when purchasing integrated packages

■ Integrated Management Services ■

- ENC Duration Notification Service: Periodic Notification
- ENC Update Management
: ECDIS, ENC Integrated Update Management

■ Arrangement of personnel in charge of each ship ■

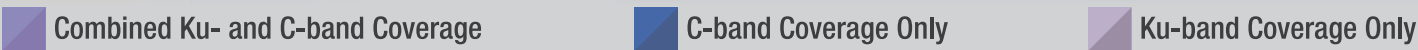
- Faster and more accurate management
by allocating the people in charge for each ship
- Total service management considering ship characteristics and environment



KVH-VSAT

The World's No.1 Connectivity for Satellite Solution

KVH's unique integrated satellite communication (SATCOM) provides fast and stable global maritime communication solution of 10 Mbps/3 Mbps. In addition, 24/7 Customer Assistance and Remote Care Services create a well-accessible customer support process that enables many branch offices and service partners to install, open and repair VSAT anywhere in the world.



TracPhone 11 IP

Five reasons to connect via KVH mini-VSAT Broadband

- 1

Fast, reliable and economical global broadband connectivity
- 2

Solid hardware for rough marine environments
- 3

Best eLearning for high performance and risk reduction
- 4

Global services and support for maximum uptime and cost management
- 5

Providing the latest news, entertainment, sports and services to enhance the recruitment and maintenance of sailors



TracPhone V7 IP

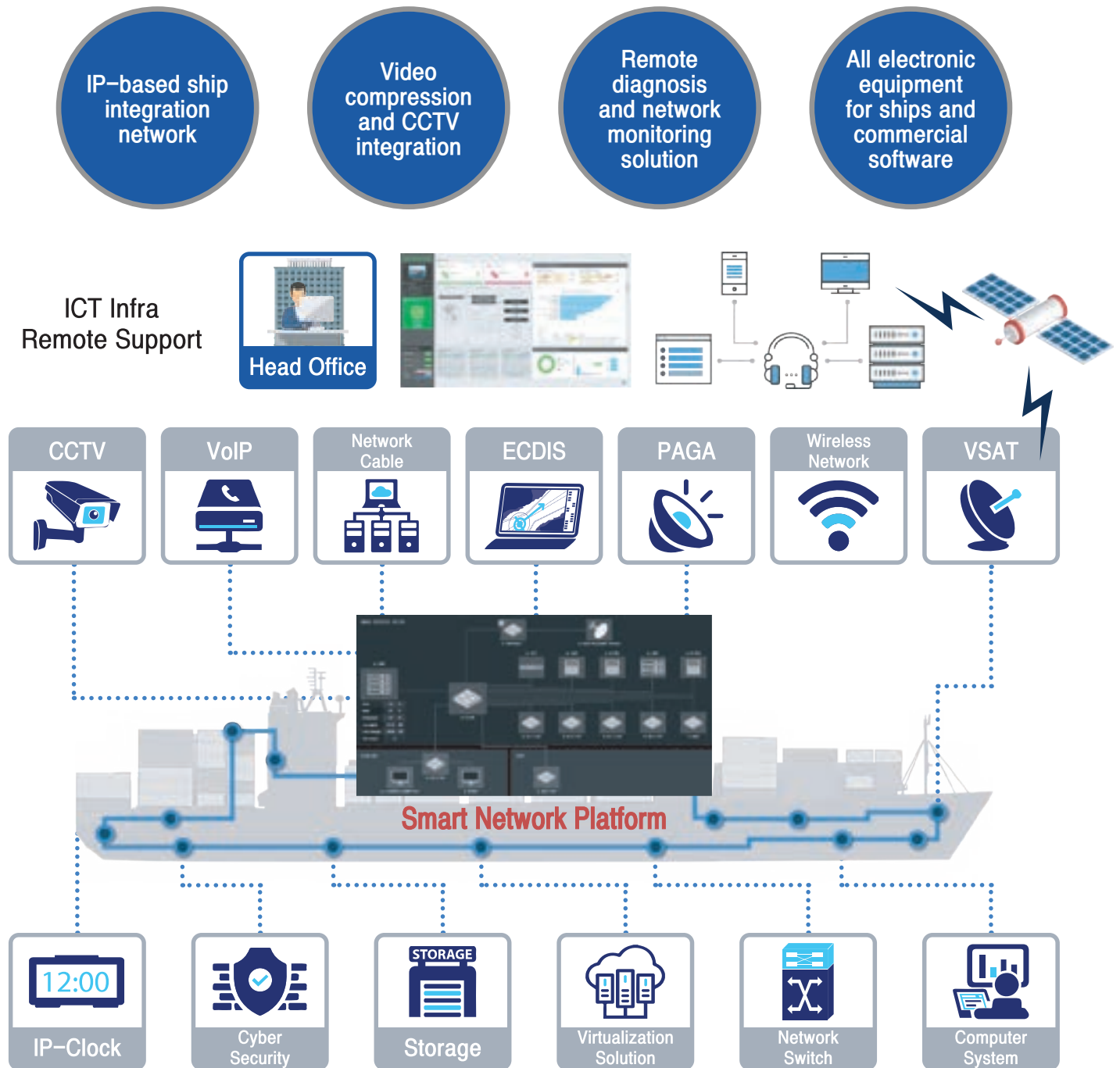
TracPhone V3 IP

Antenna Dish Diameter	37 cm (14.5 inch)	60 cm (24inch)	1.1 m (42.5 inch)
Antenna Unit Size	39 cm D x 45 cm H	66 cm D x 79 cm H	1.2 m D x 1.4 m H
Diameter x Height	15.5 inch D x 17.5 inch H	26 inch D x 31 inch H	49 inch D x 57 inch H
Antenna Unit Wei ht	11 kg (25 lbs)	26 kg (58 lbs)	109 kg (240 lbs)
Antenna Type	Ku-band	Ku-band	C/Ku-band (Dual-mode)
Upload Speeds	Up to 128 Kbps	Up to 512 Kbps	Up to 1 Mbps
Download Speeds	Up to 2 Mbps	Up to 3 Mbps	Up to 4 Mbps
Coverage	Seamless worldwide regions	Seamless worldwide regions	Global

NETWORK

Ship Integration IP Network

It is possible to design, procure, install and operate all in-ship network products necessary for the operation of the ship. It also provides IP-based integrated network configuration and user-oriented operation solution.



Product features

- Optimal drawing production and network construction based on shipbuilding field experience
- Optimal operational solution and cyber security reflecting IP network characteristics
- Available in terms of remote support of ship and safety management by connecting network products with navigation equipment, satellite communication, etc.
- Supply optimized network products for each government vessel, merchant ship, special ship and plant

SHS (Ship Handling Simulator)

SHS (Ship Handling Simulator) is a large-scale simulation system that provides practical and realistic onboard training such as real-time ship handling training, research and assessment with randomly established various ships and surrounding environment based on advanced computer graphic and network technology.



ERS (Engine Room Simulator)

ERS (Engine Room Simulator) consists of engine which is same as that of real ship and control, monitoring and warning system. ERS is an advanced system that allows real-time monitoring and control of operation on screen.

Customized ERS model

Realistic simulation

- ERS allows realistic education with standard engine model which is manufactured based on precise mathematical mode and data of new ships

Practical application

- Practical application improved with mock switch board and software which meet international standards for ships

Comparison of fuel efficiency accounting to changes in engine

- ERS embodies the changes of fuel efficiency and outflow of emissions of each operation method of engine
- ERS provides equation of model which can keep and store output data related to engine efficiency for each configuration and this can be used for research

Comparison of engine performance

- Engine performance can be measured for combustion condition which varies according to the condition of engine





marineworks
YOUTUBE



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HOMEPAGE



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