

Marine Panel PC Series

New

The maritime field faces critical environmental challenges, making reliable and rugged systems essential. IEI provides maritime professionals and marine-grade computers and panel PCs that use leading technologies and reliable designs which are perfect for applications on the dock, on the open deck, or in the control room or bridge.

- 19" and 24" Fanless Panel PC with 4th Generation Intel® Core™ i5 Dual-core Processor
- -15°C ~ +55°C Wide Temperature and IP66 Protection with Flat-bezel Projected Capacitive Touchscreen
- **Excellent Visual Performance**
 - Three independent displays
 - Full OSD function configuration
 - 0%~100% full range dimming
 - 178°/178° wide viewing angles
 - Optical bonding improves visibility under bright light (optional)
- **Isolation Protection**
 - RS-232/422/485 isolated serial ports
 - Isolated 18V ~ 36V DC input
 - 2 x Isolated CAN-bus 2.0B
- **iRIS Remote Management Module**

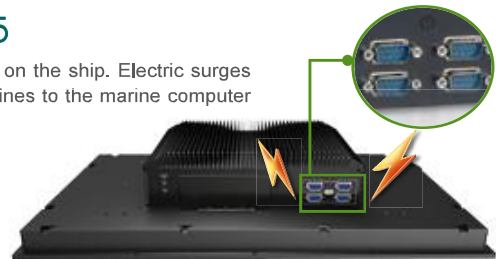


Multiple Isolated Ports for Comprehensive Protection against Electrical Surges

Ground loop and electric surges are common in the marine applications of electronic products, due to the dense placement of devices. These stray electrical signals can cause equipment damage or malfunction.

■ 2.5 kV Isolation Protection on the RS-232/422/485

IEI marine computer is protected from any stray electrical signals from other devices on the ship. Electric surges that were generated from other electronic devices which often passed through serial lines to the marine computer can cause severe damage and malfunction to the computers.



■ Isolated 18~36V DC Power 2250VDC Input to Output Basic Insulation



■ Two independent CAN 2.0B channels with 2.5 kV Isolation Protection

CAN 2.0B is a kind of marine electronics data network for communication between marine electronic devices such as chart plotters, navigation instruments, GPS receivers, etc.



S24A-QM87

Intel® Core™ i5 Dual-core Processor



S19A-QM87

Intel® Core™ i5 Dual-core Processor



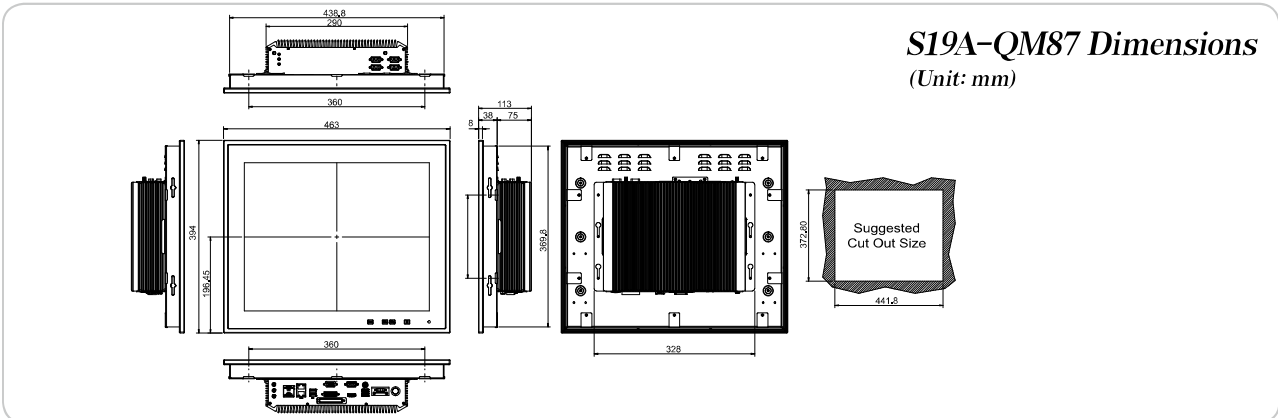
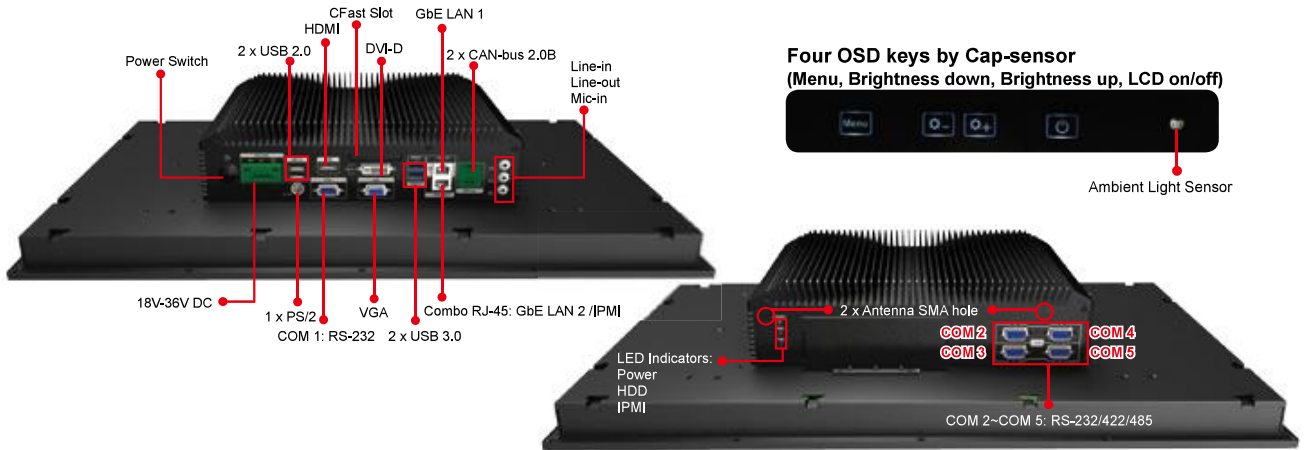
Features

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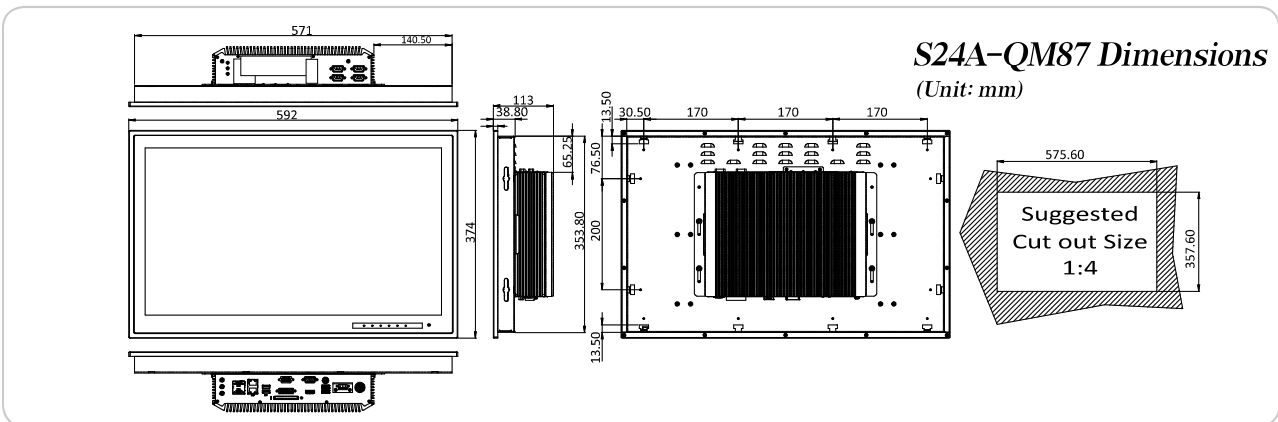


Specifications

Model	S19A-QM87	S24A-QM87	
LCD	LCD Size	19" Fanless	24" Fanless
	Panel Type	PMVA	AMVA
	Max. Resolution	1280 x 1024 (5:4)	1920 x 1080 (16:9)
	Contrast Ratio	2000 : 1	5000 : 1
	Brightness (cd/m ²)	300	300
	LCD Color	16.7M	16.7M
	Pixel Pitch (um)	294 x 294	276.75 x 276.75
	Viewing Angles (H-V)	178° / 178°	178° / 178°
Backlight MTBF (HRs)	50000	50000	
Touchscreen & Controller	EXC7920 (10-point)		
System	SBC Model	SMB-QM87-R10	
	Chipset	Intel® QM87	
	CPU	Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz processor	
	RAM	4GB 1600MHz DDR3 SDRAM (2GB*2)	
Input Interfaces	I/O Ports & Switch	Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16GB	
		2 x USB 2.0	
		2 x USB 3.0	
Expansion	2 x Full-size PCIe Mini slot, 1 x iRIS-2400 slot (iRIS remote management module)		
	2 x Antenna SMA hole (reserved)		
Ethernet Controller	GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT PCIe controller		
Sensor	Ambient light sensor (0% ~ 100%)		
OSD	Menu, Brightness up, Brightness down, LCD on/off by cap-sensor (Graphic Engine: Genesis STDP6038)		
Storage	2 x 2.5" SSD bay with RAID 0/1 function 1 x Accessible CFast socket		
LED Indicator	Power (power on: green; power off: orange)/storage (red, blinking)/IPMI (blue)		
Power Requirement	Isolated 18V ~ 36V DC, screw-type 3-pin terminal block		
Operating Temperature	-15°C ~ 55°C (5°F ~ 131°F)		
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)		
Humidity	5% to 95% RH		
Thermal Design	Fanless		
Watchdog Timer	Supports 1~255 sec. system reset		
Certifications	EMC: CE, FCC		
	Safety: DNV, IEC 60945 4th, IACS-E10, IEC 61174 IP rating: IP66 compliant front panel, and IP22 compliant rear cover		
Housing	Front aluminum sheet metal (Black C)		
Cut-out Dimensions (L x W)	442 mm x 373 mm	576 mm x 358 mm	
Dimensions (L x W x H)	463 mm x 394 mm x 113 mm	592 mm x 374 mm x 113 mm	
Net Weight (kg)	9.91	13.03	
Gross Weight (kg)	13.38	17.19	
Vibration and Shock	IEC 60945 / DNV 2.4 compliant / IACS-E10		
Power Supply (DC Input)	DC Input ATX Power Supply		
	- P/N: 041D710-00-101-RS		
	- 150W Power Supply		
	- Input: 18~36V DC, 8-4A (max.) - Output (max.): 12V @13A		
Power Consumption	112W	117W	



S19A-QM87 Dimensions
(Unit: mm)



S24A-QM87 Dimensions
(Unit: mm)

Packing List

Item	Q'ty	Remark
S19A-QM87 or S24A-QM87	1	
User Manual & Driver CD	1	Drivers and User Manual
One Key Recovery CD	1	
Screw Pack	1	Including necessary screws
PS/2 Cable	1	Round cable; PS/2 cable
Wire strain band	3	Wire strain band

Options

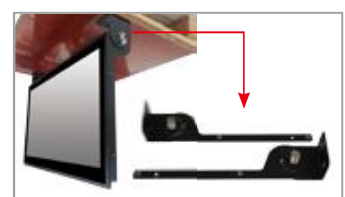
Item	Part No.	Description
Panel Mount Kit	PK-S19A-R10	For S19A
Panel Mount Kit	PK-S24A-R10	For S24A
Desktop Stand	STAND-S24A-R10	For S19A & S24A
Ceiling Mount Kit	CEILMT-S24-R10	For S19A/S24A
iRIS Module	iRIS-2400-R10	IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface

Ordering Information

P/N	Description
S19A-QM87-H5/PC/4G-R10	19" 300cd/m ² SXGA marine panel PC with Intel® Mobile Core™ i5-4400E 2.7GHz CPU, 2*2GB DDR3 RAM, projected capacitive touchscreen, isolated 18-36V DC, iRIS-2400 supported, R10
S24A-QM87-H5/PC/4G-R10	24" 300cd/m ² FHD marine panel PC with Intel® Mobile Core™ i5-4400E 2.7GHz CPU, 2*2GB DDR3 RAM, projected capacitive touchscreen, isolated 18-36V DC, iRIS-2400 supported, R10



STAND-S24A-R10



CEILMT-S24-R10

Marine Monitor Series

New

19" / 24" IP66 Marine Monitors

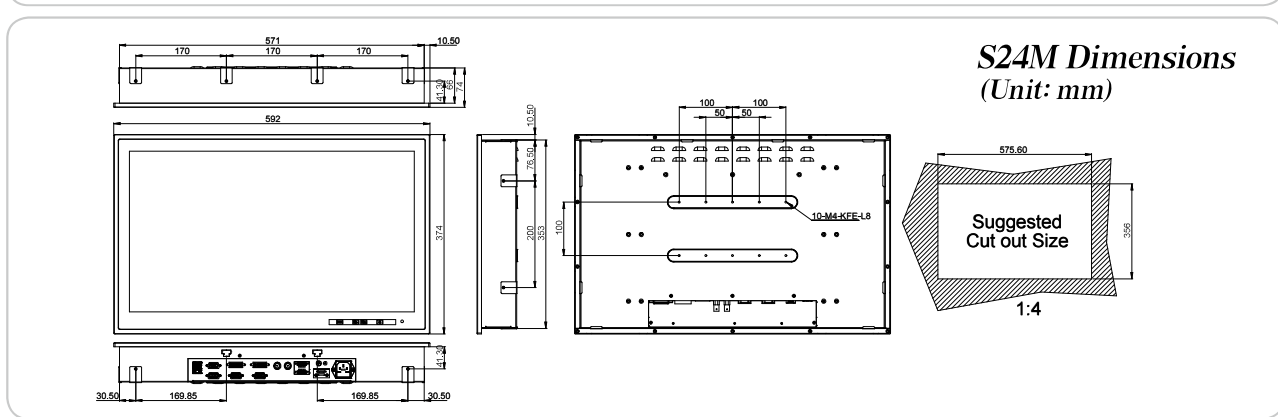
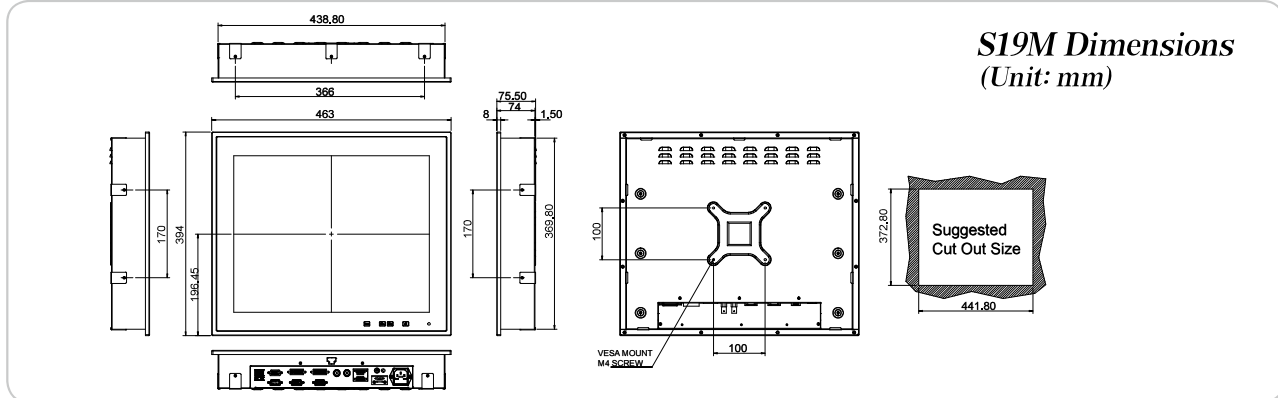
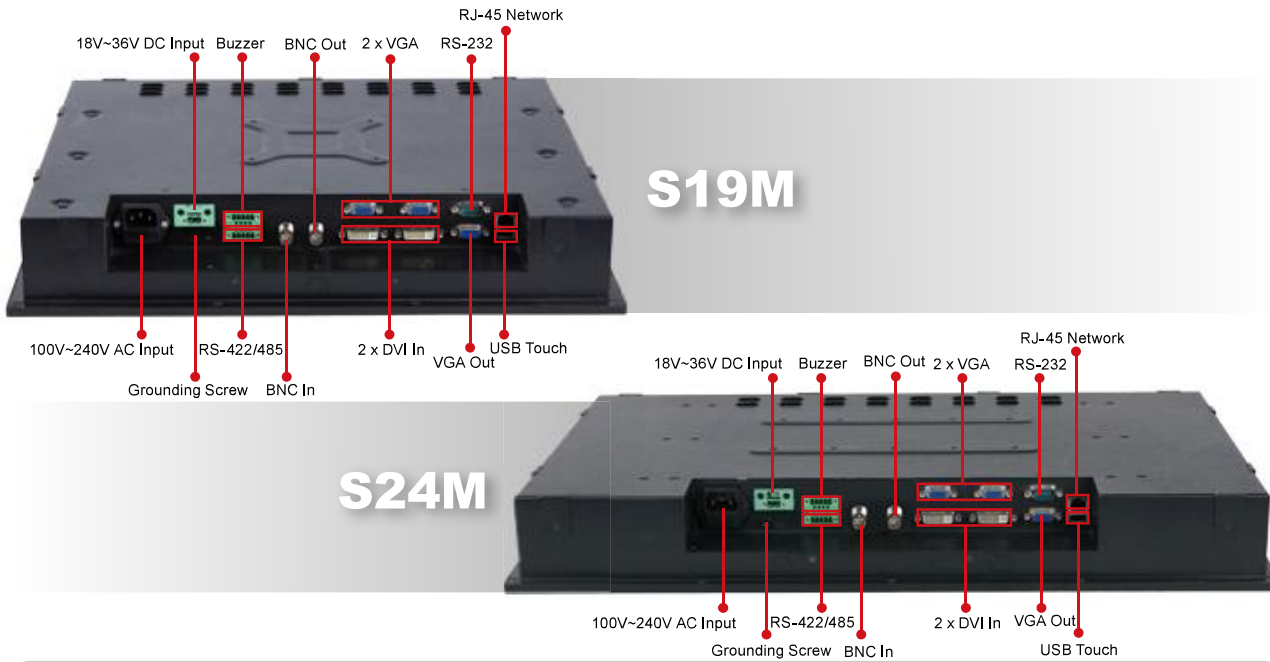
Features

- **IP66 Front / IP22 Rear**
- **-15°C ~ +55°C Wide Temperature and Flat-bezel Projected Capacitive Touchscreen**
- **Excellent Visual Performance**
 - Full OSD function configuration
 - 0%~100% full range dimming
 - 178°/178° wide viewing angles
- **Multiple Video Input**
 - Two VGA, two DVI, and one BNC
- **Multiple Video Output**
 - One VGA and one BNC
- **Dual Isolated AC/DC Input with Redundant Power Protection**
- **Remote OSD Settings through LAN, RS-232, RS-422 and RS-485**



Specifications

Model		S19M	S24M
LCD	LCD Size	19"	24"
	Panel Type	PMVA	AMVA
	Max Resolution	1280 x 1024 (5:4)	1920 x 1080 (16:9)
	Contrast Ratio	2000 : 1	5000 : 1
	Brightness (cd/m ²)	300	300
	LCD Color	16.7M	16.7M
	Pixel Pitch (um)	294 x 294	276.75 x 276.75
	Viewing Angles (H-V)	178° / 178°	178° / 178°
Backlight MTBF (HRs)	50000	50000	
Touchscreen & Controller		EXC7920 (10-point)	EXC7200 (2-point)
Scaler Chip		STDP8028	
I/O Ports		<ul style="list-style-type: none"> • DVI-D Signal Input: 2 x DVI (24-pin, female) • VGA Signal Input: 2 x D-sub (15-pin, female) • VGA Signal Output: 1 x D-sub (15-pin, female) - Clone of VGA IN* • Composite Video Input: 1 x BNC connector (Female) • Composite Video Output: 1 x BNC connector (Female) • RS-232/422/485 for Remote Control (Non-isolated) • Touchscreen: 1 x USB Type A Connector (Female) • Ethernet: 1 x RJ-45 Connector for Remote Control • Isolated AC Power Inlet: 100V~240V AC • Isolated DC Terminal Block: 18V~36V DC • 1 x Buzzer 	
PIP		Yes	
OSD Button		P-CAP Button (LCD on/off, Menu, Auto, Up, Down, Left, Right)	
LED/Sensor		Ambient light sensor (0%~100%)	
Power Requirement		Multi-power Supply: Isolated AC Power: 100-240V, 2-1A, 50-60Hz Isolated DC Power: 18-36V, 8-4A	
Operating Temperature		-15°C ~ 55°C	
Storage Temperature		-20°C ~ 60°C	
Humidity		5% to 95% RH	
Thermal Design		Fanless	
Housing		Aluminum front , sheet metal back (Black C)	
Cut-out Dimensions (L x W)		442 mm x 373 mm	576 mm x 358 mm
Dimensions (L x W x D)		463 mm x 394 mm x 113 mm	592 mm x 374 mm x 113 mm
Mounting		VESA 100mm x 100mm	
Net Weight (kg)		7.74	11.48
Gross Weight (kg)		11.54	15.97
Approvals		EMC: CE, FCC	
		Safety: DNV, IEC 60945 4th, IACS-E10	
		IP Rating: IP66 front , IP22 rear	



Options

Item	Part No.	Description
Panel Mount Kit	PK-S19M-R10	for S19M
	PK-S24M-R10	for S24M
Desktop Stand	STAND-A21-R10	for S19M & S24M

Packing List

Item	Q'ty	Remark
User Manual & Driver CD	1	Drivers and user manual
VGA	1	VGA Signal Cable
DVI	1	DVI Signal Cable
USB	1	Touch Screen Cable USB
Power Cord	1	Power Cord
S19M or S24M	1	

Ordering Information

PN	Description
S19M-AD/PC-R10	19" SXGA 300cd/m ² Marine Display with AC and DC redundant power, PCAP touch screen, R10
S24M-AD/PC-R10	24" FHD 300cd/m ² Marine Display with AC and DC redundant power, PCAP touch screen, R10