



## WP-9229-CE7 / WP-9429-CE7 / WP-9829-CE7

WP-9000-CE7 built-in InduSoft Web Studio

### ■ Features

- InduSoft runtime license ready
- Windows CE 7.0
- Cortex-A8, 1GHz CPU
- Hard Real-Time Capability
- 64-bit Hardware Serial Number for Software Protection
- 2/4/8 Slots for High Profile I/O Modules
- Various Memory and Storage
  - 512 MB SDRAM and 256 MB Flash
  - 16 KB FRAM and 128 KB MRAM for data retention
  - 1 x SD socket with one SD card
- Various Communication Interfaces
  - 10/100/1000BASE-T Ethernet Port
  - Serial Ports (RS-232/485)
  - USB 2.0 (host)
- Redundant Power Input



### ■ Introduction

**WP-9229-CE7 / WP-9429-CE7 / WP-9829-CE7** are CE7 based WinPAC that combine computing, I/O, and operator interface into a single unit, and provide the perfect solution for data acquisition and control in an individual PAC. It is equipped with an ARM Cortex-A8 (32-bit and 1 GHz) CPU and a variety of input/output ports (USB, Ethernet, RS-232/485). Local 2/4/8 I/O slots are available to use ICP DAS I-9K and I-97K series I/O modules and remote I/O expansion is available to use Ethernet I/O modules and RS-485 I/O modules.

This WinPAC also features with the powerful **InduSoft Web Studio**.

**InduSoft Web Studio** is the most powerful, integrated collection of e-automation development tool that includes all the building blocks needed to develop Human Machine Interface (HMI) and Supervisory Control and Data Acquisition (SCADA) systems. Compared to traditional IPC + PLC solutions, WinPAC reduces overall system cost, space and gives you all the best features of IPC and PLC.

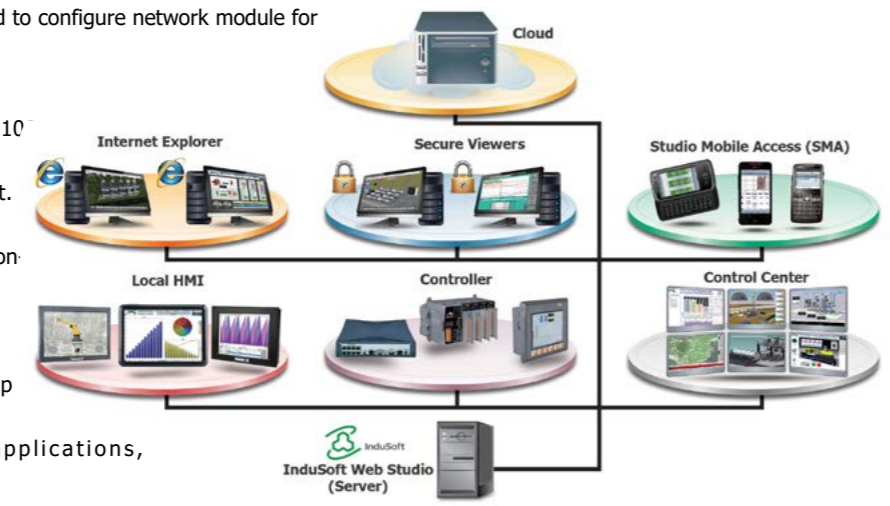
### ■ InduSoft Web Studio

InduSoft Web Studio is a powerful, integrated collection of automation tools that includes all the building blocks needed to develop modern Human Machine Interfaces (HMI), Supervisory Control and Data Acquisition (SCADA) systems, and embedded instrumentation and control applications. InduSoft Web Studio supports all Windows runtime platforms, ranging from Windows CE, Windows XP, Windows XP Embedded, Vista, Windows 7 (32/64 bit), Windows 8 (32/64 bit), Windows 8.1 (32/64 bit), and Windows Server Editions, along with built-in support for local or remote (web) based visualization. InduSoft also conforms to industry standards such as Microsoft .NET, OPC, DDE, ODBC, XML, and ActiveX.

ICP DAS provides the InduSoft bundled driver to integrate InduSoft software and ICP DAS products (I-7000, I-8000, I-87K and CAN Series) for SCADA system. There are also OPC, DDE and ActiveX development toolkit provided to cooperate with InduSoft. Besides, the VxComm software of ICP DAS can be performed to link to Internet/Intranet modules in an easy way. And DCON Utility of ICP DAS can be used to configure network module for use and maintenance.

#### Features of InduSoft:

- Intuitive script language with more than 10<sup>4</sup> standard functions is provided.
- Conform to industry standards: Microsoft .NET, OPC, DDE, ODBC, XML.
- Full-Featured WinCE-based run-time environment (CE View).
- Dynamic library of symbols - customizable.
- ActiveX container (Windows NT/CE).
- Automatic e-mail (SMTP) and dial-up connection interface supported.
- Provide multi-level security for applications, including the Internet and Intranet.

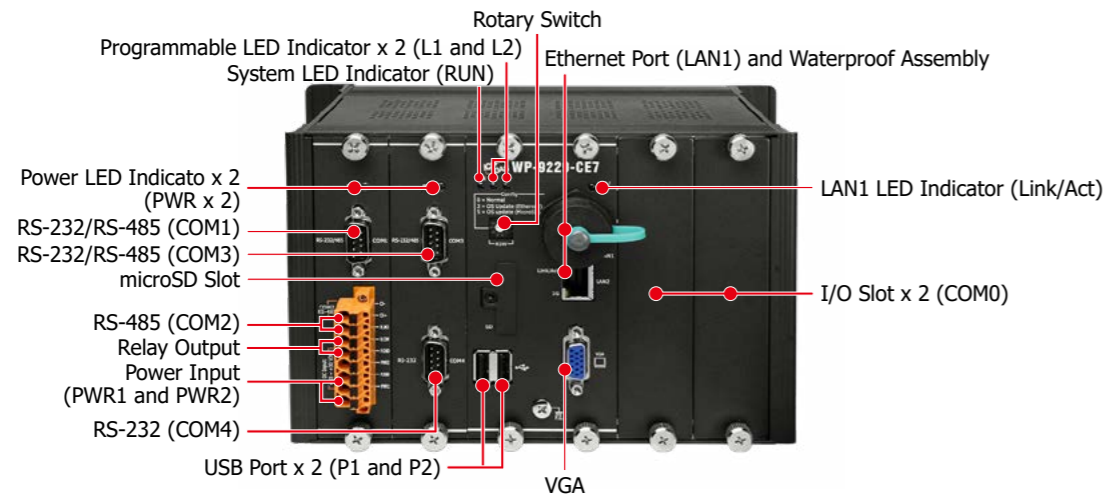


### ■ System Specifications

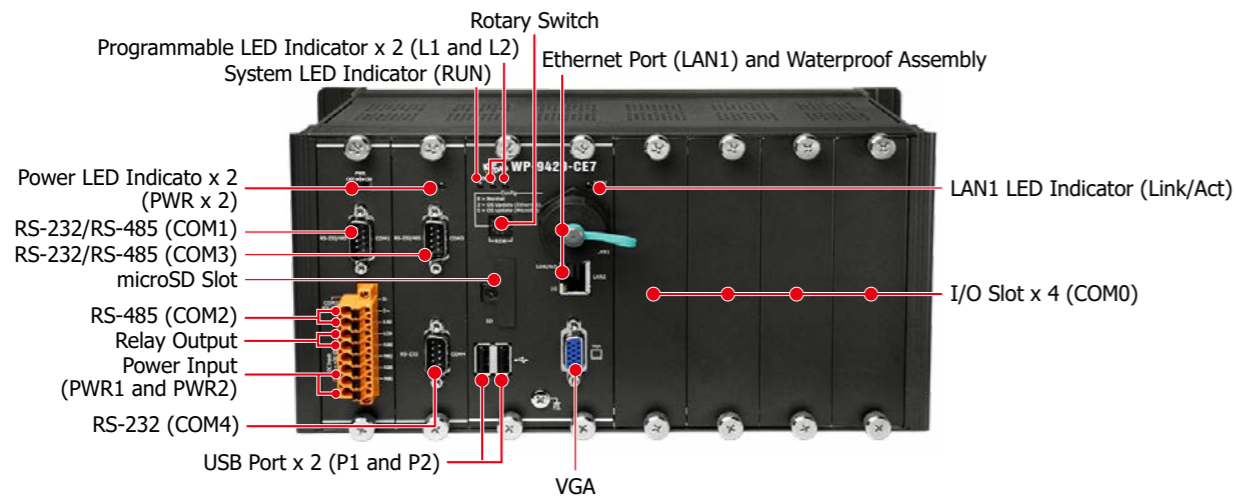
| Model                           | WP-9229-CE7   | WP-9429-CE7              | WP-9829-CE7              |
|---------------------------------|---|--------------------------|--------------------------|
| <b>Software</b>                 |   |                          |                          |
| OS                              | Windows CE 7.0  |                          |                          |
| Framework                       | .Net Compact Framework 3.5  |                          |                          |
| Service                         | FTP Server, Web Server (Supports VB script, JAVA script), Embedded SQL Server                       |                          |                          |
| SDK                             | DII for VC, DII for Visual Studio.Net 2008  |                          |                          |
| Multilanguage Support           | English, German, French, Spanish, Russian, Italian, Korean, Simplified Chinese, Traditional Chinese |                          |                          |
| Preloaded Software              | InduSoft Web Studio runtime   |                          |                          |
| <b>CPU Module</b>               |   |                          |                          |
| CPU                             | Cortex-A8, 1.0 GHz  |                          |                          |
| SDRAM                           | 512 MB DDR3   |                          |                          |
| MRAM                            | 128 KB  |                          |                          |
| Flash                           | 256 MB  |                          |                          |
| EEPROM                          | 16 KB   |                          |                          |
| Storage                         | 4 GB SD card (up to 32 GB)  |                          |                          |
| Real Time Clock (RTC)           | Provide seconds, minutes, hours, dates, day of week, month, year                                    |                          |                          |
| 64-bit Hardware Serial Number   | Yes, for software copy protection   |                          |                          |
| Watchdog Timer                  | Dual Watchdog Timer   |                          |                          |
| Rotary Switch                   | 1 x 10 Position (0 ~ 9)   |                          |                          |
| <b>Display</b>                  |   |                          |                          |
| VGA Resolution                  | 800 × 600, 1024 × 768   |                          |                          |
| LED Indicators                  | 1 x System, 2 x Power, 2 x Programmable   |                          |                          |
| <b>Communication Interfaces</b> |   |                          |                          |
| Ethernet                        | 2 x RJ-45, 10/100/1000 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)                   |                          |                          |
| USB 2.0 (host)                  | 2   |                          |                          |
| COM 0                           | Internal communication with the I-97K series modules in slots                                       |                          |                          |
| COM 1                           | RS-232/485 (RxD, TxD and GND for RS-232; Data+, Data- for RS-485); 3000 VDC isolated                |                          |                          |
| COM 2                           | RS-485 (Data+, Data-); 3000 VDC isolated  |                          |                          |
| COM 3                           | RS-232/485 (RxD, TxD, CTS, RTS and GND for RS-232; Data+, Data- for RS-485); 3000 VDC isolated      |                          |                          |
| COM 4                           | RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); 3000 VDC isolated                            |                          |                          |
| <b>I/O Expansion</b>            |   |                          |                          |
| I/O Slots                       | 2   | 4                        | 8                        |
| <b>Mechanical</b>               |   |                          |                          |
| Dimension (W x L x H)           | 239 mm x 133 mm x 164 mm  | 300 mm x 133 mm x 164 mm | 422 mm x 133 mm x 164 mm |
| Ingress Protection Rating       | IP30 (Aluminum)   |                          |                          |
| Installation                    | DIN-Rail, Wall mounting   |                          |                          |
| <b>Environmental</b>            |   |                          |                          |
| Operating Temperature           | -25 ~ +75°C   |                          |                          |
| Storage Temperature             | -30 ~ +80°C   |                          |                          |
| Humidity                        | 10 ~ 90 % RH, Non-condensing  |                          |                          |
| <b>Power</b>                    |   |                          |                          |
| Input Range                     | +10 ~ 30 VDC (1 kV Isolated)  |                          |                          |
| Redundant Power Inputs          | Yes, with one power relay (1 A @ 24 VDC) for alarm  |                          |                          |
| Capacity                        | 1.5 A, 5 V supply to CPU and backplane; 6.5 A, 5 V supply to I/O expansion slots, total 40 W        |                          |                          |
| Consumption                     | 10.8 W (0.45 A @ 24 VDC)  |                          |                          |

## Appearance

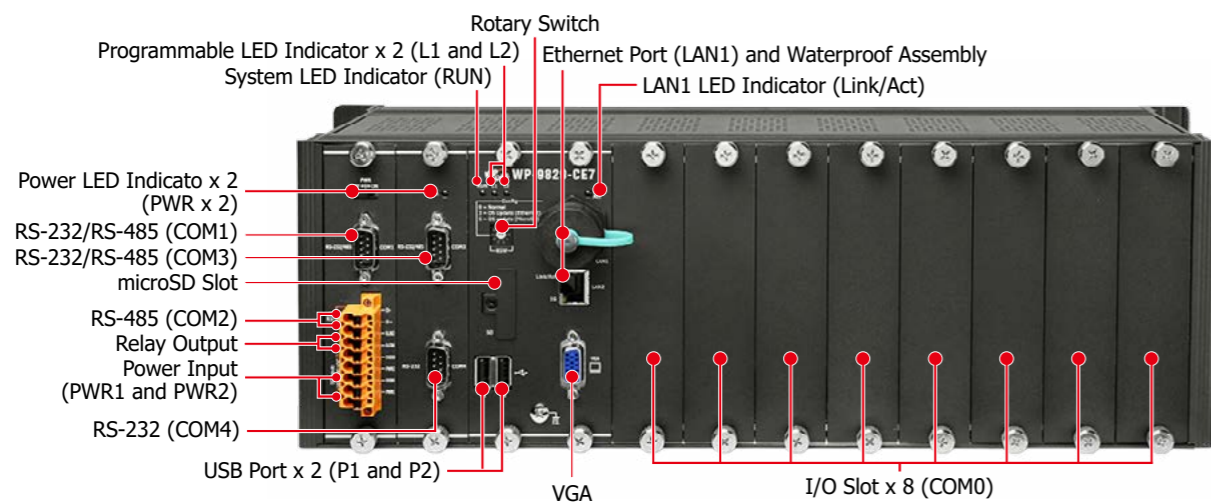
### WP-9229-CE7



### WP-9429-CE7

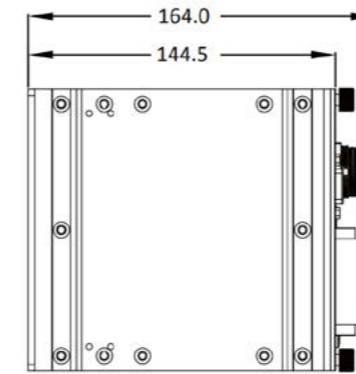


### WP-9829-CE7



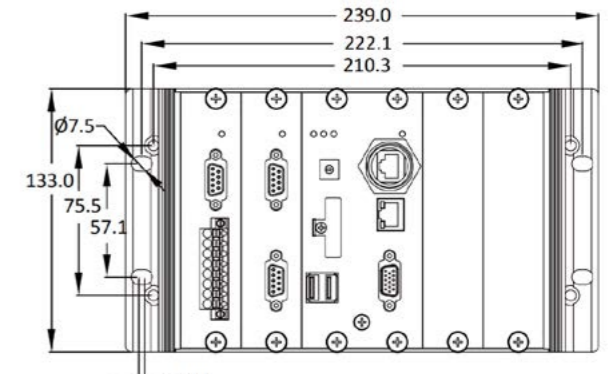
## Dimensions (Units: mm)

### WP-9229-CE7 / WP-9429-CE7 / WP-9829-CE7



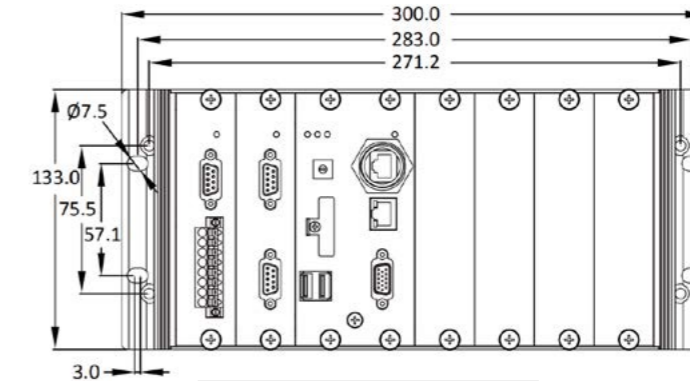
Left Side View

### WP-9229-CE7



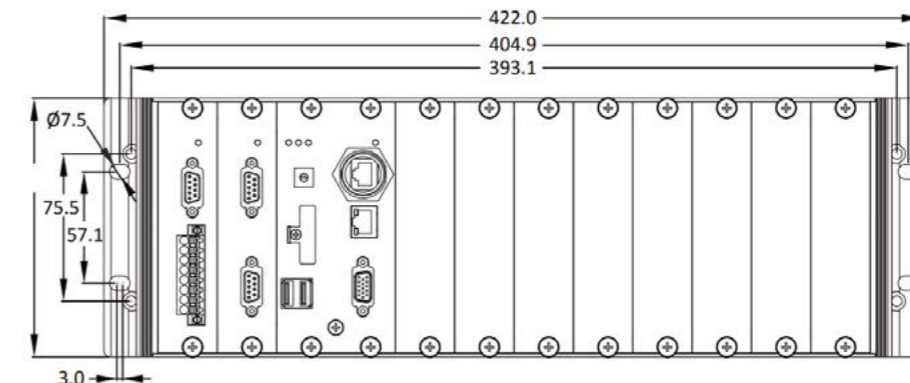
Front View

### WP-9429-CE7



Front View

### WP-9829-CE7



Front View

## Ordering Information

| InduSoft Web Studio Default Runtime License: 300 Tags, Unlimited Drivers  |   |
|---|---|
| <b>WP-9229-CE7 CR</b>   | InduSoft Web Studio (300 tags) ready, 2-slot WinPAC (WinCE 7.0) (RoHS)  |
| <b>WP-9429-CE7 CR</b>   | InduSoft Web Studio (300 tags) ready, 4-slot WinPAC (WinCE 7.0) (RoHS)  |
| <b>WP-9829-CE7 CR</b>   | InduSoft Web Studio (300 tags) ready, 8-slot WinPAC (WinCE 7.0) (RoHS)  |
| InduSoft Web Studio Default Runtime License: 1500 Tags, Unlimited Drivers |   |
| <b>WP-9229-CE7-1500 CR</b>  | InduSoft Web Studio (1500 tags) ready, 2-slot WinPAC (WinCE 7.0) (RoHS) |
| <b>WP-9429-CE7-1500 CR</b>  | InduSoft Web Studio (1500 tags) ready, 4-slot WinPAC (WinCE 7.0) (RoHS) |
| <b>WP-9829-CE7-1500 CR</b>  | InduSoft Web Studio (1500 tags) ready, 8-slot WinPAC (WinCE 7.0) (RoHS) |