ASI | AQUASYNC INNOVATION
YOUR SHIP'S GUARDIAN IN THE DIGITAL AGE

NETWORK INFORMATION INTEGRATION SYSTEM

AQUASYNC INNOVATION（SINGAPORE）PTE. LTD.

DNV

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Content.

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Company Introduction

1.1 Company Profile

AquaSync Innovation（hereinafter referred to as ASI）provides a full package of solutions for comprehensive automation, intelligence, integrated ship-shore information and ship cyber security etc. in marine and offshore industries through cutting-edge technology, empowers the global maritime industry. Our advanced solutions ensure safe, reliable, efficient performance and promote the rapid sustainable development of the maritime industry's digitalization process.

ASI has obtained the **DNV-issued ISO 9001** Quality Management System, **ISO/IEC 27001** Information Security Management System, **ISO/IEC 20000-1** Information Technology Service Management System certificates, and the **ISO/IEC 17025** Marine Cyber Security Laboratory Test Capability Recognition.

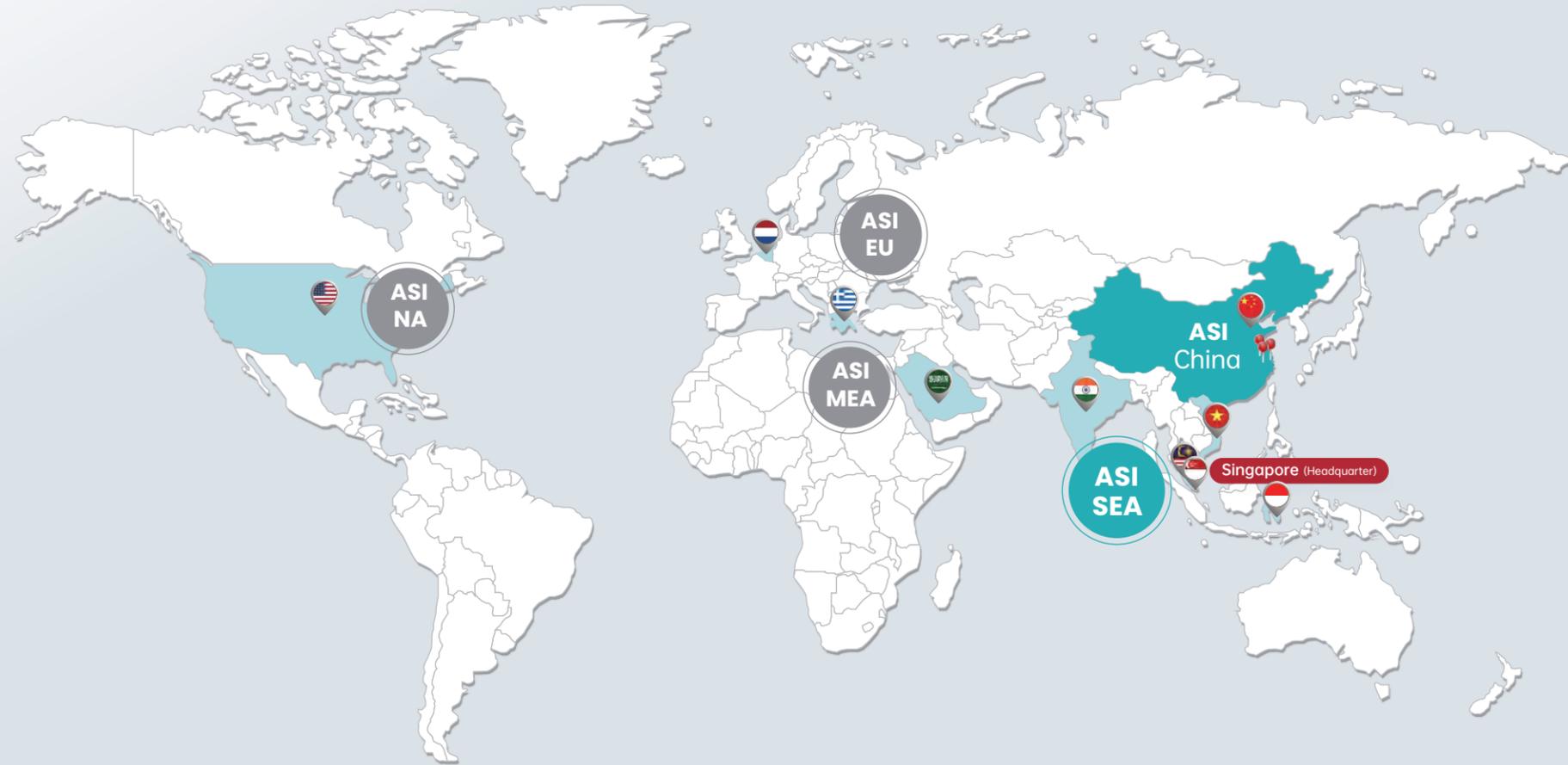| Integrated Gauging Monitoring-Alarm and Controlling System;	Network Informatization Integration Systems;	Ship Cyber Security Solutions
Ship-shore Fleet Managment Applications	Intelligent Ship System;	Sensor Transmitters, Valves, Flow Meters and Other Underlying Hardware.

1.2 Global Presence & Headquarters Map

ASI China	ASI SEA		ASI EU	ASI MEA	ASI NA
Hangzhou, Zhejiang	Singapore	Vietnam	Netherlands	Saudi Arabia	America
Wuxi, Jiangsu Province	India	Indonesia	Greece		
Shanghai	Malaysia				

1.3 Relevant Honors and Certifications

ISO 9001:2015
Quality Management System Certification

ISO/IEC 27001:2022
Information security, cyber security and privacy protect information security management system requirements

ISO/IEC 20000-1:2018
Information Technology Service Management System

YOUR SHIP'S GUARDIAN IN THE DIGITAL AGE

Network Information Integration System

02

Ship LAN System

CCTV System

Maritime LEO Satellite Communication System

VSAT Satellite Communication System

5G Cellular Mobile Network

Satellite TV System

VHF Full Ship Coverage System

Mobile Signal Enhancement System

Network Information Cabinet

We Provide

2.1 Network Information Integration System Topology

Legend:
- Network cable
- HDMI cable
- Integrated cable
- USB
- Twisted Pair
- Other

Radio Communication
- 4G/5G
- VSAT
- Maritime LEO Satellite Communication System

Oceansite Cloud Platform

Client

Marine Defender System
Oceansite Workstation

Integrated Automation

Data Source
- Flowmeter
- AMS
- Sensor
- ……

Case2: Network Port

case1:Serial port

Cabinet

AI Intelligent Workstation (Optional)

Video Compression Module (Optional)

Firewall

Marine Defender System

Oceansite System

Core Switch

Serial Device Server

NVR

Access Switch

AC Controller

Serial Device Server

case1:Serial port

Case2: Network Port

IEC 61162-450/460

Smart CCTV

From Satellite TV Server
Indoor Fixed Dome Camera
Indoor Bullet Camera
Outdoor Anti-Corrosion PTZ Camera

Optoelectronic Control Unit

From GPS
From AIS
From Radar

Ship LAN System

Access switch

Access switch

AP

Network Panel

460 Forwarder

Navigation Equipment/System
- GPS
- Autopilot
- Gyrocompass
- Speed Log
- Echo Sounder
- Anemometer
- Engine Telegraph
- AIS
- Radar

2.2 Ship LAN System-Marine Network Core Switch

Product Introduction

The Marine Network Core Switch is a Layer 3 10-gigabit industrial Ethernet switch strictly designed to meet the requirements of industrial communication systems. It features 8 auto-adaptive 10/100/1000M Ethernet ports (with optional PoE power supply) and 4 10-gigabit SFP+ expansion slots (configurable with gigabit SFP modules). The Marine Network Core Switch offers a wide range of functions, including support for the MR-ring protocol, compatibility with STP/RSTP/MSTP, port-based VLAN, 802.1Q-based VLAN, QoS, IGMP Snooping, broadcast storm suppression, port aggregation, port mirroring, and port status management. In terms of power design, the product provides dual power inputs for redundant backup. The device complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, and IEEE 802.3x standards. The Marine Network Core Switch supports Layer 3 routing, multicast routing, IPv6, and other functions, as well as multiple management methods such as Console, Telnet, and Web, delivering high-performance and highly reliable solutions for industrial communication. It is currently widely used in backbone communication systems across industries such as rail transit, intelligent transportation, urban utility tunnels, power, energy and wind power, and coal mining.

1. Layer 3 routing enables inter-VLAN communication

2. Modular flexibility with 4-port expansion options

3. High-density connectivity:Up to 8× Gigabit Ethernet ports/SFP slots, 4× embedded 10G Ethernet ports

4. Tool-less modular design for hot-swappable upgrades

5. Ultra-compact form factor with multiple mounting options

6. Passive backplane minimizes maintenance requirements

7. Rugged die-cast housing for harsh environments

8. HTML5-based web UI delivers cross-platform management

2.2 Ship LAN System-WLAN Access Controller Manager

• Automatically discover and centrally manage APs, with support for up to 100 APs

• AC is deployed in bypass mode, requiring no changes to the existing network architecture for easy deployment

• Centrally configure wireless networks, supporting SSID and Tag VLAN mapping

• Supports multiple user access authentication methods, including MAC authentication, Portal authentication, and WeChat Wi-Fi connection

• Supports AP load balancing to evenly distribute the number of wireless clients connected to APs

• Prohibits weak-signal clients from accessing and kicks out weak-signal clients

• Enables and disables AP LED lights

Interface	5 × 10/100Mbps RJ45 ports		5 × 10/100/1000Mbps RJ45 ports	
Processor	Network-specific processor, 900MHz clock speed			
LED Indicators	Per port: Link/Act, 1000Mbps		Per device: PWR, SYS	
Power Input	100-240V~50/60Hz			
Dimensions (L×W×H)	209mm x 126mm x 26mm			
Operating Environment	Operating temperature: 0℃~40℃		Operating humidity: 10%~90%RH non-condensing	
	Storage temperature: -40℃~70℃		Storage humidity: 5%~90%RH non-condensing	
Power Consumption	2.54W			
Max Manageable APs	100台 / 100 units			
Max Supported SSIDs	2.4GHz: 100 (supports Chinese SSID)		5GHz: 100 (supports Chinese SSID)	
Wireless Settings	Unified wireless network configuration		Supports enabling/disabling SSID broadcast	
	Supports wireless client isolation		Supports wireless client bandwidth limiting	
	Supports individual AP transmit power adjustment		Supports 802.1Q VLAN	
Wireless Security	64/128/152-bit WEP, WPA-PSK/WPA2-PSK, WPA/WPA2 security mechanisms			
Client List	Supported			
AP Management	AP Auto-Discovery	AP Unified Configuration		AP Remote Reboot
	AP Client Limit	AP LED On/Off Control		
AC Operation Mode	Local Management	External AC Management		
System Tools	Modify Management IP, AP IP Range, Admin Username/Password			
	Factory Reset, Backup & Restore Configuration			
	Reboot Wireless Controller, Batch AP Firmware Upgrade			
	Supports Manual Time Setting & NTP Server Sync			
	System Log Display & Remote Log Server Support			

2.2 Ship LAN System-Access Switch-POE

- 24×10/100/1000Base-T RJ45 ports（supporting PoE+ power supply）

- 2×Independent Gigabit SFP ports

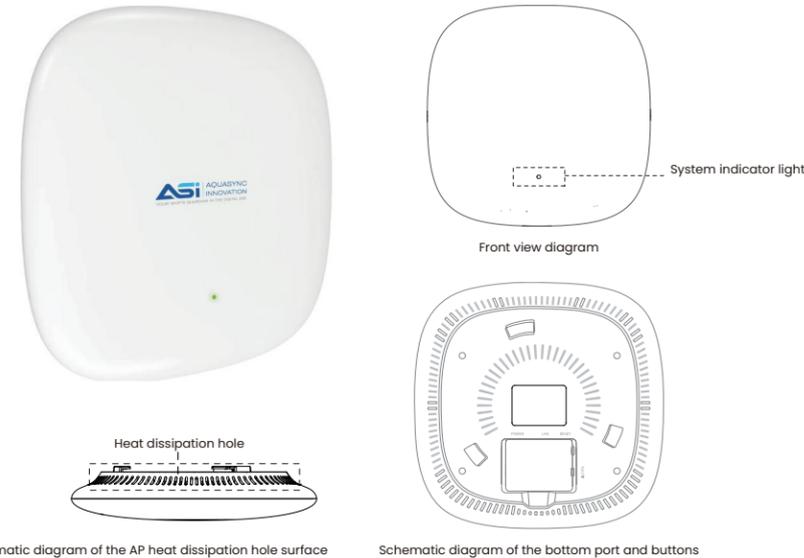- Maximum system PoE power budget: 375W

- Maximum PoE power per port: 30W

- PoE ports support priority mechanism

- Supports three operating modes: Video Surveillance, VLAN Isolation, and Standard Switching

Gigabit RJ45 Ports	24
Gigabit SFP Ports	2
PoE Ports	24GE
Total PoE Output Power	375W
Total Power Consumption	434W
PoE Standards	IEEE 802.3at (PoE+), IEEE 802.3af
Mode Switch	Standard Switching, Video Surveillance, VLAN Isolation
Input Power	220VAC, 50Hz
MAC Address Capacity	8K
Operating Environment	• Operating Temperature: 0℃～40℃ • Storage Temperature: -40℃～70℃ • Operating Humidity: 10%～90% RH non-condensing • Storage Humidity: 5%～90% RH non-condensing

2.2 Ship LAN System-Indoor Ceiling-Mounted AP

System indicator light

Front view diagram

Heat dissipation hole

Schematic diagram of the AP heat dissipation hole surface

Schematic diagram of the bottom port and buttons

RESET Button

The reset operation is as follows: While the AP is powered on, press and hold the RESET button until the system indicator light flashes, then release the button. The AP will automatically restore to factory settings and reboot. Once the reboot is complete, the system indicator light will remain steadily lit, indicating that the system has started normal operation.

DC Power Interface

When using DC power to supply the AP, you can connect a power adapter with a specification of 12V DC, 1A or higher.

FAT/FIT Mode Switch

This switch is used to switch the AP's operation mode. When set to FIT, the AP works in FIT AP mode and cannot be managed individually it must be managed through a TP-LINK wireless controller. When set to FAT, the AP works in FAT AP mode and can be managed individually via the web interface, but cannot be managed by a wireless controller. The AP will automatically reboot after mode switching.

RJ45 Port Specifications

Port	Quantity	Function
LAN	1	Connects to IEEE 802.3at/af PoE-powered devices

LED Indicator Definitions

Name	Status		Description
System LED	Power-on Boot		Solid green during boot, then fast blinks twice when ready
	AP	Solid on	System operating normally
		Flickering	In FIT mode: blinks every 2s when not connected to AC
		Off	System error or power failure

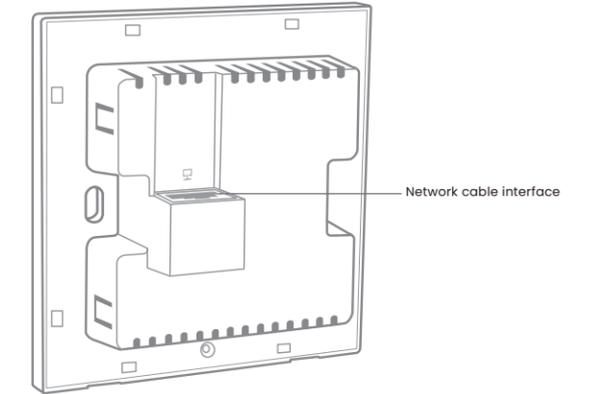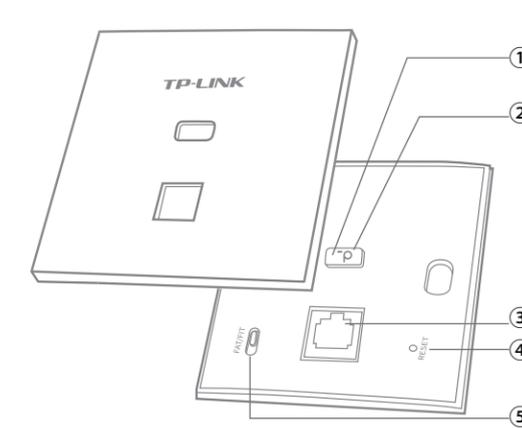# 2.2 Ship LAN System-Wireless Access Point AP

Unit of external dimensions (mm)

Physical Pictures

Product Introduction

Network cable interface

Note: Standard PoE power supply equipment that has obtained CCC certification and meets the requirements should be purchased for use in conjunction.

| Installation Method	Direct installation to international 86-type network junction box
Dimensions	86×86×33mm (L×W×H)
Wireless Speed	• 2.4GHz：300Mbps • 5GHz: 1201Mbps
Ports	Front: 1× 10/100/1000Mbps RJ45 port Rear: 1× 10/100/1000Mbps RJ45 port
Antenna	Internal antenna
Indicators	1× System status LED
Buttons	1× RESET button 1× EasyMesh button 1× FAI/FIT mode toggle switch
Power Supply	Standard PoE powered
Power Consumption	• Max: 9.5W (PoE) • Idle: 3.45W (PoE)
Operating Environment	Temperature: 0℃ to 40℃ (operating) Humidity: 10% to 90% RH non-condensing Storage temperature: -40℃ to 70℃ Storage humidity: 5% to 90% RH non-condensing

| No.	Key press	Function description
①	EasyMesh Button	When the system is working normally, press the EasyMesh button to enter EasyMesh pairing mode.
②	LED Indicator Description	System Initialization：Solid on during startup, blinks 4 times after startup completes. After Initialization Solid on: System is operating normally. Blinking: Blinks once per second during AP firmware upgrade or EasyMesh pairing. Off: System error, power failure, or LED is manually disabled.
③	Ethernet Port or IPTV Port	
④	Reset Button	Press and hold this button while powered on until the LED blinks, then release.In FIT mode, the AP will reboot and fetch the latest configuration from the AC.In FAT mode, the AP will restore factory settings and reboot.
⑤	FIT/FAT Mode Switch	Used to switch the AP operation mode. In FIT mode, the AP must be managed via a TP-LINK wireless controller (AC). In FAT mode, the AP can be managed individually via the web interface. Note: After switching modes, the AP will automatically reboot.

2.2 Wall-mounted AP

| Model	TLAPI901G Diaphragm Version
Installation Method	Pole/Wall Mounting
Dimensions	209×95×43mm
Wireless Speed	2.4GHz Band: 600Mbps 5GHz Band: 1300Mbps
Ports	1 × 10/100/1000Mbps RJ45 Port 1 × 1000Mbps SFP Port (Industrial-grade optical module recommended, operating temp ≥85ºC) 1 × DC Power Port
Antenna	External Dual-band Waterproof Detachable Omnidirectional Antenna
Antenna Coverage	360º
LED Indicator	1 × System LED
Buttons	1 × RESET Button 1 × FAT/FIT Mode Toggle Switch 1 × EasyMesh Button
Power Supply	53.5VDC/0.45A Passive PoE, 100M max power distance IEEE 802.3af/at Standard PoE 12-53.5V DC Input (Includes DC Power Adapter & PoE Injector)
Power Consumption	Max PoE Power: 15.5W PoE Idle Power: 5.2W
Management	FIT AP Mode: Managed by TP-LINK Wireless Controller (AC)

Installation Method 2: Pole Mounting

1.Use a flathead screwdriver to turn the screw on the stainless steel band counterclockwise until the band is fully loosened.
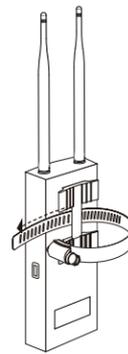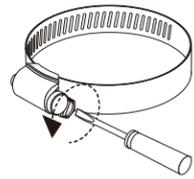
2. Insert the end of the stainless steel band through the small hole on the back of the wireless AP.
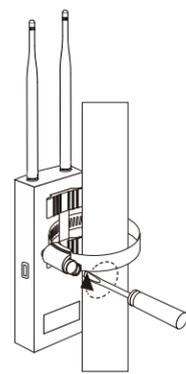
3. After determining the mounting position of the wireless AP on the pole, secure the AP firmly to the pole using the stainless steel band.

2.2 Ship LAN System-Indoor Network Faceplate with 86-type Back Box
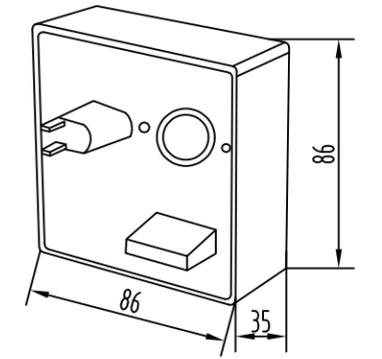
Unit of external dimensions (mm)

Physical Pictures

### Front view diagram

86

86
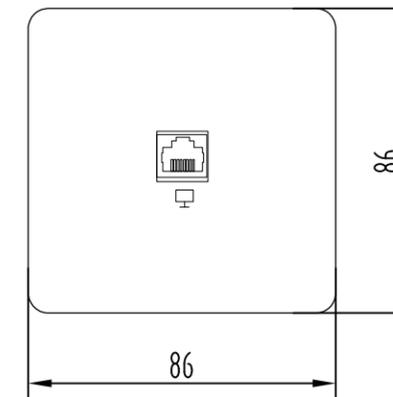
Product Introduction
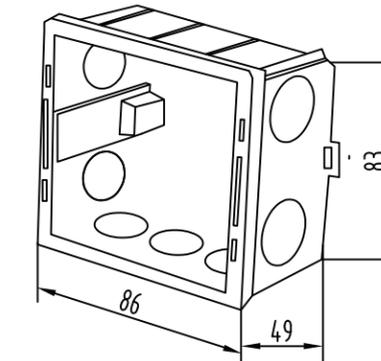
Recessed Junction Box

83

86

49

Surface-mounted Junction Box

86

35

Performance Description

Performance and Specifications	Compliance Standard: JB/T 8593
	Features: Comes with an appearance patent certificate
	Compatibility: Supports installation of Cat.8/6A/6/5e/3 modules
	Specifications: 1-port/2-port/4-port options available
Parameters and Characteristics:	Style: Flat port
	Structure: Ports feature a spring-loaded door mechanism to protect modules and shield against dust and debris; panel adopts a modular design (dual-layer front and back panel) to conceal fixing screw holes
	Material: High-quality flame-retardant PC+ASB engineering material, compliant with UL 94 V-0
	Labeling: Transparent label windows above ports; accessories include embedded voice and data icons for easy label management and identification of data/voice ports
	Operating Temperature: -10 ~ +60℃

2.3 CCTV Network Topology Diagram
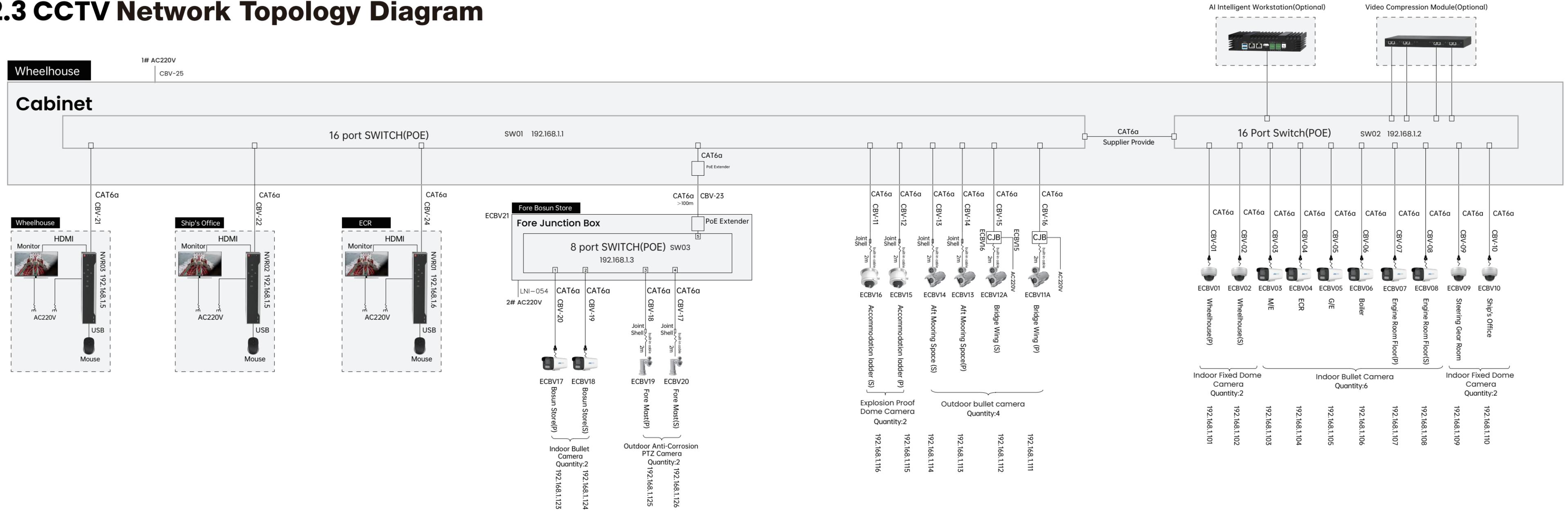
2.3.1 Smart CCTV Technological Policies Reference

Requirement / Standard	China MSA Technical Guide 1.0
Effective Date	Mar. 2025
Applicability	Domestic Oil /Chemical Tankers, Gas Carriers and Passenger Ships
Minimum Resolution ≥1080p / ≥2MP	✓
Min. Frame Rate ≥30FPS / ≥15FPS	✓
Ingress Protection (IP66 In-door & IP68 Outdoor)	
Marine-grade Certification	
AI Anomaly Detection (Fatigue, Fire, PPE, etc.)	✓ (Mandatory)
Edge AI Device ≥6TOPS	✓
Real-time Voice Alarm	✓
Min. Local Storage (14 days / 30 days)	✓ (30 days)
Remote Viewing & Alerts	✓
Cybersecurity Compliance	
IEC 62676	
MLPS 2.0	✓

Our smart CCTV system exceeds the safety and surveillance requirements outlined in India's DGS MSN 02 of 2025 and fully complies with the technical standards mandated by China's MLPS Level 2 and MSA Technical Guide 1.0.

Requirement / Standard	India DGS MSN 02/2025
Effective Date	Existing: 12 Feb 2028 Newly Registered Ships: 3 year from registration date
Applicability	Indian flagged and SPL Vessels
Minimum Resolution ≥1080p / ≥2MP	✓
Min. Frame Rate ≥30FPS / ≥15FPS	✓
Ingress Protection (IP66 In-door & IP68 Outdoor)	✓
Marine-grade Certification	✓
AI Anomaly Detection (Fatigue, Fire, PPE, etc.)	✓ (Recommended)
Edge AI Device ≥6TOPS	
Real-time Voice Alarm	
Min. Local Storage (14 days / 30 days)	✓ (14 days)
Remote Viewing & Alerts	✓
Cybersecurity Compliance	✓
IEC 62676	✓
MLPS 2.0	

Our smart CCTV system exceeds the safety and surveillance requirements outlined in India's DGS MSN 02 of 2025 and fully complies with the technical standards mandated by China's MLPS Level 2 and MSA Technical Guide 1.0.

2.3.1.1 Smart CCTV-NVR

• Supports connection to network cameras compliant with Open Network Video Interface, RTSP, and GB28181 standards

• Supports preview, storage, and playback of high-definition network video up to 32 megapixels

• Supports adaptive access for H.265 and H.264 encoded front-end devices

• Features 2 HDMI ports and 1 VGA port, supporting 8K+1080P or dual 4K heterogeneous output

• Supports instant playback during live preview and simultaneous playback of up to 16 channels

• Supports two storage modes: hard disk quota and disk group for customized recording allocation

• Provides 2 adaptive Ethernet ports supporting network fault tolerance and multi-address configuration

System Parameters	Video Input Channels	32 Channels
	Network Input Bandwidth	320 Mbps
	Network Output Bandwidth	256 Mbps
	Recording Resolution	32MP/24MP/12MP/8MP/7MP/6MP/5MP/4MP/3MP/1080p/UXGA/720p/VGA/4CIF/D1/2CIF/CIF/QCIF
Video Parameters	Video Output	2 HDMI, 1 VGA; Supports up to 8K + 1080P heterogeneous output
	HDMI Output	HDMI1: 8K (7680×4320) @30Hz, 4K (3840×2160) @30Hz, 2K (2560×1440) @60Hz, 1080P (1920×1080) @60Hz
	VGA Output	VGA: 1080P (1920×1080) @60Hz
	CVBS Output	1 channel (rear)
	Main Split Screen	HDMI1 / VGA: 1 / 2 / 4 / 6 / 8 / 9 / 16 / 25 / 36 screens
	Auxiliary Split Screen	HDMI2: 1 / 2 / 4 / 6 / 8 / 9 / 16 / 25 / 36 screens
	Video Decoding Format	H.265, Smart265, H.264, Smart264
	Decoding Capability	32×1080P
	Local Synchronized Playback	Up to 16 channels
Network Management	Network Protocols	IPv6, HTTPS, UPnP, SNMP, NTP, SADP, SMTP, PPPoE
	Network Interfaces	2 RJ45, 10/100/1000 Mbps adaptive Ethernet ports
	Serial Interfaces	1 RS-232 interface, 2 half-duplex RS-485 interfaces
External Interfaces	USB Interfaces	2 USB 2.0 (front), 1 USB 3.0 (rear)
	Alarm Input	16 channels, switchable (0~5V high level)
	Alarm Output	4 relay channels, expandable to 9 (9th supports 12V Ctrl power)
	Reverse Power Supply	Optional 1 channel DC12V, 1A (external cable up to 3 meters)
Power Specifications	Power Specification	AC 200V~240V, 150W
	Power Consumption	≤ 50W (without HDD)

2.3.1.2 Smart CCTV-AI Intelligent Workstation

Superior Computing Performance

Computing power up to 17.6 TOPS, supporting 32 channels of real-time H.264/H.265 decoding on a single chip.

User-Friendly Development Environment

- Supports Caffe, TensorFlow, PyTorch, ONNX, PaddlePaddle, and more.
- Enables Docker deployment and Python development with OpenCV/FFmpeg hardware acceleration.
- Includes open-source pipeline tools for full data workflow integration.

Rich Peripheral Interface Resources

Expandable 4G/5G/MiFi wireless connectivity for flexible edge business deployment.

Expandable mSATA SSD storage to meet high-capacity data storage requirements.

Stable and Reliable Performance

Low-power design with an efficient casing for heat dissipation.

Operates reliably in a wide temperature range from -20ºC to 60ºC.

Item	Type	Model Parameter	Description
Core Configuration	Processor	CPU	8-core ARM Cortex A53@2.3GHz
		TPU	BM1684
		INT8	17.6 Tops
		FP32	2.2 TFLOPS
	Memory	LPDDR4	Default configuration: 12 Gbyte, Optional configuration: 16 Gbyte
	Flash Storage	eMMC	Default configuration: 32 Gbyte, Optional configuration: 64 Gbyte
Encoding/Decoding Performance	Video Decoding	Video Decoding Capability	32 channels of 1080P @ 30fps, supports H264 and H265 formats
		Video Encoding	1080P @ 50fps
		Image Decoding	1080P, 480 images per second
Hardware Features	Ethernet Port	x2	Supports 10/100/1000M network connectivity
	RS-232	x1	Can connect to smoke detectors, infrared detectors, access control systems, or alarms (RS-232 cable ≤10m)
	RS-485	x1	Compatible with smoke detectors, infrared detectors, access control systems, or alarms
	HDMI	x1	Can output 1080P@60fps video source to a display terminal
	Relay	x1	Suitable for current loads under 36V
	RST	x1	General GPIO button, can be used for application software reset
	USB 3.0	x2	Can connect to devices such as USB drives, USB mice, USB keyboards, etc.
	DEBUG	x1	System debugging port (Type-C)
	TF Card Slot	x1	Supports TF card expansion (class 10 or higher recommended)
	GPIO	x2	Can output control signals to external devices
	Power Supply Port	x1	Supports DC 12V / 4A

2.3.1.3 Smart CCTV-Video Compression Module

Consistency: No change in video parameters (frame rate, resolution, format) after compression.

High Compression Ratio: Static: 15–30x; Dynamic: 6–8x.

Low average bitrate:1080P@25fps: ~600Kbps, 2K@25fps: ~700Kbps, 4K@25fps: ~900Kbps

Visually Lossless Quality: Retains visual fidelity for AI tasks (license plate/face recognition).

4K Ready: Fully supports resolutions up to 4K.

Easy Integration: Single-end deployment, no extra decompression hardware, seamless with existing surveillance.

Dual Network Ports: Enables internal/external network access and video upload.

DHCP Support: Compatible with DHCP protocol.

Low Latency: Encoding delay as low as 100ms.

Dual-Stream Output: Simultaneous main stream + sub-stream (360P/D1).

Parameter Name	Description
Main Processor	Industrial-grade embedded microcontroller
Operating System	Embedded Linux operating system
Operation Interface	Web-based operation
IPC Access	A single compression module supports 8 channels of 1080P, or 5 channels of 2K, or 2 channels of 4K, with a maximum support of 16 million pixels. The 1U chassis supports up to 5 compression modules, while the 2U chassis supports up to 25 compression modules.
Supported Resolutions	4096*2160; 3840*2160; 3392*2008; 2592*1520; 2560*1440; 2304*1296; 2048*1536; 2048*1080; 1920*1080; 1280*720
Encoding Format	H.264, H.265
Device Latency	≤100ms
Resolution/Frame Rate Consistency	Compressed video retains original resolution and frame rate.
Protocols	Control protocols: ONVIF, GB28181, Transmission protocols: RTSP/RTMP/HTTP/UDP/TCP/RTP/RTCP
Center Horizontal Resolution	Post-compression center horizontal resolution: 1920*1080 ≥ 1000 TVL, 2560*1440 ≥ 1300 TVL, 3840*2160 ≥ 1700 TVL
National Standard Inspection Report	Supports GB/T 28181 protocol and provides Ministry of Public Security type inspection report.
API Interface	Supports dynamic compression switching: The device provides HTTP interfaces for secondary development, enabling custom functions such as dynamic polling and switching.
Security Backup	Supports security backup management, enabling reconnection mechanism for video channel disconnections, real-time alarm for device disconnections, and device replacement for fault migration.
Network Interface	Each compression module includes 2 RJ45 network ports: 10/100/1000 Mbps adaptive.
Status Lights	Each compression module has 1 set of indicator lights: includes 1 power indicator
Power Supply	AC 220V with redundant power support.
Power Consumption	Full load power consumption: 1U model 50W; 2U model 200W.
Operating Environment	Operating temperature: Low temperature (-20±3)ºC, High temperature (+70±2)ºC; Operating humidity: 10%~90%RH, non-condensing.

2.3.2 CCTV System

| Name	Outdoor Anti-Corrosion PTZ Camera	Outdoor Dome Camera	Outdoor Bullet Camera	Indoor Bullet Camera	Indoor Fixed Dome Camera	Outdoor Anti-Corrosion PTZ Camera	Outdoor Dome Camera	Outdoor Bullet Camera	Outdoor Bullet Camera	Outdoor Bullet Camera	Outdoor Bullet Camera	Outdoor Bullet Camera	Indoor Fixed Dome Camera	Indoor Fixed Dome Camera	Explosion Proof Dome Camera	Explosion Proof PTZ Camera	Explosion Proof Bullet Camera	Explosion Proof Bullet Camera
Model	ASI-2DY7430I-CWX	ASI-2DF8C432MX-AY	ASI-2XC6646-IZHRSY	ASI-2CD2245CV6-L	ASI-2CD2345CV4-I	ASI900	ASI600	ASI-VL404IRW01	ASI-VL432IRW01	ASI801	ASI-FL404IR02	ASI300	ASI2000	ASI-2CD1143G0-I	EX-ASIPTZ4010IR04N	EX-ASIPTZ4033IRW01	EX-ASI404IRW01	EX-ASI404IR02
Pixel	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP	4MP
Protection Grade	IP68	IP67	IP68	IP66	IP67	IP68	IP67	IP68	IP68	IP68	IP68	IP68	IP66	IP67	IP67	IP68	IP68	IP68
Focal Length	Zoom available, 32x	Zoom available, 32x	Zoom available, 4x	Fixed focus	Fixed focus	Zoom available, 33x	Zoom available, 5x	Zoom available, 4x	Zoom available, 32x	Zoom available,18x	Fixed focus	Fixed focus	Fixed focus	Fixed focus	Zoom available, 5x	Zoom available, 33x	Zoom available, 4x	Fixed focus
Chinese Interface	√	√	√	√	√	√	√	/	/	√	/	√	/	√	/	√	√	/
English Interface	/	/	/	/	/	√	√	√	√	√	√	√	√	√	√	√	√	√
DC12V Power Supply	/	/	/	/	/	/	/	/	/	√	/	/	/	/	/	/	/	/
AC/DC24V Power Supply	/	√	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
AC100V-240V Power Supply	√	/	/	/	√	/	/	/	√	/	/	/	/	/	√	/	/	/
POE Power supply	/	/	√	√	√	/	√	√	/	√	√	√	√	√	√	/	/	/
Heating	√	√	√	/	/	√	/	√	√	√	/	/	/	/	/	√	√	/
Infrared	150m	500m	60m	30m	30m	150m	40m	100m	200m	/	30m	15m	30m	30m	40m	150m	100m	30m
Wiper	√	√	√	/	/	√	/	√	√	√	/	/	/	/	/	√	√	/
Explosion-proof	/	/	/	/	/	/	/	/	/	/	/	/	/	/	ATEX:II 2G Ex db IIC T6 Gb	ATEX:II 2G Ex db IIC T6 Gb	ATEX:II 2G Ex db IIC T6 Gb	ATEX:II 2G Ex db IIC T6 Gb
Suggested Installation Location	Compass deck, mast, deck, bow and stern monitoring	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Engine Room	Cab, central control room, indoor rooms and corridors	Compass deck, mast, deck bow and stern monitoring	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Cab, central control room, indoor rooms and corridors	Cab, central control room, indoor rooms and corridors	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Compass deck, mast, deck bow and stern monitoring	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage	Left and right wings, port and starboard sides, front and rear mooring areas, gangway passage

2.3.2.1 CCTV Solution for Vessels

ASI404IRWO1

ASI2000

ASI900

ASI600

ASI801

ASIPTZ4010IR04

ASI900
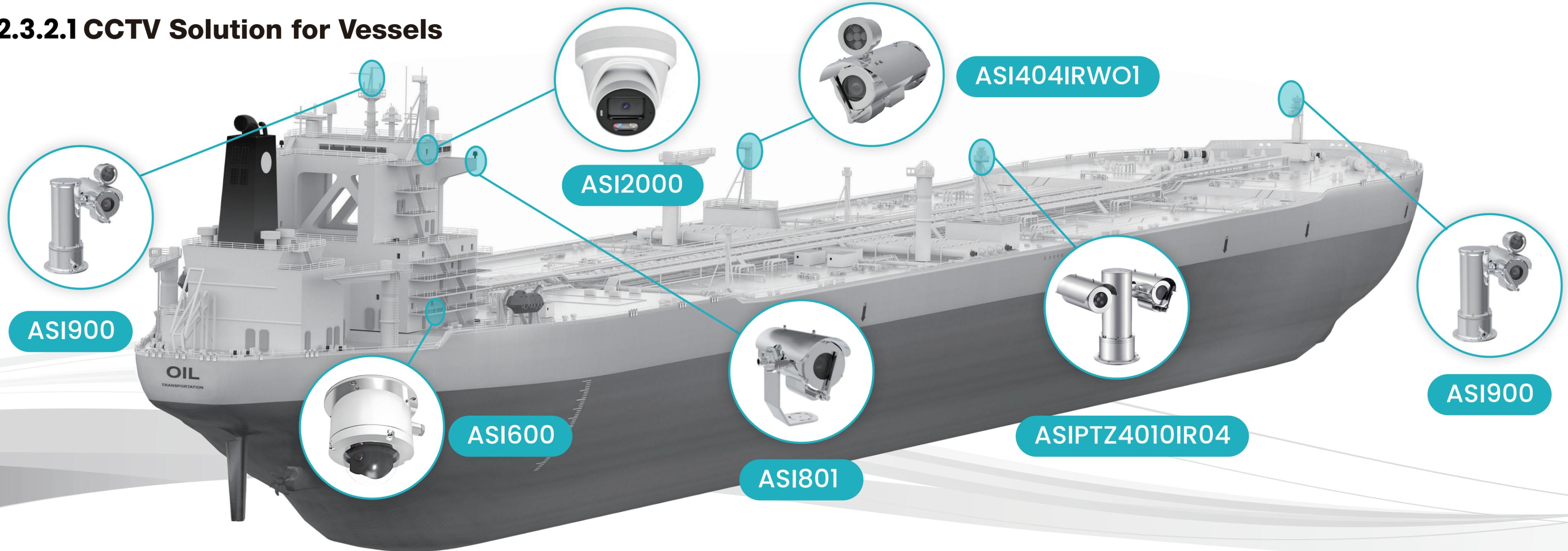
2.3.2.2 Marine CCTV Camera

ASI-2DY7430I-CWX

Outdoor Anti-Corrosion PTZ Camera

- Enclosure Material: SS316L
- Resolutiont: 4MP
- Protection: IP68
- Focal Length: 5.9-188.8mm Zoom lens
- IR Supplement Light Range: 150m
- Powe: POE:802.3at
- PTZ Function: Horizontal range: 0~360° , Vertical range: -90°~+90° (auto-flip)
- Power: AC100V -240V
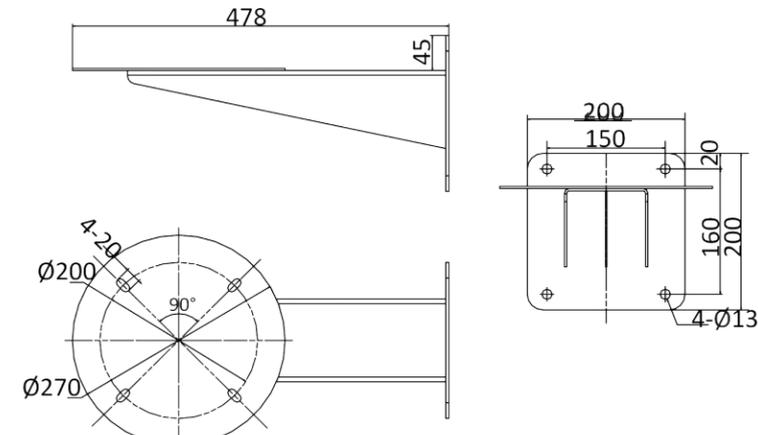
DIMENSIONS

Installation location

The exterior of the stern engine compartment canopy *2

Left *1 on the driver's deck

In the driver's deck *1

Right of the driver's deck *1
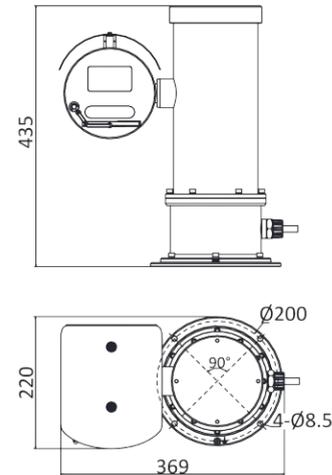
ASI-2DF8C432MX-AY

Outdoor Dome Camera

- Maximum image size: 2560 × 1440
- Product size: Ø242 × 398.1 mm
- Pixe: 400W
- Enclosure Material: Anti-Corosion Protection
- Weight: 6kg
- Protection: IP67
- Heating: Yes
- IR Supplement Light Range: 500m
- Startup and Operating Conditions: -40"c~60°c, Humidity 95% or less (non-condensing)
- Power: DC： DC： 36 V， 1.67 A/AC： 24 V， 3 A
- PTZ Function： Horizontal range: 0~360° , Vertical range: -20°~-90° (auto-flip)

DIMENSIONS
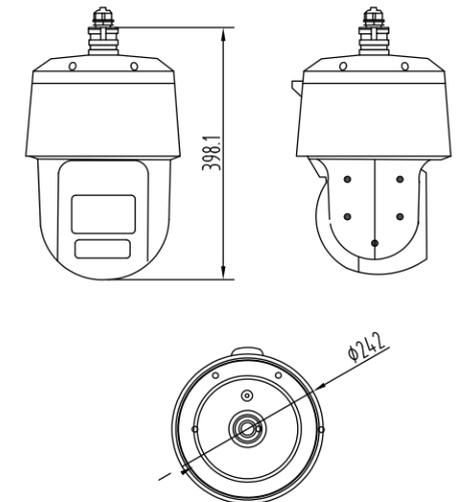
2.3.2.2 Marine CCTV Camera

ASI-2XC6646-IZHRSY

Outdoor Bullet Camera

- Maximum image size: 2688x1520
- Product size: 240.8 x145 x166.6 mm
- Pixe: 400W
- Enclosure Material: Anti-Corrosion Protection
- Weight: 4265g
- Protection: IP68
- Wiper: Yes
- Heater: Yes
- IR Supplement Light Range: 2.8~12mm:60m, 8~32mm:100m
- Power: DC:12V+20% or POE: 802.3at , 42.5 V~57 V
- Startup and Operating Conditions: -40"c~60°c , Humidity 95% or less (non-condensing)
- Current and power consumption: ① DC:12V±20%, 1.8A, Maximum power consumption:22W, ② POE: 802.3at, 42.5V~57V, 0.5A~0.4A, Maximum power consumption:22 W
- Focal Length & FOV: ① 2.8~12 mm @F1.4, Horizontal FOV:100.8°~40.2°, Vertical FOV:53.3°~22.5°, Diagonal FOV:122.3°~ 46.2, ② 8~32 mm @F1.7, Horizontal FOV:40.7°~14.6°, Vertical FOV:22,3°~8.3°, Diagonal FOV:47.4°~16.7

DIMENSIONS
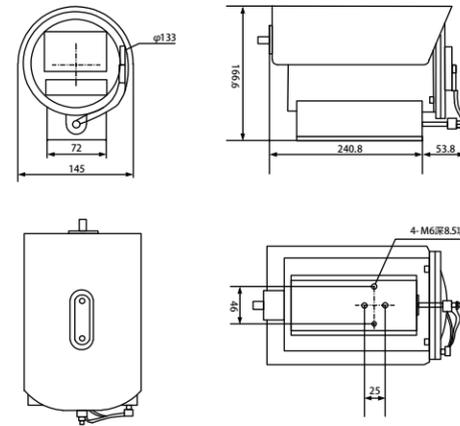
ASI-2CD2245CV6-L

Indoor Bullet Camera

- Maximum image size: 2560 × 1440
- Product size: 87.1 × 83.7 × 171.7 mm
- Pixe: 400W
- Enclosure Material: Engineering plastic
- Weight: 350 g
- Protection: IP66
- IR Supplement Light Range: 30 m
- Startup and Operating Conditions: -30"c~60°c, Humidity 95% or less (non-condensing)
- Power: DC： 12 V ± 25%, Support anti reverse connection protection, PoE： 802.3af, Class 3
- Focal Length & FOV: ① 4mm, Horizontal FOV： 75.3°, Vertical FOV： 41.4°, Diagonal FOV： 88.2°, ② 6mm, Horizontal FOV： 49°, Vertical FOV： 26.3°, Diagonal FOV： 57.2°, ③ 8mm, Horizontal FOV： 37.5°, Vertical FOV： 20.7°, Diagonal FOV： 43.3° , ④ 12 mm, Horizontal FOV： 23.4°, Vertical FOV： 13.3°, Diagonal FOV： 26.8°.

DIMENSIONS
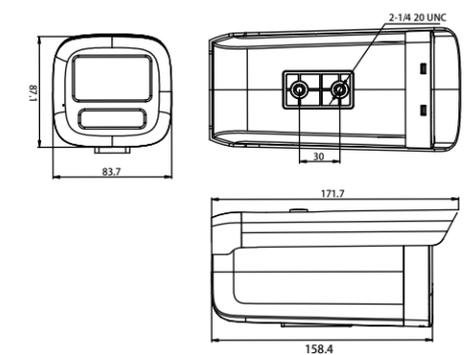
2.3.2.2 Marine CCTV Camera

ASI-2CD2345CV4-I

MARINE CCTV SYSTEM

Indoor Fixed Dome Camera

- Maximum image size: 2560 × 1440
- Product size: ∅111 × 82.4 mm
- Pixe: 400W
- Enclosure Material: Engineering plastic
- Weight: 360 g
- Protection: IP67
- IR Supplement Light Range: 30 m
- Startup and Operating Conditions: -30"c~60°c , Humidity 95% or less (non-condensing)
- Power: DC：12 V ± 25% , Support anti reverse connection protection , PoE：802.3af, Class 3
- Focal Length & FOV: ① 2.8mm，Horizontal FOV：98.0° , Vertical FOV：53.1° , 角 Diagonal FOV：114.7° ② 4mm , Horizontal FOV：78.7° , Vertical FOV：43.1° , Diagonal FOV：92.3°

DIMENSIONS
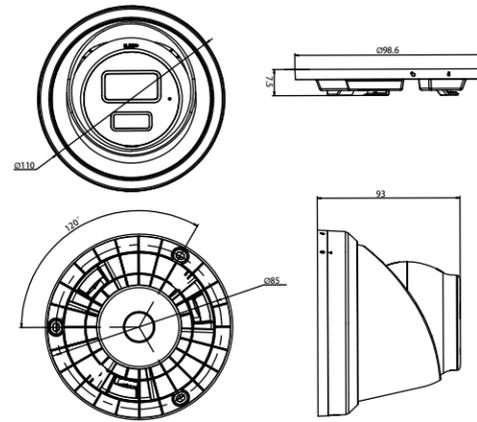
Outdoor Anti-Corrosion PTZ Camera

- Stainless steel 316L Enclosure,
- Ingress protection IP68,
- 4.5-148.5mm Vari-focal lens,
- 33XOptical Zoom,16x Digital Zoom,
- Pan 0-360° Tilt -90°n speed: 0.1-45°/s adjustable,
- AC110-240V Standard (AC30V.DC24V,POE++ Optional),
- Resolution 2560*1440.

Outdoor Dome Camera

- Stainless Steel 316L Enclosure,
- IP68 Ingress Protection,
- IR Distance 40meters,
- Support Pan&Tilt Functions,
- 5MP /2.7-13.5mm Focal Length,
- DC12V/PoE Power optional,
- Resolution 2560*1440.

ASI900

MARINE CCTV SYSTEM

DIMENSIONS

ASI600

MARINE CCTV SYSTEM

DIMENSIONS
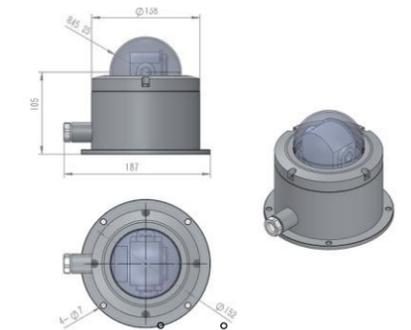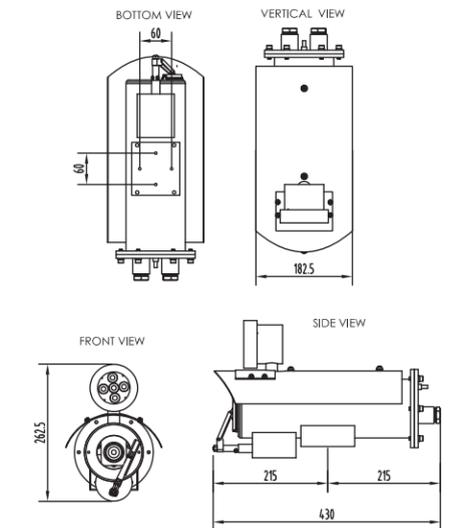
2.3.2.2 Marine CCTV Camera

ASI-VL404IRW01

MARINE CCTV SYSTEM

Outdoor Bullet Camera

- Maximum image size: 2560 × 1440
- Product size: 430x183 x263 mm
- Pixe: 400W
- Enclosure Material: 316L+Anti-Corosion Protection
- Weight: 8000g
- Protection: IP68
- Wiper&IR: Yes
- IR Supplement Light Range: 100m
- Powe: POE:802.3at
- Startup and Operating Conditions: -40ºc~60ºc , Humidity 100% or less (non-condensing)
- Power Consumption: Maximum power consumption:18w
- Focal Length & FOV: 2.8~12 mm, Horizontal FOV:107.4~39.8º, Optical zoom magnification: 4x

DIMENSIONS
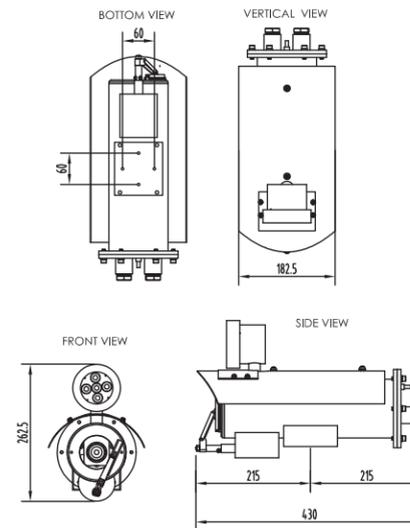
ASI-VL432IRW01

MARINE CCTV SYSTEM

Outdoor Bullet Camera

- Maximum image size: 2560 × 1440
- Product size: 430x183 x263 mm
- Pixe: 400W
- Enclosure Material: 316L+Anti-Corosion Protection
- Weight: 8000g
- Protection: IP68
- Wiper&IR: Yes
- IR Supplement Light Range: 100m
- Powe: POE:802.3at
- Startup and Operating Conditions: -40ºc~60ºc , Humidity 100% or less (non-condensing)
- Power Consumption: Maximum power consumption:18w
- Focal Length & FOV: 2.8~12 mm, Horizontal FOV:107.4~39.8º, Optical zoom magnification: 4x

DIMENSIONS

2.3.2.2 Marine CCTV Camera

- **Outdoor Bullet Camera**
- Enclosure material: SS316L
- Protection: IP68
- Resolution: 4MP
- Wiper: Yes
- Maximum Image Size: 2560×1440
- Power : DC12V Standard (AC110-240V,POE+ Optional)
- Focal Length : 5.5-99mm Vari-focal lens,18X Optical Zoom,16x Digital Zoom,

- **Outdoor Bullet Camera**
- Protection: IP68
- Maximum Image Size: 2560x1440
- IR supplement Light Range: 200m
- Product Size: 430x183 x263 mm
- Pixel: 4MP
- Weight: 2500g
- IR: Yes
- Power: POE:802.3at
- Startup and Operating Conditions: -40ºc~60ºc, Humidity 100% or less (non-condensing)
- Power Consumption: Maximum power consumption:7w
- Enclosure Material: 316L+Anti-Corosion Protection
- Focal Length & Fov: 2.8/4 mm ，Horizontal FOV:112.1º/90.2º Fixed focus

ASI801

MARINE CCTV SYSTEM
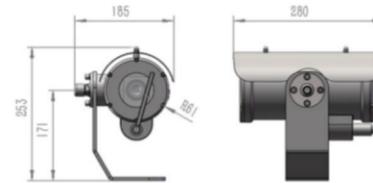
DIMENSIONS

ASI-FL404IR02

MARINE CCTV SYSTEM

DIMENSIONS
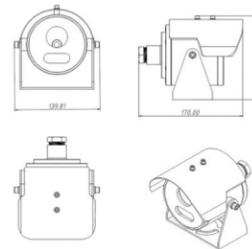
- **Outdoor Bullet Camera**
- Pixel: 4MP
- Protection: IP68
- IR Supplement Light Range: 15m
- Maximum Image Size: 2560×1440
- Enclosure Material: SS 316L Enclosure
- Power: DC12V/PoE power optional

- **Indoor Fixed Dome Camera**
- Pixel: 4MP
- Protocol & Compatibility: Support RTSP&Onvif(17.2 with profile S)Compatible with Many Third-Party NVRs and CMS,
- Key Features: Day/Night,AWB/MWB,BLC, 3D-DNR,Shutter, IR-CUT,D-WDR,Mirror, Image Flip etc. Functions,
- Alarm Function: Support Red and Blue Light Flashing Alarm,
- Lens Specification: 3.6mm F1.0 Fixed Lens,
- Protection: IP66, Water-Proof
- Power: POE （802.3at）

ASI300

MARINE CCTV SYSTEM
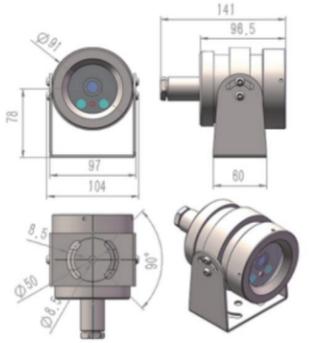
DIMENSIONS

ASI2000

MARINE CCTV SYSTEM

DIMENSIONS

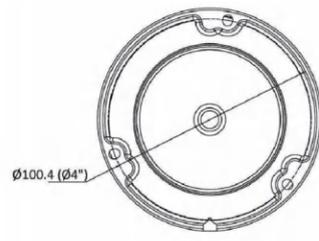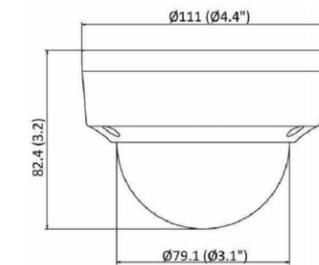# 2.3.2.2 Marine CCTV Camera

ASI-2CD1143G0-I

MARINE CCTV SYSTEM

Indoor Fixed Dome Camera

- **Maximum image size:** 2560 × 1440
- **Product size:** Ø111 × 82.4 mm
- **Pixe:** 400W
- **Enclosure Material:** Engineering plastic
- **Weight:** 360g
- **IR Supplement Light Range:** 30m
- **Powe:** POE:802.3at
- **Startup and Operating Conditions:** -40ºc~60ºc , Humidity 100% or less (non-condensing)
- **Power Consumption:** DC：12 V ± 25% , Support anti reverse connection protection , PoE：802.3af，Class 3
- **Focal Length & FOV:** ① 2.8mm, Horizontal FOV：98.0º, Vertical FOV：53.1º, Diagonal FOV：114.7º . ② 4mm, Horizontal FOV：78.7º, Vertical FOV：43.1º, Diagonal FOV：92.3.

DIMENSIONS

Ø111 (Ø4.4")
82.4 (3.2)
Ø79.1 (Ø3.1")
Ø100.4 (Ø4")

Unit: mm (inch)

EX-ASIPTZ4010IR04

MARINE CCTV SYSTEM

Explosion Proof Dome Camera

- Stainless Steel 316L Enclosure,
- Ingress Protection IP68,
- Up to 5 Megapixel High Resolution,
- Max.2592*1944@25fps(50HZ/60HZ),
- Day/Night, AWB/MWB, BLC, 3D-DNR, Shutter, IR-CUT D-WDR, Mirror, Image Flip etc. functions,
- 10X 5-50mm Motor Lens,
- IR Range: up to 40m,
- Pan: 0~355º(35º/s)/Tilt:0~90º(25º/s)/Zoom 12X,
- Power：12 V DC ± 10%/PoE(Optional),
- Explosion-Proof Protection：ATEX:ATEX:II 2G Ex db IIC T6 Gb/II 2D Ex tb IIIC T80℃Db.

DIMENSIONS

Ø138
Ø45
106
187
Ø7
Ø158
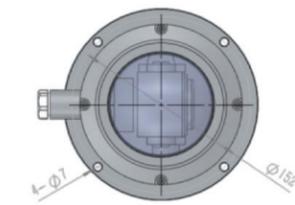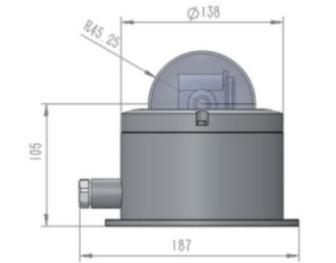
# 2.3.2.2 Marine CCTV Camera

EX-ASIPTZ4010IR04

MARINE CCTV SYSTEM

Explosion Proof PTZ Camera

- Stainless Steel 316L Enclosure,
- Ingress Protection IP68,
- Power：AC 100V-240V /POE++ optional,
- Explosion-Proof Protection：ATEX:ATEX:II 2G Ex db IIC T6 Gb/II 2D Ex tb IIIC T80℃Db,
- Foca Distance：Electric and dynamic zoom,4.5~148.5mm,
- Support starlight level low ilumination, excellent monitoring effect under weak light conditions,
- 33 x optical zoom, using a self-developed focusing algorithm, with a fast and accurate focus,
- 120dB wide dynamic, to meet the monitoring requirements of high brightness contrast scene,
- Support in addition to the heat wave, the hot weather image is clear and stable,
- Support the image anti-shake, effectively reduce the picture itter, make the image stable and clear,
- Automatic Day and Night Conversion Function (ICR),
- Support 2688* 1520 @ 30 fps, so that the picture presents a smooth motion image,
- Horizontal:0º-360"/Vertical Angle:-90º-+90"/Rotation speed:Approximately 5s(opticallens, wide to tele).

DIMENSIONS
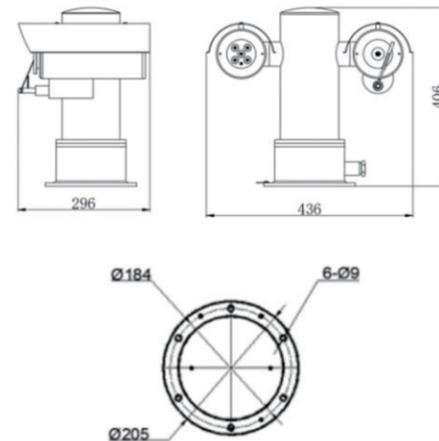
296   436   406

Ø184   6-Ø9
Ø205

Explosion Proof Bullet Camera

- Stainless Steel 316L Enclosure,
- Ingress Protection IP68,
- Power：DC 12V+25%, DC24V, AC24V POE+, AC100 -240V optional,
- Explosion-Proof Protection：ATEX:ATEX:II 2G Ex db IIC T6 Gb/II 2D Ex tb IIIC T80℃Db,
- With a maximum resolution of up to 2560*1440,
- The focal length is 2.8 mm~12 mm, with ultra-wide field angle,
- Support ICR infrared filter type automatic switch,
- Intelligent wiper function, the wiper adopts automobile wiper blade, which has, good weather resistance and easy replacement.
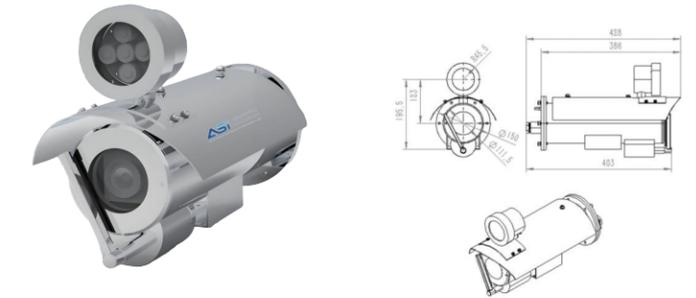
Explosion Proof Bullet Camera

- Stainless Steel 316L Enclosure,
- Ingress Protection IP68,
- 4MP/2.8mm/4mm Fixed Lens,
- Smart IR, up to 30m (98ft) IR Distance,
- Day/Night Functionality,
- Power：DC 12 V±25%POE Optional,
- Explosion-Proof Protection：ATEX:II 2G Ex db IIC T6 Gb/II 2D Ex tb IIIC T80℃Db.

EX-ASI404IRW01

MARINE CCTV SYSTEM

DIMENSIONS

EX-ASI404IR02

MARINE CCTV SYSTEM

DIMENSIONS

2.3.2.3 Bracket

Anti-Shake SS316L Wall Mounting Bracket for Big Bullet Camera

• Weight: ≤3.1kg,

• Material: 316 stainless steel, suitable for use in strong corrosive,

• Appllcation scenarios: It is used for the installation ofexplosion-proof integrated camera, explosion-proof electric PTZ and other related special equipment ,

• Pecuiarityit has flame resistance, corrnsion resictance, water resistance aging resistance, stable structure, and improves on-site reliability.

ASIB004T

MARINE CCTV SYSTEM

Anti-Shake SS316L Wall Mounting Bracket for PTZ Camera

• Weight: ≤10.25kg,

• Material: 316 stainless steel,suitable for use instrong corrosive environments,

• Application scenarios: It is used for the installation of explosion-proof integrated camera and other related special equipment,

• Peculiarityit has flame resistance, corrosion resistance water resistance aging resistance, stable structure,and improves on-site reliability.

ASIB005T

MARINE CCTV SYSTEM

2.3.2.4 Monitor

HP E24q G5 QHD

MARINE CCTV SYSTEM

Monitor

• **Display Size:** 24-in

• **Maximum resolution:** 2560 x 1440 @ 75Hz

• **Aspect Ratio:** 16:9

• **Power Source:** 100-240VAC 50/60Hz

• **Power Consumption-Typical:** 39W

• **Product Weight:** 12Kg
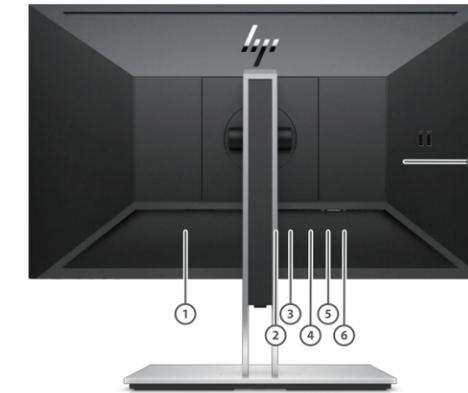
DIMENSIONS

Name of component

Joypad OSD button

Security Cable Slot

Power Connector

HDMI 1.4 HDMI 1.4 Port

1.2 DisplayPort™ 1.2

USB-B Port

SuperSpeed USB Type-A 5Gbps signaling rate (2)

SuperSpeed USB Type-A 5Gbps signaling rate (2) 1 charging

2.3.2.4 Monitor

HP E24q G5 QHD

MARINE CCTV SYSTEM

Embedded Monitor
- Display Size: 24-in
- Maximum resolution: 2560 x 1440 @ 75Hz
- Aspect Ratio: 16:9
- Power Source: 100-240VAC 50/60Hz
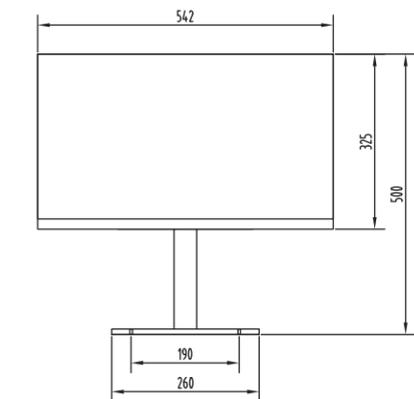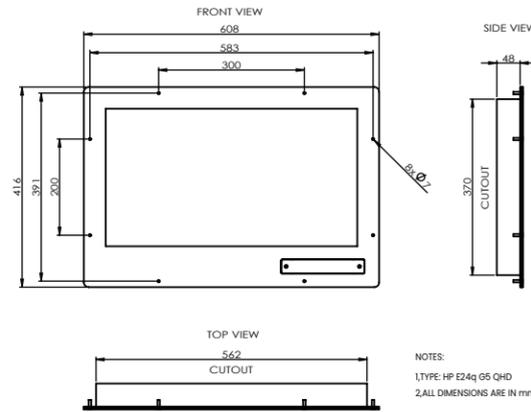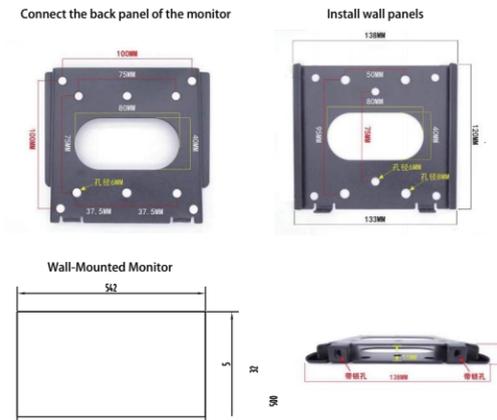- Power Consumption-Typical: 39W
- Product Weight: 12Kg

HP E24q G5 QHD

MARINE CCTV SYSTEM

Wall-Mounted Monitor
- Display Size: 24-in
- Maximum resolution: 2560 x 1440 @ 75Hz
- Aspect Ratio: 16:9
- Power Source: 100-240VAC 50/60Hz
- Power Consumption-Typical: 39W
- Product Weight: 12Kg

DIMENSIONS

FRONT VIEW
SIDE VIEW
608
583
300

TOP VIEW
562
CUTOUT

NOTES:
1,TYPE: HP E24q G5 QHD
2,ALL DIMENSIONS ARE IN mm

DIMENSIONS

Connect the back panel of the monitor   Install wall panels

Wall-Mounted Monitor
562

2.3.2.5 Waterproof PoE Extender

PoE Extender

MARINE CCTV SYSTEM
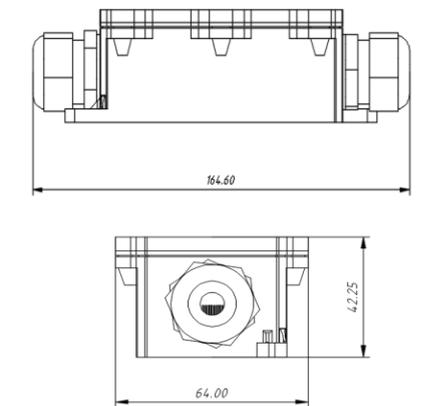
Order No.	PoE Extender002
Dimensions H Xw X D	164.6*64*42.25
Fixed Port	1*10 / 100M RJ45 Poe power receiving input port 1*10 / 100M RJ45 LD Poe power supply output ports
Network Protocol	Supports IEEE 802.3az-2010(EEE) 100Base-TXIEEE802.3u Compliant 10Base-TIEEE802.3 Compliant
Installation Mode	Desktop, wall-mounted
Lights	Network status connection success indicator Speed: 100M network connection success indicator
Lightning Protection	3KV8/20us
Protection Level	IP56
Power	DC12MAX0.5A
Operating Temperature/Humidity	-10 ~ + 55 º C, 5% ~ 90% Rh without condensation
Store Temperature/Humidity	-40 ~ + 75 º C: 5% ~ 95% RH without condensation
Net Weight (Kg)	0.15kg
Poe Pin	1245+ 3678-
Poe Extender Distance	Poe in+ Poe out 100M type, max distance 150+150 meters, max power out 16W 10M type, max distance 250+250 meters, max power out 13W LD 100M type, max distance 150+500 meters, max power out 12W LD 10M type, max distance 250+800 meters, max power out 6W
Certificate	CE mark, commercial；CE/LVD EN60950； FCC Part 15 Class B；RoHS；
Watt	Power Consumption：≤0.5W
Transmission Mode	Direct forwarding (full wirespeed)

DIMENSIONS

164.60
42.25
64.00

2.3.2.6 Washer Tank

Name	Explosion Proof Anti-corrosion 2 In 1 Small Type 5L Washer Tank System For CCTV
Dimensions (H*W*D]mm	398*192*170
Material	Stainless Steel 316L
IP Level	IP66/IP67
Voltage	AC100V-240V
Surface Treatment	Corrosion Proof Powder coating
Washer Tank Capacity	5L
Delivery Head	5m
Tube Length	5m
Maximum Working Temperture	60℃
Minmum Tempersture with Antifreeze Liguid in Solution	-10℃
Electrical Safety(CE)	EN60950-1, EN62368-1
Outdoor Safety(CE)	EN60950-22
Third -Party Products	Support
Cable Glands	3xG1/2''
Designed FO	Camera with wiper
Built-In	Air switch, power adapter, water pump, solenoid walve, signal control board etc
Functions	Supply power for camera and water pump control water pump to spray water
Net Weight	5KG
Ex Mark	ExII 2G Ex db op is IIC T6 Gb/|2D Ex tb op is IIIC T80℃ Db
Certificaton	ATEx approval

ASIWTO05

MARINE CCTV SYSTEM
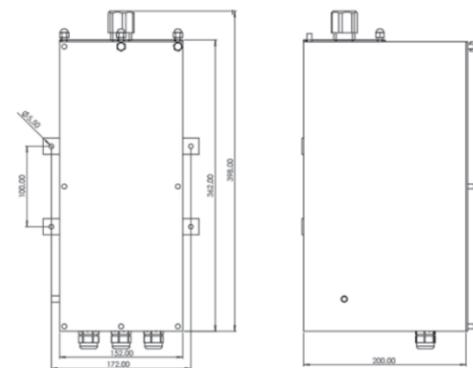
DIMENSIONS

2.3.2.7 Junction box

Location:Outdoor Junction Box

- Protection: IP56
- Material: Material: Q235
- Weight: ≈10Kg
- Colour: Munsell 7.5BG7/2
- All Dimensions are in mm

ASIJ001

MARINE CCTV SYSTEM

Dimensions (Unit: mm)

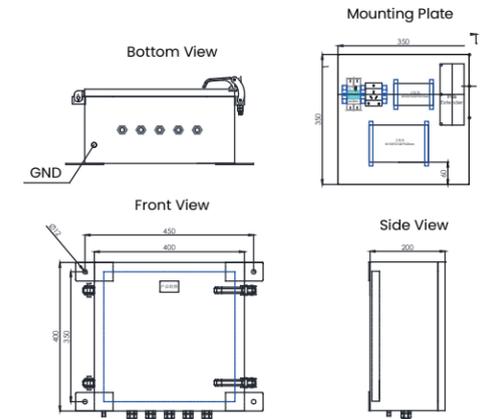**Location: Central control room junction box**

- Protection: IP44
- Material: Q235
- Weight: ≈10Kg
- Colour: RAL7035
- All Dimensions are in mm

ASIJ003

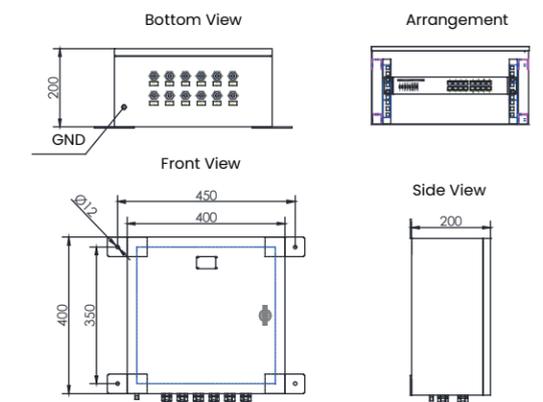MARINE CCTV SYSTEM

Dimensions (Unit: mm)

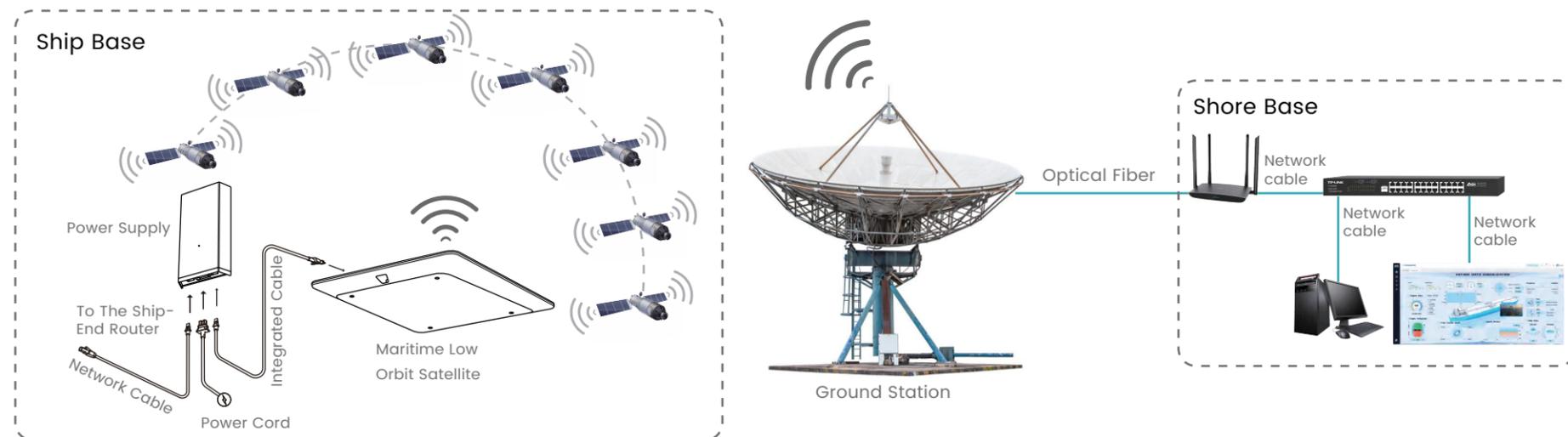# 2.4 Maritime LEO Satellite Communication System

System Introduction

The maritime LEO satellite system can provide high bandwidth, low latency broadband and communication services for global consumers and commercial users.

Technical parameters

Field of View	140°
Dimensions	57.5x51.1cm
Support Up and Down Speeds	8-25Mbps Up and 40-220Mbps Down
Environment Rating	IP56

Please note that due to the relatively new technology of maritime LEO satellite services, there is no network service within 15 nautical miles offshore in countries where their use is not allowed. Generally, there is network service beyond 15 nautical miles offshore, and the distance may vary among different countries. The actual effect shall prevail.


2.5 VSAT Satellite Communication System

System Introduction

The VSAT system is composed of a hub station and many remote VSATs scattered in each user's location. It can access the Internet without any ground lines, and is not limited by terrain, distance and ground communication conditions.

Technical parameters

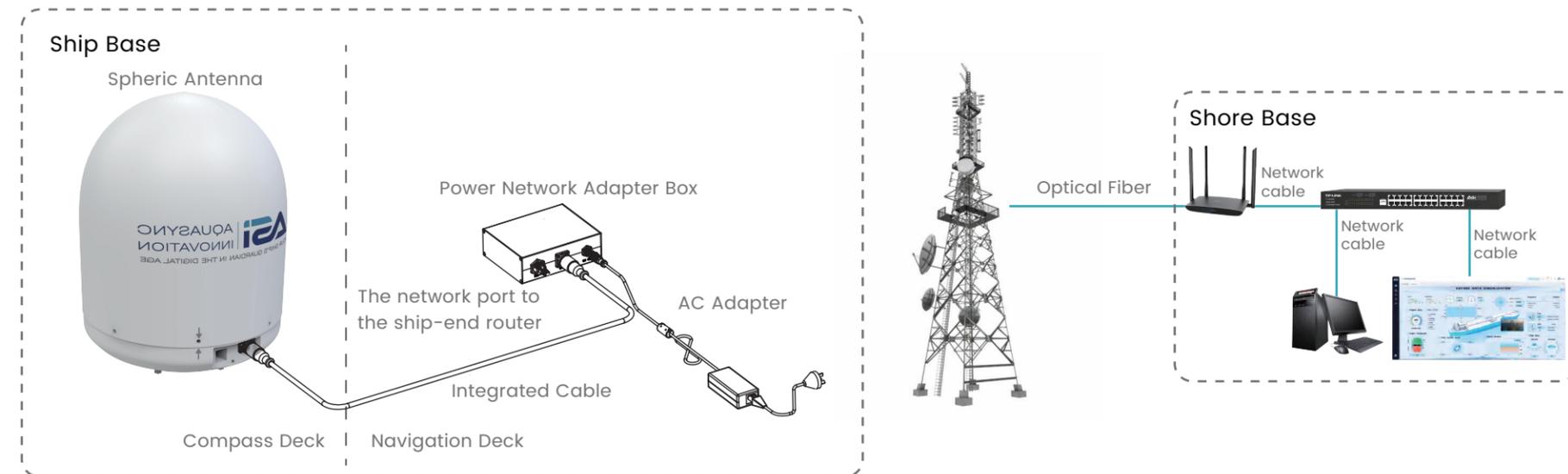|	
Antenna Type	Three-Axis (Polarized) Ship Mounted Dynamic Communication
Antenna Diameter	100cm
BUC	8W
Environment Rating	IP56
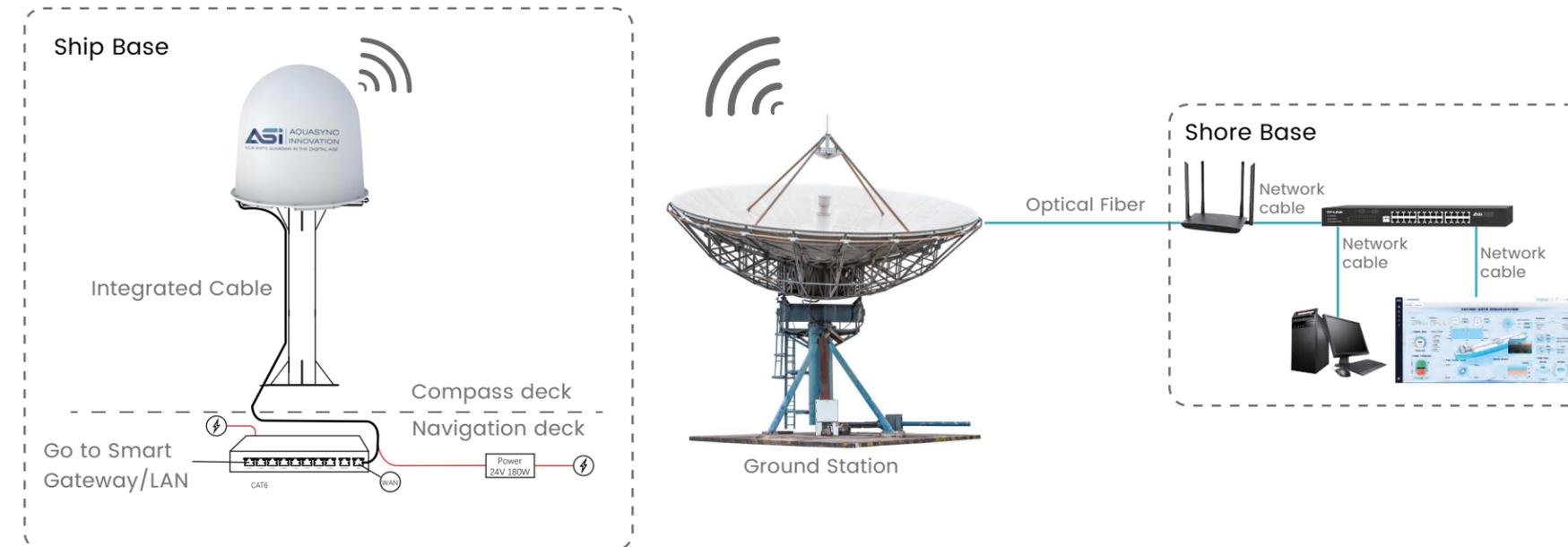
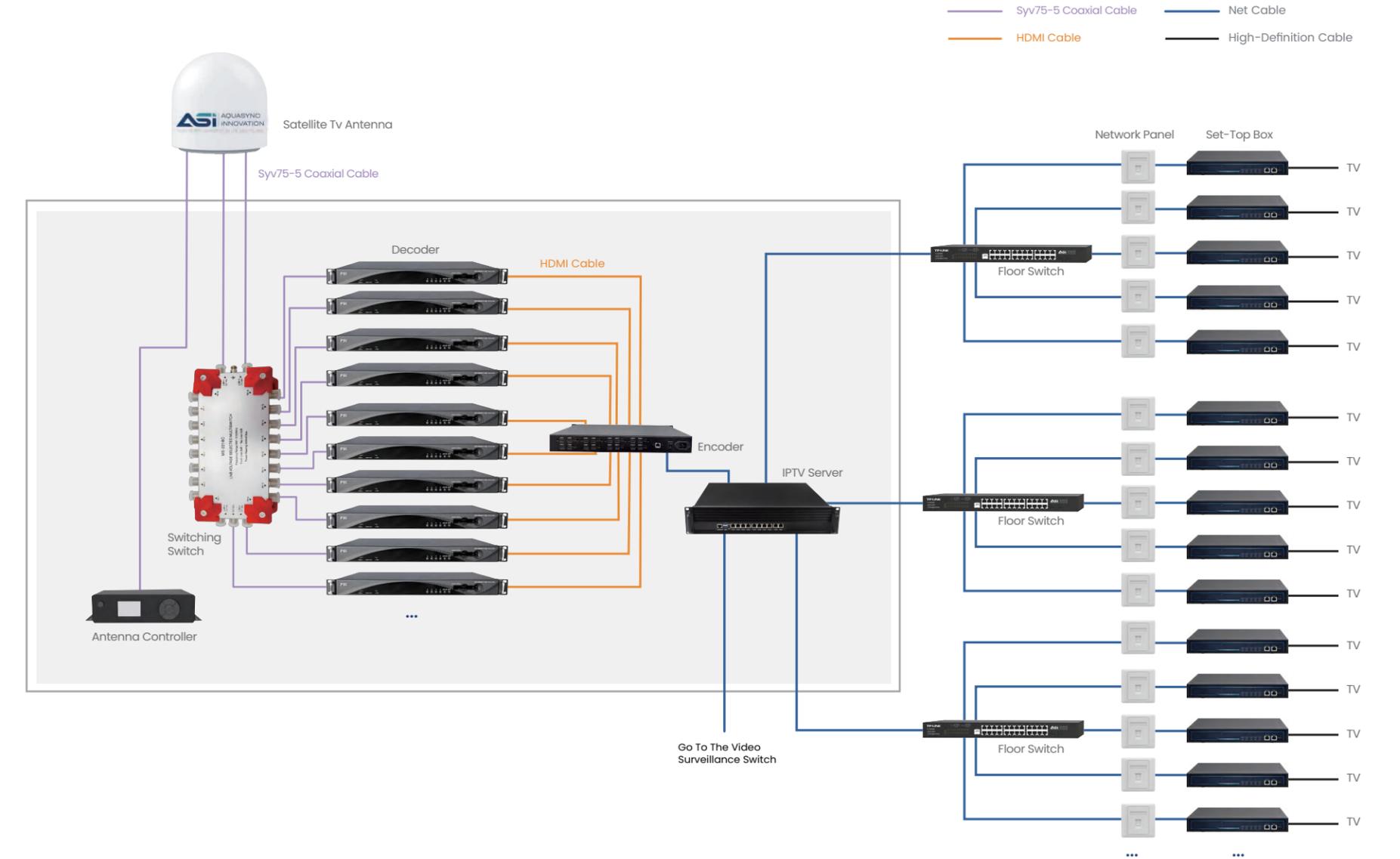# 2.6 5G Cellular Mobile Network

System Introduction

5G cellular mobile network antenna receives and amplifies the shore operator's base station signal to connect the Internet signal to the ship side router so that the equipment and staff can connect to each other. Compared with satellite communication costs, the cost of 5G cellular mobile networks is lower, saving communication costs.
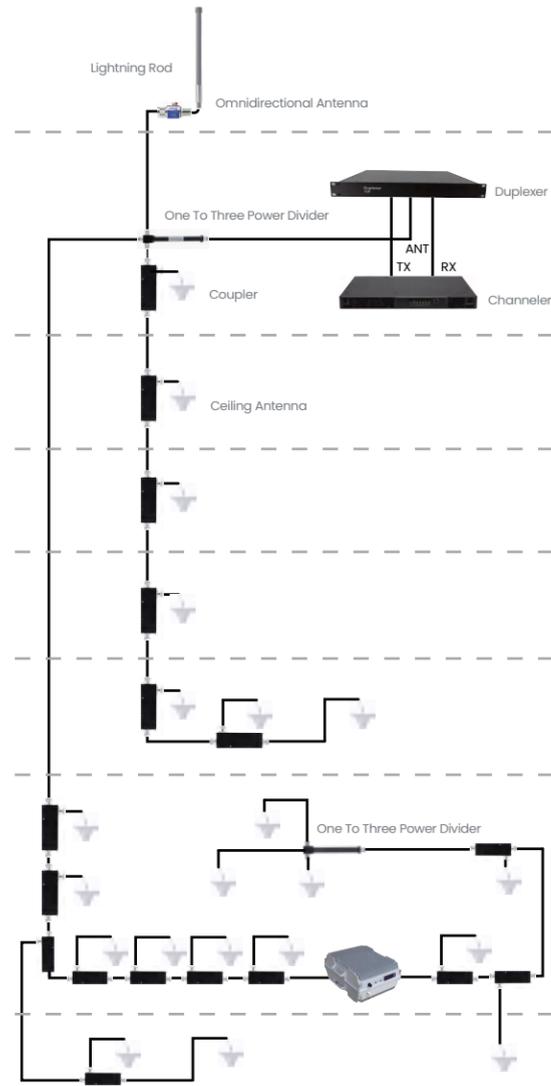
Technical Parameters

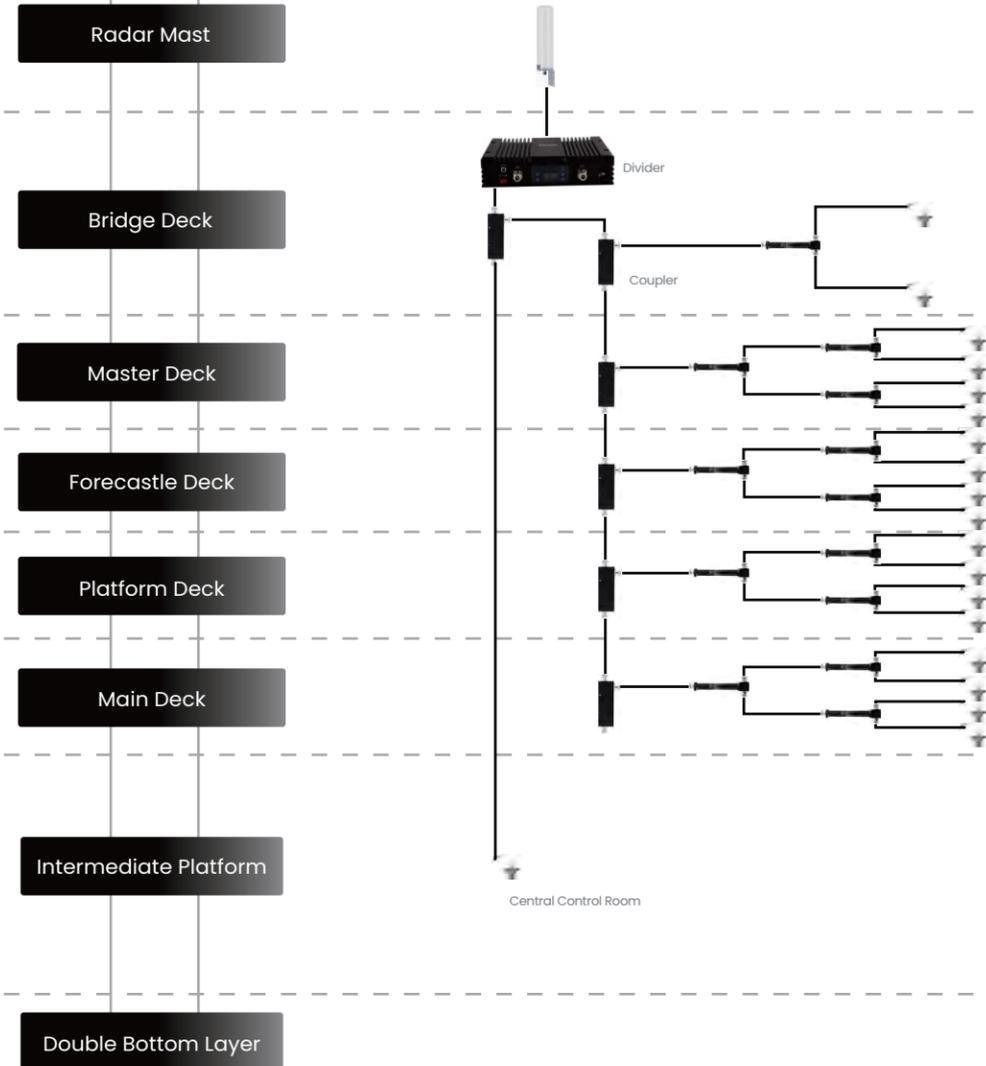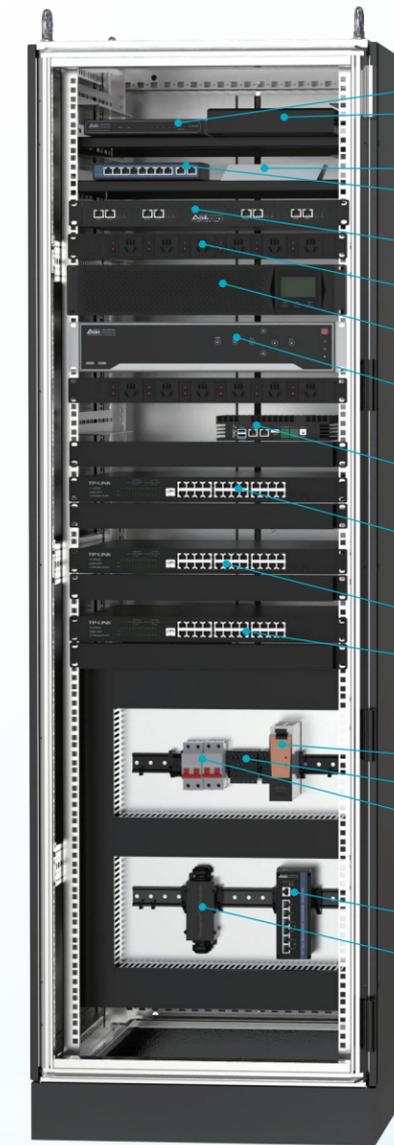|	
Frequency Range of Antenna	650-6000MHz
Signal Coverage Range	Within 25 Nautical Miles
Wind Resistance Strength	60m/s
Environment Rating	IP67
Average Speed of Up And Down	4G uplink at 28.51Mbps and downlink at 48.57Mbps;
	5G uplink at 80.40Mbps and downlink at 348.31Mbps;

2.7 Satellite TV System

2.8 VHF Full Ship Coverage System

Lightning Rod
Omnidirectional Antenna
One To Three Power Divider
Duplexer
Coupler
ANT
TX   RX
Channeler
Ceiling Antenna
One To Three Power Divider

2.9 Mobile Signal Enhancement System

Radar Mast

Bridge Deck

Master Deck

Forecastle Deck

Platform Deck

Main Deck

Intermediate Platform

Double Bottom Layer

Divider
Coupler
Central Control Room

2.10 Network Information Cabinet

01	AC Controller (ASI)
02	VSAT Antenna Adapter (ASI)
03	LEO Satellite Power Supply Unit (Starlink)
04	VSAT billing gateway (ASI)
05	Video Compression Module (ASI)
06	PDU (ASI)
07	UPS (HUAWEI)
08	NVR (ASI)
09	AI Intelligent Workstation (ASI)
10	CCTV Switch (ASI)
11	LAN Switch (ASI)
12	Switch Power Supply Unit (Weidmüller)
13	Terminal (Weidmüller)
14	Micro Circuit Breaker (Schneider)
15	Firewall (ASI)
16	Waterproof PoE Extender (ASI)

Cabinet (Rittal)