



## XP-9181-WES7/WP-9381-WES7/XP-9781-WES7

Windows Embedded Standard 7 IPC

### Features

- Windows Embedded Standard 7 SP1 x64 (64-bit)
- Intel® Atom™ E3845 1.91 GHz
- 4 GB DDR3 SDRAM
- 32 GB SSD
- VGA / HDMI Display Output
- 2 10/100/1000M Ethernet Ports
- Audio with Microphone-In and Earphone-Out
- Redundant Power Input
- Operating Temperature: -25 ~ +75 °C



### Introduction

The XP-9181-WES7/XP-9381-WES7/XP-9781-WES7 are WES7 based PACs that combine computing, I/O, and operator interface into a single unit, and provide the perfect solution for integrating HMI, data acquisition and control in an individual PAC. It is equipped with an Intel E3827 CPU, 1/3/7 I/O expansion slots and a variety of connectives including dual Gigabit Ethernet, VGA, USB port, RS-232 and RS-485 interface. Local I/O slots are available to use our I-9K and I-97K series I/O modules and remote I/O expansions are available to use our Ethernet I/O modules and RS-485 I/O modules.

Since WES7 has the same Win32 API as Windows 7, most popular applications on desktop can run on WES7 based Panel PC.

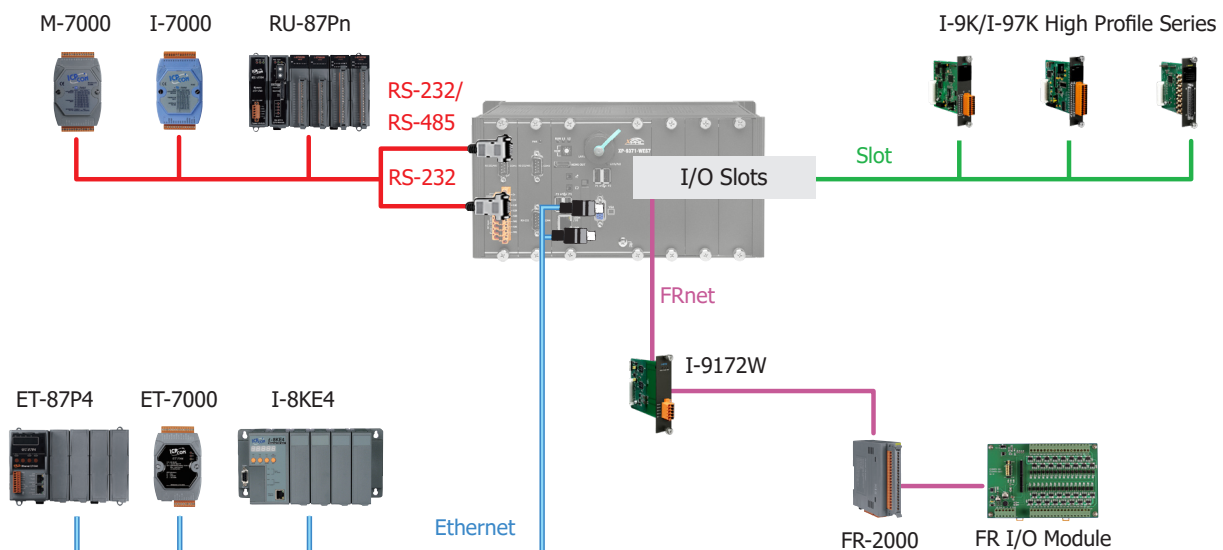
### Windows Embedded Standard 7.0



Most of the popular features in Windows software are included, such as EWF (Enhanced Write Filter), Remote Desktop Connection, IIS, ASP/ASP.NET, .NET Framework 4.5 and also supports rich development software solutions, such as VS 6.0, VS.NET, VB, Delphi, BCB, InduSoft.

- Full Win32 API
- Remote Desktop Protocol 5.1
- Silverlight 5
- Enhanced Write Filter
- .NET Framework 3.5, 4.0, 4.5, 4.7

### Applications

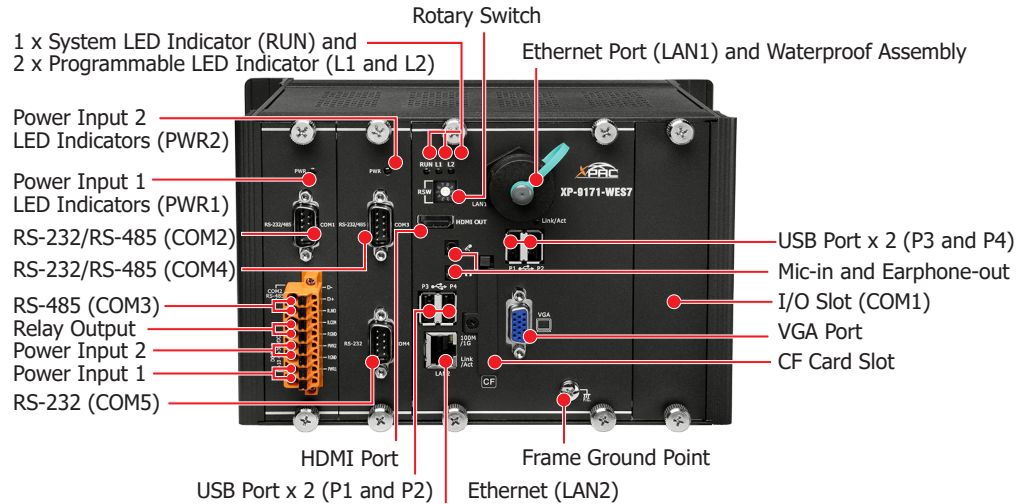


## Specifications

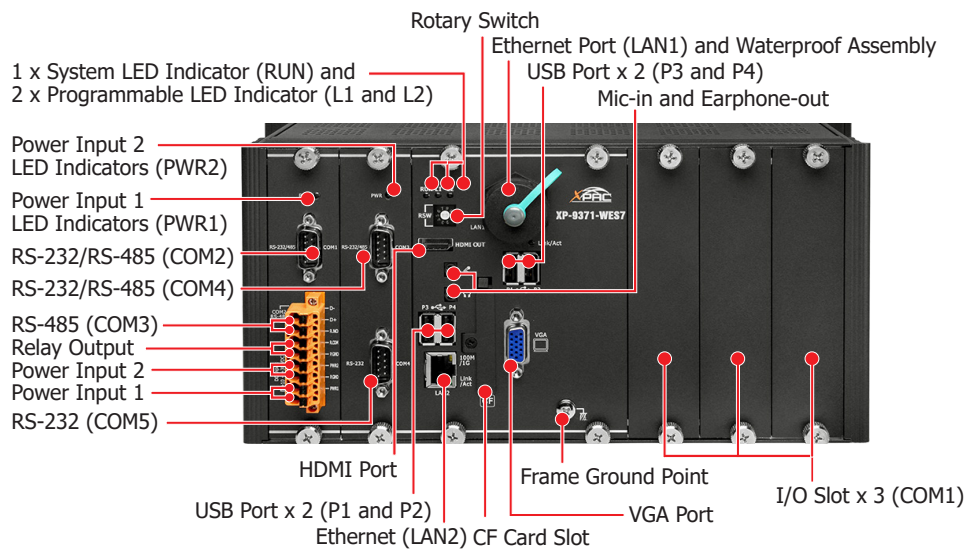
| Model                         | XP-9181-WES7                                                                                                              | XP-9381-WES7                                                                                    | XP-9781-WES7                                                                                    |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| System Software               |                                                                                                                           |                                                                                                 |                                                                                                 |
| OS                            | Windows Embedded Standard 7 SP1 x64 (64-bit)                                                                              |                                                                                                 |                                                                                                 |
| .Net Compact Framework        | 3.5, 4.0, 4.5, 4.7                                                                                                        |                                                                                                 |                                                                                                 |
| Embedded Service              | IE11, FTP Server, IIS 7.0, ASP (Java Script, VB Script)                                                                   |                                                                                                 |                                                                                                 |
| SDK Provided                  | DII for VC, DII for Visual Studio.Net                                                                                     |                                                                                                 |                                                                                                 |
| Multilanguage Support         | English, German, French, Spanish, Portuguese, Russian, Italian, Korean, Japanese, Simplified Chinese, Traditional Chinese |                                                                                                 |                                                                                                 |
| CPU Module                    |                                                                                                                           |                                                                                                 |                                                                                                 |
| CPU                           | E3845 (1.91 GHz, 64-bit quad core)                                                                                        |                                                                                                 |                                                                                                 |
| SDRAM                         | 4 GB DDR3                                                                                                                 |                                                                                                 |                                                                                                 |
| MRAM                          | 128 KB                                                                                                                    |                                                                                                 |                                                                                                 |
| Flash                         | mSATA slot with one 32 GB SSD                                                                                             |                                                                                                 |                                                                                                 |
| EEPROM                        | 16 KB                                                                                                                     |                                                                                                 |                                                                                                 |
| Expansion Flash Memory        | CF card slot with one 16 GB CF card (support up to 32 GB)                                                                 |                                                                                                 |                                                                                                 |
| RTC (Real Time Clock)         | Provide seconds, minutes, hours, day of week/month, month and year                                                        |                                                                                                 |                                                                                                 |
| 64-bit Hardware Serial Number | Yes, for software copy protection                                                                                         |                                                                                                 |                                                                                                 |
| Dual Watchdog Timer           | Yes                                                                                                                       |                                                                                                 |                                                                                                 |
| LED Indicator                 | 1 x System, 2 x Power and 2 x Programmable                                                                                |                                                                                                 |                                                                                                 |
| Rotary Switch                 | Yes (0 to 9)                                                                                                              |                                                                                                 |                                                                                                 |
| Audio                         | Mic-in and Earphone-out                                                                                                   |                                                                                                 |                                                                                                 |
| VGA & Communication Ports     |                                                                                                                           |                                                                                                 |                                                                                                 |
| VGA Resolution                | 1280 x 1024 ~ 1920 x 1080 (16 : 9), 640 x 480 ~ 1024 x 768 (4 : 3)                                                        |                                                                                                 |                                                                                                 |
| HDMI Resolution               | 1280 x 1024 ~ 1920 x 1080 (16 : 9), 640 x 480 ~ 1024 x 768 (4 : 3)                                                        |                                                                                                 |                                                                                                 |
| Ethernet                      | 2 x RJ-45 10/100/1000M Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)                                         |                                                                                                 |                                                                                                 |
| USB 2.0 (host)                | 4                                                                                                                         |                                                                                                 |                                                                                                 |
| COM1                          | Internal communication with the I-97K series modules in slots                                                             |                                                                                                 |                                                                                                 |
| COM2                          | RS-232/485 (Rx/D, Tx/D and GND for RS-232; Data+, Data- for RS-485); 3000 VDC isolated                                    |                                                                                                 |                                                                                                 |
| COM3                          | RS-485 (Data+, Data-); 3000 VDC isolated                                                                                  |                                                                                                 |                                                                                                 |
| COM4                          | RS-232/485 (Rx/D, Tx/D, CTS, RTS and GND for RS-232; Data+, Data- for RS-485); 3000 VDC isolated                          |                                                                                                 |                                                                                                 |
| COM5                          | RS-232 (Rx/D, Tx/D, CTS, RTS, DSR, DTR, CD, RI and GND); 3000 VDC isolated                                                |                                                                                                 |                                                                                                 |
| I/O Expansion                 |                                                                                                                           |                                                                                                 |                                                                                                 |
| I/O Expansion Slot            | 1                                                                                                                         | 3                                                                                               | 7                                                                                               |
| Mechanical                    |                                                                                                                           |                                                                                                 |                                                                                                 |
| Dimension (W x L x H)         | 239 mm x 164 mm x 133 mm                                                                                                  | 300 mm x 164 mm x 133 mm                                                                        | 422 mm x 164 mm x 133 mm                                                                        |
| Installation                  | DIN-Rail or Wall Mounting                                                                                                 |                                                                                                 |                                                                                                 |
| Environmental                 |                                                                                                                           |                                                                                                 |                                                                                                 |
| Operating Temperature         | -25 ~ +60 °C                                                                                                              |                                                                                                 |                                                                                                 |
| Storage Temperature           | -30 ~ +80 °C                                                                                                              |                                                                                                 |                                                                                                 |
| Humidity                      | 10 ~ 90 % RH (non-condensing)                                                                                             |                                                                                                 |                                                                                                 |
| Power                         |                                                                                                                           |                                                                                                 |                                                                                                 |
| Input Range                   | +10 to +30 VDC                                                                                                            |                                                                                                 |                                                                                                 |
| Isolation                     | 1 kV                                                                                                                      |                                                                                                 |                                                                                                 |
| Redundant Power Input         | Yes, with one power relay (1 A @ 24 VDC) for alarm                                                                        |                                                                                                 |                                                                                                 |
| Capacity                      | 4.1 A, 5 V supply to CPU and backplane, 2.5 A, 5 V supply to I/O expansion slots, 33 W in total                           | 4.2 A, 5 V supply to CPU and backplane, 2.4 A, 5 V supply to I/O expansion slots, 33 W in total | 4.4 A, 5 V supply to CPU and backplane, 2.2 A, 5 V supply to I/O expansion slots, 33 W in total |
| Consumption                   | 18.5 W (0.77 A @ 24 VDC)                                                                                                  | 18.7 W (0.78 A @ 24 VDC)                                                                        | 20.4 W (0.85 A @ 24 VDC)                                                                        |

## Appearance

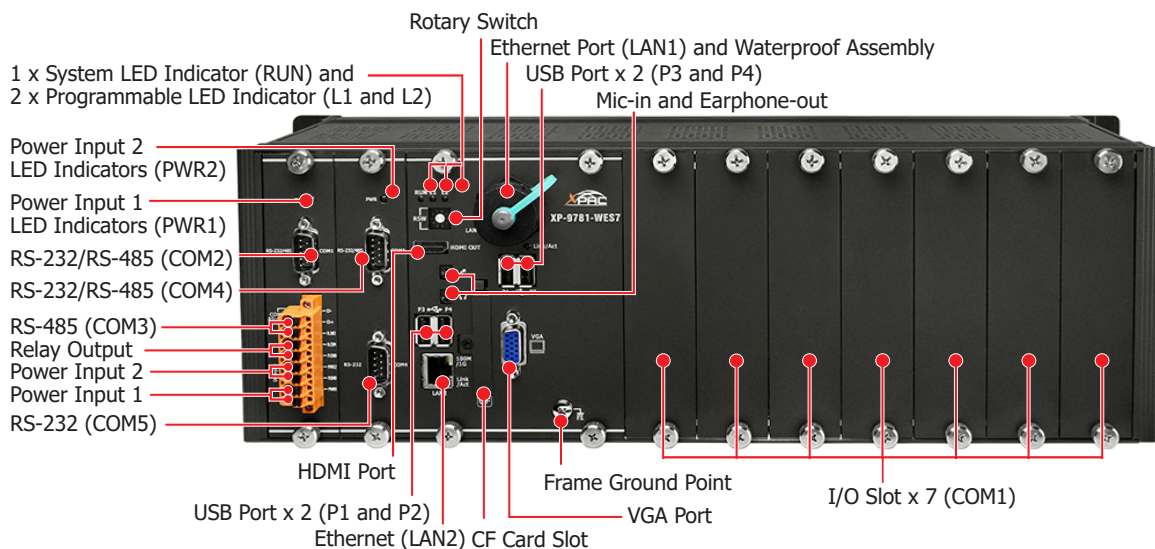
### XP-9181-WES7



### XP-9381-WES7

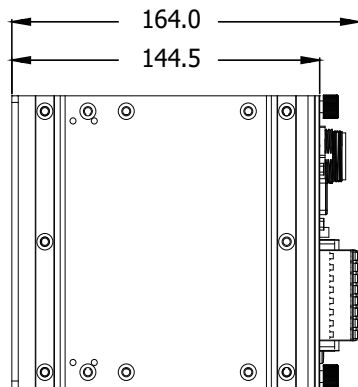


### XP-9781-WES7



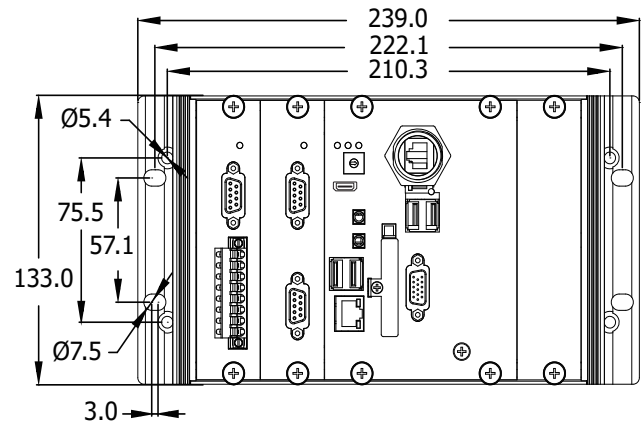
## Dimensions (Units: mm)

XP-9181-WES7/XP-9381-WES7/XP-9781-WES7



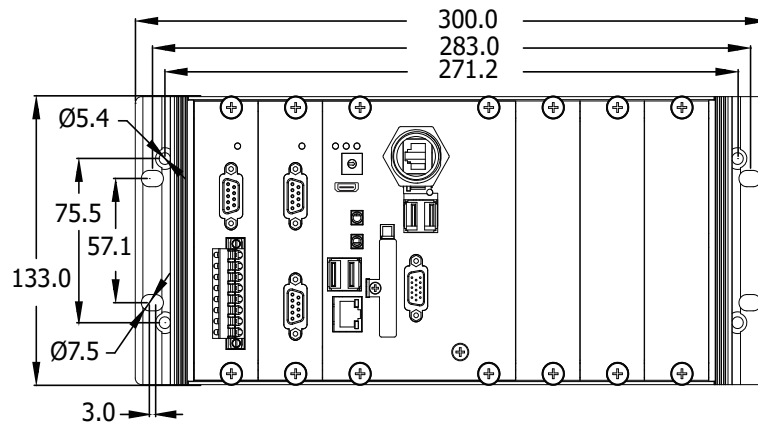
Left Side View

XP-9181-WES7



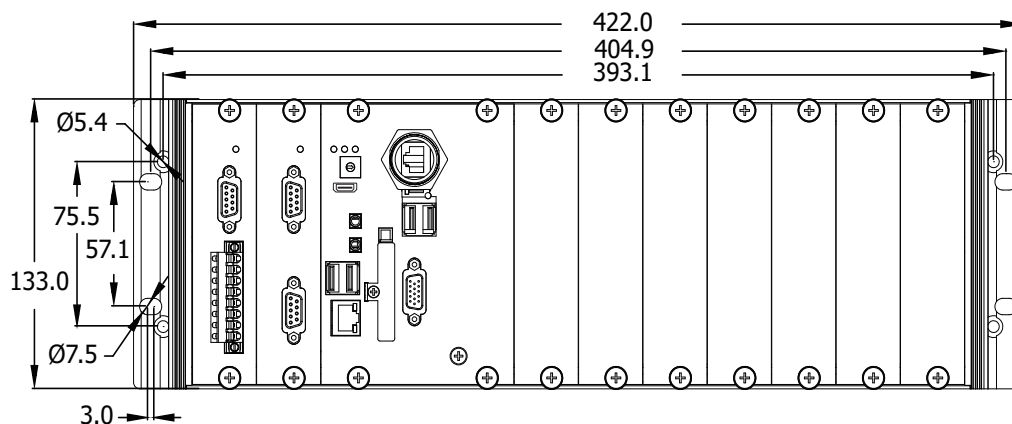
Front View

XP-9381-WES7



Front View

XP-9781-WES7



Front View

## Ordering Information

|                        |                                                               |
|------------------------|---------------------------------------------------------------|
| <b>XP-9181-WES7 CR</b> | Standard XP-9000-WES7 with E3845 CPU, WES7 OS and 1 I/O Slot  |
| <b>XP-9381-WES7 CR</b> | Standard XP-9000-WES7 with E3845 CPU, WES7 OS and 3 I/O Slots |
| <b>XP-9781-WES7 CR</b> | Standard XP-9000-WES7 with E3845 CPU, WES7 OS and 7 I/O Slots |