WA-HU HMI Series

Visualization Box HMI and Communication Gateway with WebAccess/HMI Runtime

Features

Open HMI Application-Ready-Package with Embedded Automation Box PC

- Industrial fanless compact design with palm and regular form factor
- Flexible stand, wall, VESA, DIN rail mount options
- Powerful Intel Celeron/Core i3 processor performance
- 32GB industrial mSATA installed
- Microsoft Windows Embedded 7 Pro 64-bit installed
- Supports iDoor technology for diverse applications

WebAccess/HMI Runtime

- Includes HMI Runtime 1500 tags
- Supports 450 industrial communication protocol and drivers for PLC/devices
- Rich object library for easy application design
- Supports on-/off-line design simulation by the development tool

Introduction

The WA-HU HMI series is a complete application-ready-package that includes an embedded automation box PC (in a palm-size or regular form factor), 32 GB mSATA, Microsoft Windows Embedded 7 Pro, and WebAccess/HMI Runtime. This provides users with an efficient, integrated HMI solution for production data visualization and protocol translation in the automation industry. The embedded automation box PC with Intel® Celeron®/Core™ i3 processor provides a high-performance system with various mount options for diverse field operations.

The built-in Open HMI Runtime software offers a rich object library, online/offline simulation, and over 450 industrial protocols and drivers. Open HMI Runtime is designed to enable a wide range of HMI control and visualization functions for creating powerful, user-friendly, reliable solutions for sophisticated applications.

Contents of the Open HMI Application-Ready-Package Solution for Industry 4.0

- Embedded automation box PC
- 32GB mSATA
- Microsoft Windows Embedded 7 Pro (64 bit)
- WebAccess/HMI Runtime 1500 tags

Open HMI Solution Specifications

Visualized Box HMI for Process Information

- Supports high resolution VGA and full HD HDMI output
- Multiple languages for HMI (up to 10 languages)
- Object library: includes default/common objects, object groups and global objects
- HMI Designer: a powerful develop tool supports online/offline design simulation
- User-customized picture/sounds database

Application-Oriented HMI Functions

- Data log: up to 16 datalog blocks (saved as csv/txt file)
- Operation log: operation history for process parameter inspection (saved as csv file)
- Alarm: up to 16 alarm blocks, e-mail notification (supports SSL/TSL encryption)
- Recipe: up to 16 Recipe blocks
- Schedule: up to 80 sets
- Event: up to 36 sets
- User-customized data process: Macros
- Security Authority: 9 levels password

Communication with Multiple Systems

- Rich interfaces such as RS-232/422/485, USB 3.0/2.0, Ethernet, and Audio I/O
- Maximum Serial/Ethernet Links: 4-links (serial), 16-links (Ethernet)
- Supports 450 communication protocols and drivers for industrial devices
- Gateway service by Modbus for HMI devices communication
- Flexible I/O expansion by iDoor technology

Reliable Design for Field Operations

- Fanless compact design with higher reliability
- Stand, wall, VESA and Din-rail mounting for any field side installation
- Supports remote system status monitoring by WISE-PaaS/RMM
- Approved Certifications: BSMI, CCC, CE, FCC Class A, UL
- Wide operating temperature
- Vibration Protection with mSATA: 2 Grms (5~500 Hz)

For more Open HMI application stories and technical support documents, visit the Advantech website at http://select.advantech.com/open-hmi-solutions

All product specifications are subject to change without notice.

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Configuration Options

Series	Visualization Box HMI and Communication Gateway		
Part Number	WA-HU2272G-J15H2AE	WA-HU2473G-J15H2AE	WA-HU2483G-315H2AE
Embedded Automation PC	UNO-2272G-J2AE	UNO-2473G-J3AE	UNO-2483G-434AE
Operating System	Microsoft WES 7 Pro (64 bit)		
HMI Software	WebAccess/HMI Runtime 1500 tags		
Form Factor	Palm size	Regular size	Regular size
CPU	Intel® Celeron® J1900 2.0 GHz	Intel® Celeron® J1900 2.4 GHz	Intel® Core™ i3-4010U 1.7 GHz
Memory	2G of DDR3L SDRAM	4G of DDR3L SDRAM	8G of DDR3L SDRAM
Display Type	HDMI: 1920 x 1080 @60Hz	HDMI: 1920 x 1080 @60Hz VGA: 2560 x 1600 @60Hz	HDMI: 3200 x 2000 @60Hz VGA: 1920 x 1200 @60Hz
Storage	1 x 32 GB mSATA		
Expansion Slots	2 x Mini PCIe	1 x Mini PCIe	2 x Mini PCIe
Mounting	Stand and wall		
	DIN rail and VESA (with optional kit)		
Network (LAN)	1 x 10/100/1000 Base-T	2 x 10/100/1000 Base-T	4 x 10/100/1000 Base-T
I/O	1 x RS-232 (optional RS-422/485 via BIOS configuration), 2 x USB 2.0, 1 x USB 3.0	2 x RS-232, 2 x RS-422/485, 4 x USB 2.0, 1 x USB 3.0	2 x RS-232, 2 x RS-422/485, 2 x USB 2.0, 2 x USB 3.0
iDoor Expansion	1 x iDoor		
Audio	1 x Line Out	1 x Line In, 1 x Line Out	1 x Line In, 1 x Line Out
DC Power Input (Voltage)	24 V_{DC} ± 20%	10 ~ 36 V_{DC}	24 V_{DC} ± 20%
Power Consumption	12 W	24 W	28 W
Operating Temperature	-10 ~ 55°C	-10 ~ 55°C	-20 ~ 60°C
Dimensions	157 x 88 x 50 mm	252 x 149 x 62 mm	252 x 149 x 62 mm
Certification	CE, FCC, UL, CCC, BSMI		

Ordering Information

- **WA-HU2483G-315H2AE** UNO-2483G-434AE, HMI Runtime 1500 tags, 32G mSATA, WES7P
- **WA-HU2473G-J15H2AE** UNO-2473G-J3AE, HMI Runtime 1500 tags, 32G mSATA, WES7P
- **WA-HU2272G-J15H2AE** UNO-2272G-J2AE, HMI Runtime 1500 tags, 32G mSATA, WES7P

Accessories

- **PWR-247-CE** 100-240V 60W 24V 2.5A power adapter for WAHU2272G/WA-HU2473G
- **96PSA-A150W24T2** 100-240V 150W 24V power adapter for WA-HU2483G
- **1702002600** Power Cable US Plug 1.8 M
- **1702002605** Power Cable EU Plug 1.8 M
- **1702031801** Power Cable UK Plug 1.8 M
- **1700000596-11** Power Cable China/Australia Plug 1.8 M
- **UNO-2000G-DMKAE** Din-rail kit for WA-HU2272G/WA-HU2473G/ WA-HU2483G
- **UNO-2000G-VMKAE** VESA Mount kit for WA-HU2272G/WA-HU2473G/ WA-HU2483G

Selected iDoor Modules

- **PCM-24D2R2-BE** 2-Ports Isolated RS-232 mPCIe, DB9
- **PCM-24D2R4-BE** 2-Ports Isolated RS-422/485 mPCIe, DB9
- **PCM-24D4R2-BE** 4-Ports Non-Isolated RS-232 mPCIe, DB37
- **PCM-24D4R4-BE** 4-Ports Non-Isolated RS-422/485 mPCIe, DB37
- **PCM-27D24DI-AE** 24-Channels Isolated Digital I/O with counter mPCIe, DB37
- **PCM-24U2U3-AE** USB 3.0, mPCIe, USB-A type x 2
- **PCM-24S2WF-BE** 802.11 a/b/g/n 2T2R w/ Bluetooth 4.0, half-size mPCIe
- **PCM-24R1TP-AE** Intel® 82574L, GbE, RJ45 x 1