IPM-1003

10.4" Fanless IP Monitor

Quick Reference Guide

2nd Ed – 19 September, 2018

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Part No. E2017IP03A1R

FCC Statement

THIS DEVICE COMPLIES WITH PART 15 FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE.

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS "A" DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES.

THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

Notice

This guide is designed for experienced users to setup the system within the shortest time. For detailed information, please always refer to the electronic user's manual.

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As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into body, or (b) support or sustain life and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.
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To receive the latest version of the user's manual; please visit our Web site at:
http://www.avalue.com.tw/

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1. Getting Started

1.1 Safety Precautions

Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

1.2 Packing List

- 1 x IPM-1003 Fanless IP Monitor
- 1 x packing set includes the followings
  - 1 x 12V adapter
  - 4 x M4 Screw

If any of the above items is damaged or missing, contact your retailer.

1.3 System Specifications

Component	
Mother Board	Mother Board: E9697IPM006R I/O Board: E9697IPM004R-A
Processor	ASPEED AST1510
Memory	on board 1GB DDR2 1066MHz memory
Audio	Yes (source from Box PC)
Power Supply	DC-in or Powered LAN
Adapter	12V/5A 60W
System Fan	Fanless
Speaker	2 x 2W Speakers
Panel	
LCD Panel	10.4 XGA TFT 1024*768 Using Innolux G104X1-L04 9
Touch Screen	Higgstec 5-wire Resistive Touch Panel
Touch Controller	Built-in Touch controller on board (by USB)
PCAP	Optional
Others	Membrane for power/ volume/ brightness
External I/O	
USB Port	2 x USB2.0 Ports for external peripherals in lower connector recess (Through PCI to USB2.0 Chip)
Video Port	1 x HDMI input on Rx Module 1 x HDMI out on Rx module
Audio Port	1 x 3.5mm stereo jack
Indicator Light	Power on/off indicator light on membrane
Others	1 x RJ45 port for DoE only
Mechanical	
Power Typer	+12 ~ 26V DC-in or Powered LAN
Power Connector Type	DC Jack Lockable
Dimension	260 mm x 198 mm x 41 mm
Weight	1.95 kg
Color	Front: Sliver / Rear: Black
Fanless	Yes
Reliability	
EMI Test	CE/FCC Class A
Safety	UL/CB design compatible
Dust and Rain	IP-65 Design Compatible (Front Panel); IP-41 Design Compatible (Rear Box)

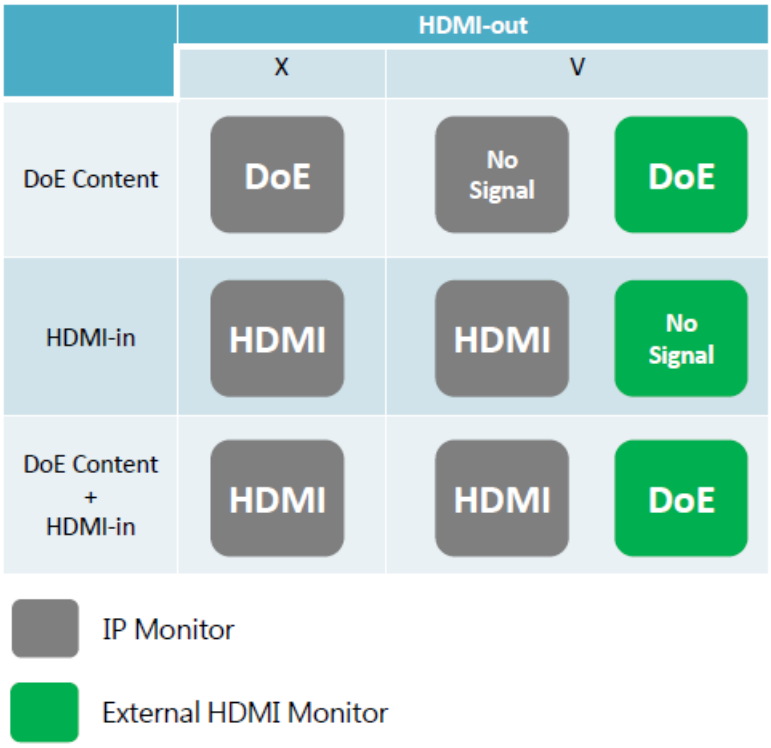
Test	Full IP-65 Co-design for next model
Vibration Test	Sine Vibration test (Non-operation) Test Fc : Vibration sinusoidal 1. Test Acceleration : 2G 2. Test frequency : 5~500 Hz 3. Sweep：1 Oct/ per one minute. (logarithmic) 4. Test Axis : X,Y and Z axis 5. Test time :10 min. each axis 6. System condition : Non-Operating mode 7. Reference IEC 60068-2-6 Testing procedures Package Vibration Test 1. PSD: 0.026G²/Hz , 2.16 Grms 2. Non-operation mode 3. Test Frequency : 5-500Hz 4. Test Axis : X,Y and Z axis 5. 30 min. per each axis 6. IEC 60068-2-64 Test:Fh Random Vibration Operation 1. PSD: 0.0505G²/Hz, 5 Grms 2. operation mode 3. Test Frequency : 5-500Hz 4. Test Axis : X,Y and Z axis 5. 30 minutes per each axis 6. IEC 60068-2-64 Test:Fh 7. Storage : N/A
Mechanical Shock Test	Bump Test 1. Wave form：Half Sine wave 2. Acceleration Rate：10g for operation mode 3. Duration Time：11ms 4. No. of Shock：Z axis 300 times 5. Test Axis: Z axis 6. Operation mode 7. Reference IEC 60068-2-29 Testing procedures Test Eb : Bump Test
Drop Test	Packing Drop 1. One corner , three edges, six faces 2. ISTA 2A, IEC-60068-2-32 Test:Ed
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F), ambient w/ air flow

Operating Humidity	5 ~ 90% Relative Humidity, Non-condensing
Storage Temperature	-30°C ~ 70°C (-4°F ~ 158°F)

Note: Specifications are subject to change without notice.

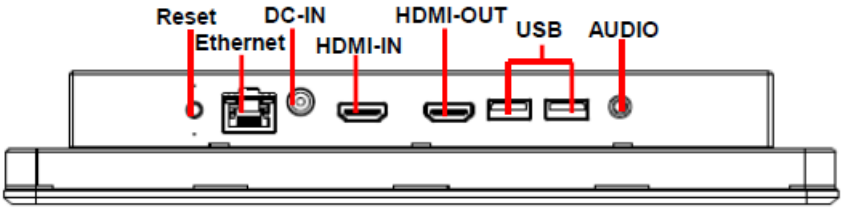
Remark:

When HDMI monitor is connected to HDMI-out connector, the content from Display Over Ethernet (DoE) is switched to HDMI monitor and the content from HDMI-In remains on IP monitor screen.

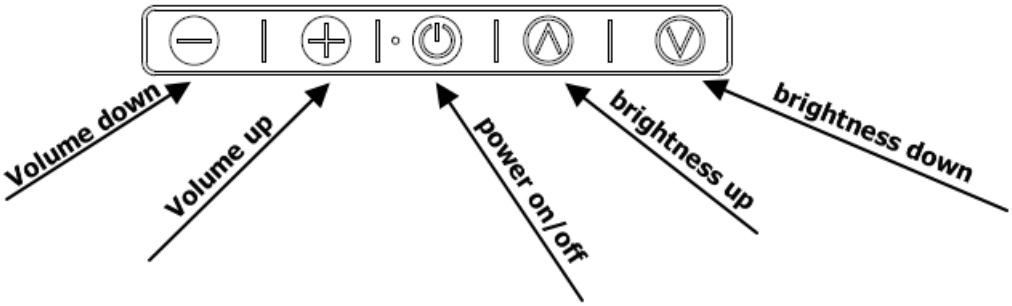


1.4 System Overview

1.4.1 Rear View



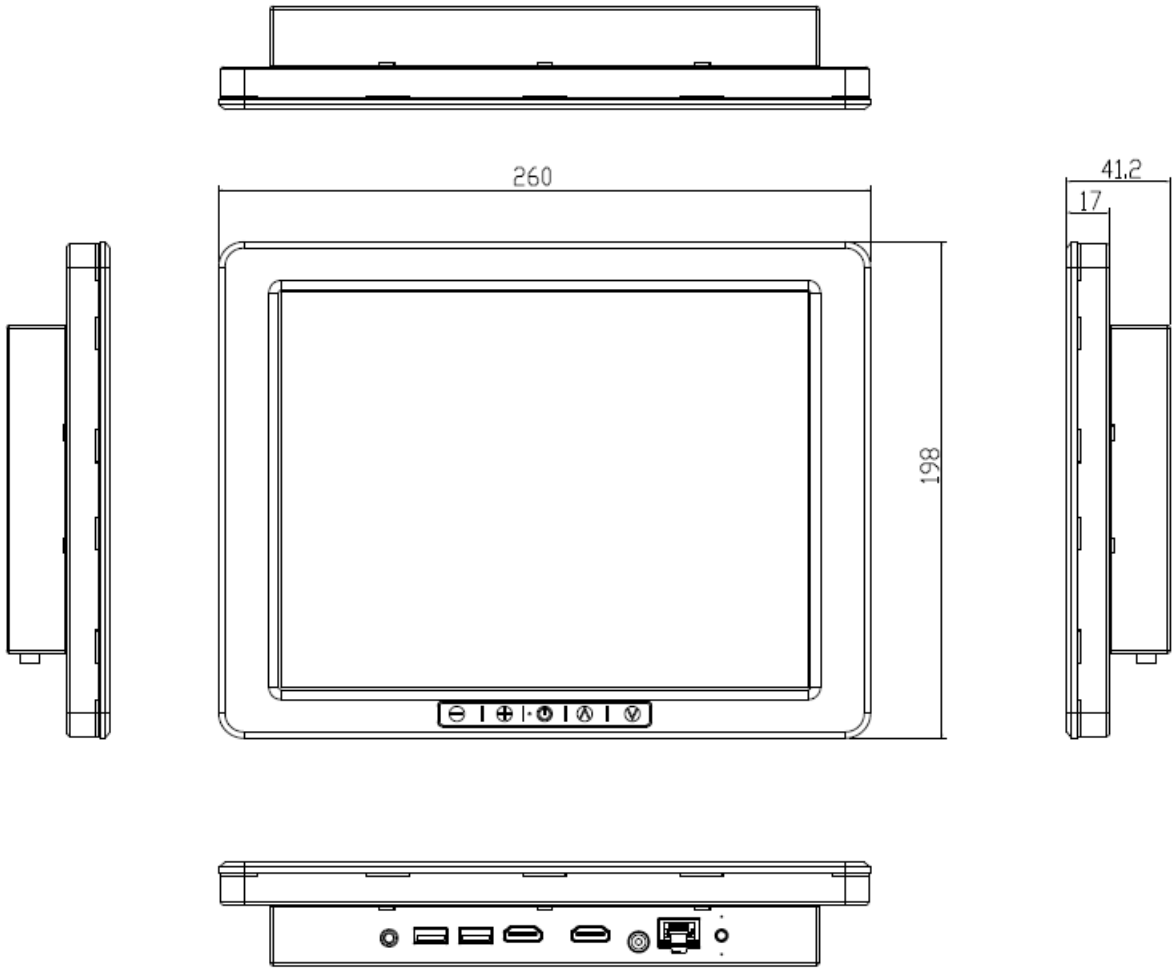
1.4.2 Membrane

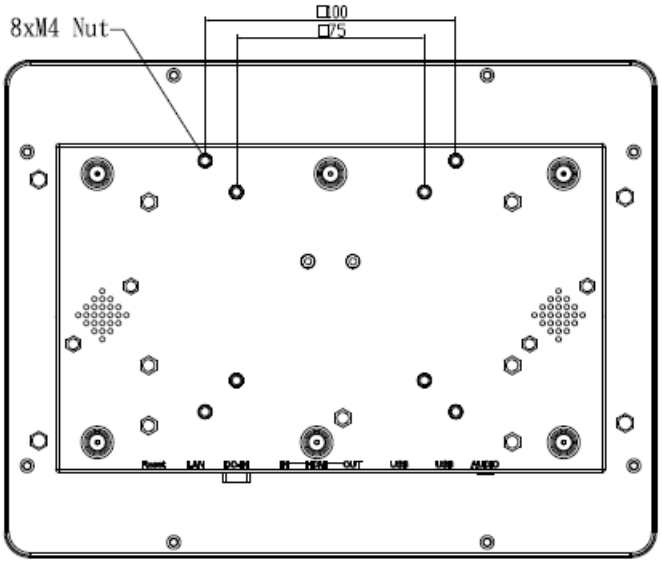


Connectors

Label	Function	Note
HDMI-IN	HDMI-IN connector	
HDMI-OUT	HDMI-OUT connector	
DC IN	DC Power-in connector	
Ethernet	RJ45 Gigabit Ethernet(with Powered LAN) connector	
Audio	Audio connector	
USB	2 x USB 2.0 connector	
Reset	Reset button	

1.5 System Dimensions





(Unit: mm)