Advantech Control Cabinet PC

Designed for Machine Construction and Plant Engineering Applications

- Introduction
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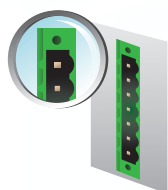**ADVANTECH**

Enabling an Intelligent Planet

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Advantech Control Cabinet PC

Wide Range of Product Form-factors for Different Mounting Scenarios of Cabinet Applications
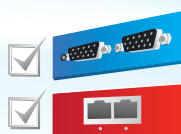
Advantech's UNO-1000/3000 series of Embedded Control Cabinet PCs are fanless with high performance, multiple extensions, and ruggedized chassis with an embedded operating system (Windows CE, Windows XPE, Linux-Embedded). With iDoor Technology which supports automation feature extensions such as Fieldbus communication, Wi-Fi/3G, and Digital / Analog I/O. Versatile Mounting space DIN-Rail Mount, Wall Mount, Book 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. The design meets Class 1 Div. 2 & ATEX Certification for harsh environment applications.

Features & Benefits

Dual iDoor Expansion

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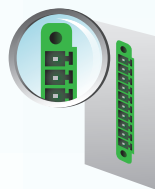
Dual Power Input

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.
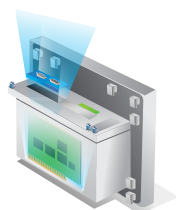
Built-in Digital I/O

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

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 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.

C1D2/ATEX Certfication

Meets and exists in hardly enviroment and applicable to operation in safety as Oil & Gas industry.
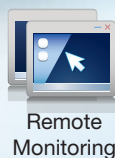
UNO-3200 Series

UNO-1000 Series

Remote
Monitoring

Remote On/Off,
KVM

CPU

System
Configuration

SMS

Real-time
Response

System
Recovery

UNO-3300 Series

UNO-3400 Series

Easy Maintenance

Captive Thumb Screw

Operators can work efficiently with captive thumb screws as a superior tool to strengthen swapping HDD, CFast & PCI/PCIand 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-swapp

Hot-swap HDD/S
deploy software d
control data easily
working units with

Intelligent Software

WebAccess

Advantech WebAccess is a 100% web browser-based software package for HMI and SCADA with private cloud software architecture. All the features found in conventional HMI and SCADA software including Animated Graphics Displays, Real-time Data, Control, Trends, Alarms and Logs, are available in an standard web browser. WebAccess is built around the latest internet technologies.

WebAccess

SUSIAccess
Remote Device Management

SUSIAccess 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. SUSIAccess targets the needs of creating a more intelligent and interconnected embedded computing solution.

SUSIAccess
Remote Device Management

Panel Express

PanelExpress is a Windows based HMI runtime softwar, it enables you to utilize the resources of a PC such as computation power, multimedia and bigger screen to realize a high-end sophisticated HMI.

PANELEXPRESS
Designed for Convenience

System Protection

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.
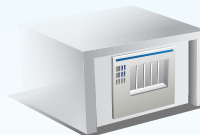
Wall Mount

Easy pull-out operation is extremely convinent that advantage is suitable for all but the heavier installations.

Book Mount

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

Panel 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.

able Storage

SD let operators ata or collect when maintaining out interruptions.

Selection Guide

Model Name	UNO-1252G	UNO-1372G	UNO-1483G	UNO-3283G	UNO-3382G/3384G	UNO-3483G
CPU	Intel® Quark 400 MHz	Intel® Atom™ E3845 1.91GHz	Intel® 4th Gen. Core™ i3-4010U 1.7GHz	Intel® Core™ i CPU	Intel® Core™ i7-4650U 1.7Hz	Intel® Core™ i7-3612QE
Onboard RAM	256MB DDR3 SDRAM	4GB DDR3L SDRAM	8GB DDR3L SDRAM	8GB DDR3L SDRAM	8GB DDR3L SDRAM	8GB SO-DIMM DDR3/DDR3L
Battery-Backup SRAM	-	-	-	-	On board MRAM 512K	-
Display	-	HDMI, VGA	DP, VGA	DVI, HDMI	DVI, DP (disabled when attached to display module)	VGA, HDMI
Audio	-	Line-out	Line-out	Mic in, Line out (pin header)	N/A (built-in Line-in/out/Mic, I/O through iDoor)	Mic in, Line out (pin header)
Serial Ports	1 x RS-232, 1 x RS-485	1 x RS-232, 1 x RS-422/485	1 x RS-232, 2 x RS-422/485	2 x RS-232/422/485 with DB9 connection	RS-232/422/485 x 1 (isolation)	1 x RS-232, 1 x RS-232/422/485 with DB9 connection (pin header)
Ethernet Ports	2 x 10/100 Base-T	3 x 10/100/1000 Base-T	4 x 10/100/1000 Base-T	2 x 10/100/1000 Base-T RJ-45 (support IEEE1588)	2 x 10/100/1000 Base-T RJ-45 (support IEEE1588)	2 x 10/100/1000 Base-T RJ-45 (support IEEE1588)
USB Ports	1 x USB 2.0 1 x USB 2.0 client	2 x USB 2.0 1 x USB 3.0	2 x USB 2.0 2 x USB 3.0	2 x USB 2.0 4 x USB 3.0	2 x USB 2.0 2 x USB 3.0	2 x USB 2.0 2 x USB 3.0
PCIe/PCI Expansion	2 x Mini PCIe	2 x Mini PCIe	1 x PCIe x 1 2 x Mini PCIe	1 x PCIe x 16, 2 x PCI	UNO-3382G: 2 x Mini PCIe UNO-3384G: 2 x Mini PCIe, 2 x PCI/PCIe (2 x PCI, 1 x PCIe x1+1 x PCIex 4, 1 x PCI + 1 x PCIex 4)	1 x PCIex 4, 3 x Mini PCIe (2 x full, 1 x half)
Digital I/O	4-ch DI, 4-ch DO	4-ch DI, 4-ch DO	4-ch DI, 4-ch DO	-	-	-
CFast Slots	-	-	-	CFast x 1	CFast x 1	-
2.5" HDD Expansion	-	1 x SATA 6Gb/s	1 x SATA 6Gb/s	Two built-in 2.5" SATA HDD brackets with support for RAID 0/1	Two built-in 2.5" SATA HDD brackets with support for RAID 0/1	Two built-in 2.5" SATA HDD brackets with support for RAID 0/1
Operating Systems	Linux	Windows 7/8, WES7/WE8S, Linux	Windows 7/8, WES7/WE8S, Linux	WinXP, Win7/8, WES7/8, Win8, WES, Linux	Linux, Win 7, WES 7, Win 8, Win Emb 8.1 Industry	WinXP, Win7/8, WES7/8, Win8, WES, Linux
Mounting	DIN-rail Mount	DIN-rail/Wall Mount	DIN-rail/Wall Mount	Wall, Stand, Panel Mount	Book Mount	Enclosure Mount
Power Input Range	12/24V_{DC} ± 15%	12/24V_{DC} ± 20%	12/24V_{DC} ± 20%	12/24V_{DC} ± 20%	24V_{DC} ± 20%	12/24V_{DC} ± 20%
Operating Temperature	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)
Power Consumption Typical	6W	24W	41W	50W	45W	50W
Power Requirement	12W, 24V_{DC} @ 0.5A	36W, 24V_{DC} @ 1.5A	60W, 24V_{DC} @ 2.5A	12V/24V_{DC} @ 5A	24V_{DC} @ 4.5A	12V/24V_{DC} @ 4A
Dimensions (W x D x H)	70 x 90 x 100 mm (2.76" x 3.54" x 3.94")	85 x 139 x 152 mm (3.3" x 5.5" x 6.0")	106 x 139 x 198 mm (4.2" x 5.8" x 7.8")	305 x 238 x 225 mm (120.1" x 93.7" x 88.58")	UNO-3382G: 254 x 207 x 65.2 mm (100" x 81.5" x 25.7") UNO-3384G: 254 x 207 x 103.2 mm (100" x 81.5" x 40.6")	305 x 82 x 225 mm (120.1" x 32.3" x 88.6")

Advantech iDoor Module

Memory/Storage/External I/O   Communication   FieldBus   Digital / Analog I/O

PCM-2300MR
MR4A16B, MRAM, 2MByte

PCM-2300TP
TPM Compliant with TCG 1.2

PCM-23C1CF
CFast, Ejection Type I, CFast x 1

PCM-23U1DG
Locked USB Slot for USB Dongle, USB x 1

PCM-24D2R2/24D2R4
OXPCIe-952 UART, Isolated RS-232, 422/485, DB9 x 2

PCM-24D4R2/24D4R4
OXPCIe-954 UART, Non-Isolated RS-232, 422/485, DB37 x 1

PCM-24R2PE
Intel i350, GbE, PoE IEEE 802.3af, PD, RJ45 x 2

PCM-24R2GL
Intel i350 PCIe, GbE, LAN Mini Card, RJ45 x 2

PCM-24R1TP
Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1

PCM-24U2U3
USB 3.0 Mini Card, USB x 2

PCM-24S2WF
802.11 a/b/g/n 2T2R w/ BT4.0, Atheros AR9462, SMA x 2

PCM-24S23G
6-band HSPA Cellular Module, SIM Holder+ GPS, SMA x 2

PCM-24S24G
LTE Bands, UMTS/HSPA Bands, GPS/GPRS Bands, SMA x 2

PCM-26D2CA
SJA1000 CANBus, CANOpen, DB9 x 2

PCM-26D1PB
Hilscher netX100 FieldBus, ProfiBus, DB9 x 1

PCM-27D24DI
Digital I/O, 16 DI / 8 DO, Isolation, DB37 x 1