American Industrial Systems, Inc.
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Quick solution for:
- Room Booking Schedule
- Access Control
- Room Information Display

User Manual

10” Multi-Touch Panel PC
IPW10ID3S-H1-PoE-PCT

**Multi Touch** Projected Capacitive
**Fanless** All-in-one Panel PC
**Ultra-low power** with Intel Atom N2600 processor
Power over Ethernet (PoE)

Automation: Digital Ports, 2 input and 2 output
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Copyright:
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translated to another language or stored in a retrieval system, or transmitted by any means,
electronic, mechanical, photocopying, recording, or otherwise, without prior written
permission. Windows is a registered trademark of Microsoft, Inc. Other brand or product
names are trademarks of their respective holders.

FCC rules:
The test results show that this device meets the FCC rules. Those limits are set to protect residential areas
from the devices with harmful emission. This device will produce, use and radiate radio frequency energy.
In addition, failure to follow the user’s manual to install or use this device might produce harmful
interference with radio communication. Notwithstanding the foregoing, it does not guarantee that this
type of harmful interference does not occur in some special installations. The interference caused by this
device to the reception of radio or television signals may be verified by turning it on and off. Any changes
or modifications to this TFT LCD would void the user’s authority to operate this device.

Important Recycle Instruction:

�� Lamp(s) inside this product contains mercury. This product may contain other
electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in
accordance with local, state, or federal Laws. For more information, contact the Electronic
Industries Alliance at WWW.EIAE.ORG. For lamp specific disposal information check
WWW.LAMPRECYCLE.ORG
Usage Notice

⚠️ **Warning!**

To prevent the risk of fire or shock hazards, do not expose this product to rain or moisture. Do not open or disassemble the product as this may cause electrical shock.

**Precautions**

Follow all warnings, precautions and maintenance as recommended in this user’s manual to maximize the life of your unit.

**Do:**

- Turn off the product before cleaning.
- Touch screen surface may be cleaned using a soft clean cloth moistened with mild window glass commercial cleaners or 50/50 mixture of water and isopropyl alcohol.
- Use a soft cloth moistened with mild detergent to clean the display housing.
- Disconnect the power plug from AC outlet if the product is not going to be used for an extended period of time.

**Don’t:**

- Do not touch the LCD Display screen surface with sharp or hard objects.
- Do not use abrasive cleaners, waxes or solvents for your cleaning.
- Do not operate the product under the following conditions:
  - Extremely hot, cold or humid environment.
  - Areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - In direct sunlight.
Introduction

Integrated possibilities:
Automation and Security for Home and Building
HVAC environmental control

Factory automation
Industrial HMI and SCADA

Self Service Kiosk in Hotels
Hospitals, airports, and Ticket vending

Vehicle mounted
Equipment and device control

Education
Testing center

Applications

Quick solution for:
- Room Booking Schedule
- Access Control
- Room Information Display

About IPW10ID3S-H1-POE-PCT

IP = IP65 Water and dust proof
W = Wide width ratio of 16:10
10 = 10.1 Diagonal viewing area in inches
ID3S = Intel Atom dual core
POE = Power Over Ethernet
PCT = Projected Capacitive Touch

Features include:
- Projected Capacitive multi touch screen with USB controller
- 10.1” Active matrix TFT LCD technology
- 1024 x 600 XSVGA resolution
- Intel® Atom™ Dual Core Processor N2600 1.60 GHz
- Viewing angle H: 140°, V: 110° with 500:1 Contrast Ratio
- 75 x 75 VESA Mount
- Dimensions (W x H x D) 263.28 x 171 x 35.70 mm
- OS: Windows Embedded Standard 7 (WS7E or WS7P)
External overview

**Touch Screen for IPW10ID3S-H1-POE-PCT**
Projected capacitive touch screen  
Surface: Glare treatment

**Back Panel I/O Port**
1 x Terminal Block (Phoenix Type)  
1 x RJ-45 (PoE/LAN)  
1 x DIO port (2 x DI, 2 x DO, Phoenix Type)  
1 x RS-232/422/485  
2 x USB 2.0 (1 more on the side)

**12~24V DC-IN**
The Motherboard allows plugging 12~24V DC-IN jack on the board without another power module converter under power consumption by Intel Atom N2600 1.6GHz Processor in NM10 chipset.

**Power Consumption**
24W of power

**Ethernet interface**
The Motherboard is equipped with Broadcom BCM57780 chipset which is fully compliant with the PCI 10/100/1000 Mbps Ethernet protocol compatible.

**POE port**
Power over Ethernet

**Serial COM port**
One COM port connectors build in the rear I/O. This COM ports supports RS232/422/485.

**Bottom side USB ports**
2 x USB 2.0 ports support hot plug-in connection.
Right side USB port
1 x USB 2.0 ports support hot plug-in connection

Mother Board

Product Overview

The panel PC is integrated with Intel® NM10 express chipset and Atom N2600 Processor. The Intel Atom Processor with 32nm low power design enables down to 50% less average power consumption and the chipset delivers up to 4x improvement in graphics performance and enables up to 50% higher data transfer bus speed rate. Intel Graphic Accelerator 3600 Integrated Graphics Engine, Broadcom BCM57780 GbE controller

Thus, the ID31 SBC is designed to satisfy most of the applications in the industrial computer market, such as Gaming, POS, KIOSK, Industrial Automation, and Programmable Control System. It is a compact design to meet the demanding performance requirements of today's business and industrial applications.

System:

Processor:
Intel Atom N2600 1.6GHz
BIOS
AMI BIOS (detailed instructions exist on the CD shipped with the panel)

Just after power on, pressing the Del key will open the BIOS configuration application.

Main Memory
2GB DDR3 800/1066 MHz, up to 4GB

Chipset
Intel® NM10 express chipset

Storage Device
32GB SATA SSD

Digital I/0
2 x DI, 2 x DO

LAN:
1 x PoE LAN

Dimensions
~263 x 172 x 37mm (also see: Product Mechanical Drawings)

Environmental Requirements
Temperature - Operating: 0°C to 45°C (32°F to 113°F)
Temperature - Storage: -20°C to 60°C (-4°F to 140°F)

Humidity (Non-condensing) - 30 to 90% RH @ 40°C

Vibration Protection - 5 to 500 Hz, 1 Grms random vibration

**General**

Input Power 12 to 24V DC Terminal Block (Phoenix Type) or Power over Ethernet or PoE

**MTBF**

50,000 Hours Demonstrated

**Approvals**

Designed for CE/FCC

**Display**

**Type**

10.1” diagonal, Active matrix TFT LCD

**Aspect Ratio**

16:10 (Widescreen)

**Active/Area**

220.416 (H) x 129.15 (V) mm

**Native (Optimal) Resolution**

1024 x 600 WSVGA

**Number of Colors**

262K

**Brightness (Typical)**

LCD Panel: 200 nits

PCT Touch: 180 nits

**Contrast Ratio**

500:1
Viewing Angle
Horizontal: 140° Total
Vertical: 110° Total

Touch Technology
Projected Capacitive

Features and Benefits
- Powered via Power-over-Ethernet (PoE)
- Easy-to-clean, true flat front surface without bezel
- Flexible, reliable, and ruggedized touch screen computers for open platform HMI/SCADA
- Two independent touch points (with Windows 7 operating system)
- Eliminates dust and debris build-up at the edge and corners of the display
- Provides improved power efficiency and reduced consumption
- Responds to a light touch to activate response
- Ruggedized levels of NEMA 12, NEMA 4, IP52, IP54, IP65 ratings
Package Content

*Driver CD for touch screen and other features*

*Recovery CD for restoring back to factory condition*

Note: Recovery disk is OS specific

*Paper back recovery manual*
12 VDC Power supply
Minimum power requirement is 24 watts

Standard AC Power cord
American 3 Prong

Phoenix to power supply prewired
This connector has adhesive as a strain relief.

Wire for screw connectors
This is used when installed in an environment that already has 12 to 24 volts available. A second phoenix connector is supplied without adhesive.
**Mounting plate (Optional, ordered separately)**

There is 4 mounting holes on the panel for permanent mounting. This option allows easy removal with a sliding connection type and a tab stop at the bottom.

There is one screw to secure the panel located at the base.
**VESPA Mount for the Panel PC**

This monitor conforms to the VESA Flat Panel Mounting Physical Mounting Interface standard which defines a physical mounting interface for flat panel monitors, and corresponding with the standards of flat panel monitor mounting devices, such as wall and table arms. The VESA mounting interface is located on the back of your monitor.

Mount the bracket to the wall. The tab stop goes on the bottom. Panel will slide over the bracket.
Product Mechanical Drawings

1. USB x2
2. RS232/422/485
3. Digital I/O (2 in / 2 out)
4. RJ-45 (PoE / LAN)
5. 12~24V DC-IN Terminal Block (Phoenix Type)
6. USB (Optional)

Labeling