Advantech Control Cabinet PC

Designed for Machine Construction and Plant Engineering Applications

- Introduction
- Product Features
- Intelligent Software
- Selection Guide
Advantech Control Cabinet PC

Wide Range of Product Form-factors for Different Mounting Scenarios of Cabinet Applications

Advantech’s UNO-1000/3000 series of Embedded Control Cabinet PCs are fanless with high performance, multiple extensions, and ruggedized chassis. With iDoor Technology which supports automation feature extensions such as Fieldbus communication, Wi-Fi/3G, Digital I/O and POE. Versatile Mounting space DIN-Rail Mount, Wall Mount, Enclosure Mount and Panel mount with easy installation indicated market segments. In terms of the type of mounting, with their Control Cabinet PC, they are suitable for IoT gateway, motion and vision applications.

Features & Benefits

Dual Power Input
Dual power input with wide range operating voltage is a fail-safe mechanism to reduce working unit maintaining down time by alternative power input source. And remote power on assists working units go back online from outside of the cabinet.

Multiple Expansion
UNO supports latest range of expansion interfaces including PCIe for high density I/O, iDoor for fieldbus modules, PCI for motion cards with easy installation captive thumb screws.

Dual iDoor Expansion
Advantech’s iDoor technology provides simple, flexible, and reliable expansion in high density systems using versatile color identification and multiple functions.

Built-in Digital I/O
Built-in DI/DO for simple I/O control, status detection, lighting control and event triggering in order to save extra cost and devices.

Dual Digital Display
Flexible display options provide resolutions of up to 4K/2K and provide excellent image quality.

Enclosure Mount (UNO-3400)
Compact outside heatsink mounts through a corresponding cut-out in the cabinet or enclosure panel which integrated seals represent high performance as IP67.

IEC-61010 certified
UNO-3382G/3384G are evaluated to the UL/IEC-61010 standard and support book mounting methods which makes them suitable for installing in harsh industrial environments.
Easy Maintenance

Captive Thumb Screw
Operators can work efficiently with captive thumb screws as a superior tool to strengthen swapping HDD, CFast & PCI/PCI and for maintaining storage and expansion devices.

Hot-swap RTC Battery
Removable RTC battery saves time and cost by avoiding disassembling the working unit and shutting down the whole operation.

Hot-swappable Storage
Hot-swap HDD/SSD let operators deploy software data or collect control data easily when maintaining working units without interruptions.
Advantech WebAccess is a 100% web-based SCADA (Supervisory Control And Data Acquisition) software and it acts as an IoT Platform providing open interfaces for partners to develop IoT applications for different vertical markets. In addition to traditional SCADA functions, WebAccess has an intelligent dashboard, to provide users with cross-platform, cross-browser data analysis and user interface using HTML5 technology. As well as the built-in widgets, WebAccess also provides Widget Builder to allow customers to build their own.

**WebAccess/HMI Designer**
WebAccess/HMI Designer is powerful yet intuitive software to create total solutions for HMI (Human Machine Interface) products. WebAccess/HMI Designer is proven in many application fields and is an easily integrated development tool. WebAccess/HMI Runtime, a part of WebAccess/HMI, guarantees reliability and performance of open platform because of the minimum system overhead, high communication data rates, sub-second screen switching, and 24/7 operation.

**Remote Device Management**
WISE-Pass/RMM is an innovative remote management and cloud-based software preloaded in all Advantech embedded solutions, allowing the efficient and centralized remote monitoring and management of embedded devices in real-time, device health status, system configuration, system protection, and recovery & backup. WISE-Pass/RMM targets the needs of creating a more intelligent and interconnected embedded computing solution.

**Versatile Mounting with Easy Installation**

- **DIN-Rail Mount**
UNO-1000 series can be painlessly installed on the rail with the sophisticated din-rail kit at the rear and R-angle design at the front.

- **Wall Mount**
Easy pull-out operation is extremely convenient that advantage is suitable for all but the heavier installations.

- **Enclosure Mount**
The UNO-3400 series are designed for easier and quick installation in control cabinets. As UNO-3400 which has the Placing-and-Click snap connector which has further considered users’ activity and then simplifies the installation procedures.

- **Enclosure Mount**
The UNO-3300 offers an open and universal automation solution, saves space and allows quick installation in a control cabinet.

- **DIN-Rail Mount**
SD let operators deploy software data or collect data when maintaining without interruptions.
## Advantech iDoor Module

### Selection Guide

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<tr>
<td>CPU</td>
<td>ARM Cortex A8, 600MHz</td>
<td>Intel® Quad 400 MHz</td>
<td>Intel® Atom™ N2808 1.86 GHz</td>
<td>Intel® Atom™ N3350 1.1GHz</td>
<td>Intel® Atom™ N3350 1.1GHz</td>
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<tr>
<td>Onboard RAM</td>
<td>256MB DDR2 SDRAM</td>
<td>256MB DDR3 SDRAM</td>
<td>4GB DDR3L, SO-DIMM</td>
<td>8GB DDR3L, SO-DIMM</td>
<td>8GB DDR4, SO-DIMM</td>
<td>8GB DDR4L, SO-DIMM</td>
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<td>Battery Backup SRAM</td>
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<td>-</td>
<td>On board RAM 512K</td>
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<td>Display</td>
<td>-</td>
<td>-</td>
<td>HDMI, VGA</td>
<td>DVI-I, HDMI</td>
<td>HDMI, DP</td>
<td>VGA, HDMI</td>
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<td>Audio</td>
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<td>-</td>
<td>Line-out</td>
<td>Line-out</td>
<td>Mic in, Line out (pin header)</td>
<td>Mic in, Line out (pin header)</td>
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<tr>
<td>Serial Ports</td>
<td>1 x RS-232, 1x RS-422/485, 1x RS-485</td>
<td>1 x RS-232, 1x RS-422/485, 1x RS-485</td>
<td>2 x RS-323, 2 x RS-232/422/485</td>
<td>1 x RS-232/232/422/485</td>
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<td>1 x RS-232, 1x RS-422/485, 1x RS-485</td>
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<td>Ethernet Ports</td>
<td>2 x 10/100 Mbps</td>
<td>2 x 10/100 Mbps</td>
<td>3 x 10/100/1000 Mbps</td>
<td>4 x 10/100/1000 Mbps</td>
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<td>USB Ports</td>
<td>1 x USB 2.0</td>
<td>1 x USB 2.0</td>
<td>2 x USB 2.0</td>
<td>2 x USB 2.0</td>
<td>6 x USB3.0</td>
<td>2 x USB 2.0</td>
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<td>PCIE/PCI Expansion</td>
<td>1 x Mini PCIe</td>
<td>2 x Mini PCIe</td>
<td>2 x Mini PCIe</td>
<td>1 x PCIe x 1</td>
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<td>1 x PCIe x 1</td>
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<td>Digital I/O</td>
<td>-</td>
<td>4-ch DI, 4-ch DO</td>
<td>4-ch DI, 4-ch DO</td>
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<td>Micro SD</td>
<td>1 x 1G MicroSD card</td>
<td>1 x MicroSD card slot</td>
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<td>CFast Slots</td>
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<td>CFast x 1</td>
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<td>2.5&quot; HDD Expansion</td>
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<td>1 x 1G MicroSD card</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Operating Temperature</td>
<td>-30 ~ 60°C (4 ~ 140°F)</td>
<td>-30 ~ 60°C (4 ~ 140°F)</td>
<td>-30 ~ 60°C (4 ~ 140°F)</td>
<td>-30 ~ 60°C (4 ~ 140°F)</td>
<td>-30 ~ 60°C (4 ~ 140°F)</td>
<td>0 ~ 55°C (32 ~ 131°F)</td>
<td>-30 ~ 60°C (4 ~ 140°F)</td>
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<td>Power Consumption Typical</td>
<td>5.3W</td>
<td>10W</td>
<td>24W</td>
<td>41W</td>
<td>30W</td>
<td>45W</td>
<td>50W</td>
</tr>
<tr>
<td>Dimensions (W x D x H)</td>
<td>50 x 90 x 100 mm (1.97&quot; x 3.54&quot; x 3.94&quot;)</td>
<td>63 x 105 x 100 mm (2.48&quot; x 4.13&quot; x 3.94&quot;)</td>
<td>86 x 139 x 152 mm (3.39&quot; x 5.51&quot; x 6.0&quot;)</td>
<td>106 x 139 x 198 mm (4.2&quot; x 5.5&quot; x 7.8&quot;)</td>
<td>143 x 238 x 117 mm (5.6&quot; x 9.3&quot; x 6.9&quot;)</td>
<td>UNO-3382G: 65.2 x 254 x 207 mm (2.57&quot; x 10&quot; x 8.1&quot;)</td>
<td>UNO-3384G: 103.2 x 254 x 207 mm (4.06&quot; x 10&quot; x 8.15&quot;)</td>
</tr>
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### Advanced Features
- **Memory/Storage/External I/O**
  - **FieldBus**
  - **Digital / Analog I/O**

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**Storage Devices**
- **UNO-1251G/1252G:** CFast, Ejection Type I
- **UNO-3382G/3384G:** 1 x CFast
- **UNO-3483G:** 1 x CFast

**Expansion Options**
- **UNO-1372G/1483G:** 1 x Mini PCIe
- **UNO-3283G:** 1 x Mini PCIe
- **UNO-3382G/3384G:** 1 x Mini PCIe
- **UNO-3483G:** 1 x Mini PCIe

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**Other Features**
- **Power Over Ethernet (PoE):** Available on select models
- **Wi-Fi Support:** Various models support Wi-Fi connectivity
- **Audio Outputs:** Available on select models
- **Video Outputs:** HDMI, VGA, DVI-D

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**Technical Specifications**
- **CPU Models:**
  - Intel® Core™ i3-4010U
  - Intel® Core™ i7-3612QE
- **RAM Options:**
  - 256MB DDR2 SDRAM
  - 256MB DDR3 SDRAM
  - 4GB DDR3L, SO-DIMM
  - 8GB DDR3L, SO-DIMM
  - 8GB DDR4, SO-DIMM
- **Storage Options:**
  - 1.91GHz Dual-Core ARM Cortex A8
  - i3-4010U 1.7GHz
- **Display Options:**
  - HDMI, VGA
  - DVI-I, HDMI
  - HDMI, DP
- **Audio Options:**
  - Mic in, Line in, Line out (pin header)
- **Power Input Options:**
  - 10-36VDC
  - 24VDC ± 20%
- **Dimensions:**
  - UNO-1251G/1252G: 120 x 100 x 25 mm
  - UNO-1372G/1483G: 213 x 125 x 25 mm
  - UNO-3283G: 120 x 100 x 25 mm
  - UNO-3382G/3384G: 213 x 125 x 25 mm
  - UNO-3483G: 120 x 100 x 25 mm

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**Unique Features**
- **UNO-1251G/1252G:**
  - 2 x 10/100 Mbps Ethernet Ports
  - 1 x USB 2.0
- **UNO-1372G/1483G:**
  - 3 x 10/100/1000 Mbps Ethernet Ports
  - 2 x USB 2.0
- **UNO-3283G:**
  - 4 x 10/100/1000 Mbps Ethernet Ports
  - 2 x USB 3.0
- **UNO-3382G/3384G:**
  - 2 x RS-422/485
  - 1 x PCIe x 1
- **UNO-3483G:**
  - 2 x RS-422/485
  - 1 x PCIe x 1
Advantech Innovative Design Concept- Simple, Flexible, Reliable

As a leading provider of Industrial PC, Advantech devoted to innovation product/service development. To be the pioneer in intelligent automation technology, the i-concept represents the intelligent, integrated and intuitive design which covers the innovation of service model, user behavior and cutting-edge technology that opens a new era of industrial automation.

An integrated intelligent key brings simplified intuitive operation for configuring your automation panel. With a flexible software design, customized functions are easier to carry out.

A standardized modular Interface which offers flexible expansion to increase the number of applications and expand system functions through the variety of standardized modular I/Os.

A Reliable Long Distance Transmission Technology which transfers video signals and touch control over a single Ethernet cable which overcomes interference in harsh environments not only for data connections, but also for a cost effective multiple display solution.

http://www.advantech.com

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