

Features

- PXA270, 520 MHz CPU
- Windows CE 5.0
- Hard Real-Time Capability
- VGA Port Output
- Support eLogger HMI
- Redundant Power Inputs
- Operating Temperature: -25 ~ +75°C

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Compact PAC

Introduction

WP-8x31, WP-8x41 and WP-8x51 Series are the new generation Windows CE 5.0 based PACs of ICP DAS. It is equipped with a PXA270 CPU (520 MHz), various connectivity (VGA, USB, Ethernet, RS-232/485) and I/O slots for high performance parallel I/O modules (high profile I-8K Series) and serial I/O modules (high profile I-87K series). The benefits of running Windows CE 5.0 on WinPAC include hard real-time capability, small core size, fast boot speed, interrupt handling at a deeper level and achievable deterministic control. WinPAC is also capable of running PC-based control software such as Visual Basic .NET, Visual C#, SCADA software, SoftPLC... etc. It has all of the best features of both traditional PLCs and Windows capable PCs.

For software copy protection, programmers can design software based on the 64-bit hardware serial number for making software copy protected.

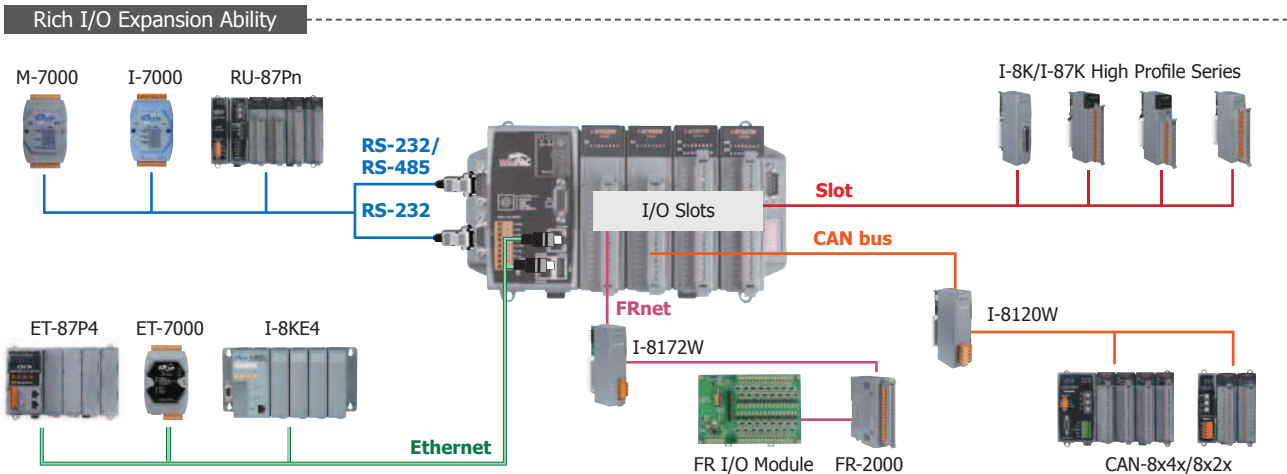
Windows CE5



Windows CE 5 is a compact and real-time OS used to quickly create time critical and high performance applications. Using Windows CE 5 gives an ability to run PC-based control software such as Visual Basic .NET, Virtual C#, SCADA software, SoftPLC... etc.

- ★ FTP Server
- ★ Web Server
- ★ SQL Compact Edition 3.5
- ★ .NET Compact Framework 3.5
- ★ Virtual CE Pro (VCEP)
- ★ OPC Server (NAPOPC_CE5 DA Server)
- ★ Soft PLC solution: WP-8xx7, WP-5xx7 and VP-25W7 (ISaGRAF inside)
- ★ SCADA solution: WP-8xx9, WP-5xx9 and VP-25W9 (InduSoft inside)

Applications



Specifications

| Models | WP-8131 | WP-8431 | WP-8831 | WP-8141 | WP-8441 | WP-8841 | WP-8051 | WP-8351 | WP-8751 |
|--|--|--------------|---------|-----------------------------|---|--------------|---|--------------|---------|
| System Software | | | | | | | | | |
| OS | Windows CE 5.0 | | | | | | | | |
| .Net Compact Framework | 3.5 | | | | | | | | |
| Embedded Service | FTP server, Web server (supports VB script, JAVA script), Embedded SQL server | | | | | | | | |
| SDK Provided | DII for eVC, DII for Visual Studio.Net 2005/2008 | | | | | | | | |
| Multilanguage Support | English, German, French, Spanish, Russian, Italian, Korean, Simplified Chinese, Traditional Chinese | | | | | | | | |
| CPU Module | | | | | | | | | |
| CPU | PXA270, 520 MHz | | | | | | | | |
| SDRAM | 128 MB | | | | | | | | |
| Dual Battery Backup SRAM | 512 KB; data valid up to 5 years | | | | | | | | |
| Flash | 128 MB | | | 96 MB | | | | 128 MB | |
| EEPROM | 16 KB | | | | | | | | |
| Memory Expansion | microSD socket with one 2 GB microSD card (support up to 32 GB microSDHC card) | | | | | | CF slot with 2 GB CF Card (support up to 32 GB) | | |
| RTC (Real Time Clock) | Provide second, minute, hour, date, day of week, month, year | | | | | | | | |
| 64-bit Hardware Serial Number | Yes, for Software Copy Protection | | | | | | | | |
| Dual Watchdog Timers | Yes | | | | | | | | |
| Programmable LED Indicator | 1 | | | | | | | | |
| Rotary Switch | Yes (0 ~ 9) | | | | | | | | |
| DIP Switch | - | Yes (8 bits) | - | Yes (8 bits) | - | Yes (8 bits) | - | Yes (8 bits) | - |
| Audio | Microphone-In and Earphone-Out | | | | | | | | |
| VGA & Communication Ports | | | | | | | | | |
| VGA | Yes 640 x 480, 800 x 600, 1024 x 768 | | | Yes 640 x 480, 800 x 600 | | | | | |
| Ethernet | RJ-45 x 2, 10/100 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators) | | | | | | | | |
| USB 1.1 (host) | 2 | | | 1 | | | 2 | | |
| USB 1.1 (client) | - | | | - | | | 1 | | |
| COM 0 | Internal communication with the high profile I-87K series modules in slots | | | | | | | | |
| COM 1 | RS-232 (Rx, Tx and GND); non-isolated | | | | | | | | |
| COM 2 | RS-485 (Data+, Data-) with internal self-tuner ASIC; 2500 V _{dc} isolated for WP-8131 and WP-8141; 3000 V _{dc} isolated for other models. | | | | | | | | |
| COM 3 | - | Yes | - | Yes | RS-232/RS-485 (Rx, Tx, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated | | | | |
| COM 4 | - | Yes | - | Yes | RS-232 (Rx, Tx, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated | | | | |
| COM 5 | - | | | | | | Yes | - | |
| RS-232 (Rx, Tx, and GND); non-isolated | | | | | | | | | |
| I/O Expansion Slots | | | | | | | | | |
| Slot Number | 1 | 4 | 8 | 1 | 4 | 8 | 0 | 3 | 7 |
| Note: For High Profile I-8K and I-87K Modules Only | | | | | | | | | |
| Mechanical | | | | | | | | | |
| Dimensions (W x L x H) | 95 mm x 132 mm x 111 mm: WP-8131, WP-8141 137 mm x 132 mm x 111 mm: WP-8051 231 mm x 132 mm x 111 mm: WP-8431, WP-8441, WP-8351 355 mm x 132 mm x 111 mm: WP-8831, WP-8841, WP-8751 | | | | | | | | |
| Installation | DIN-Rail or Wall Mounting | | | | | | | | |
| Environmental | | | | | | | | | |
| Operating Temperature | -25 ~ +75°C | | | | | | | | |
| Storage Temperature | -30 ~ +80°C | | | | | | | | |
| Ambient Relative Humidity | 10 ~ 90% RH (non-condensing) | | | | | | | | |
| Power | | | | | | | | | |
| Input Range | +10 ~ +30 V _{dc} | | | | | | | | |
| Isolation | 1 kV | | | | | | | | |
| Redundant Power Inputs | Yes, with one power relay (1 A @ 24 V _{dc}) for alarm | | | | | | | | |
| Capacity | 8 W | 25 W | 25 W | 8 W | 30 W | 30 W | 15 W | 30 W | 30 W |
| Consumption | 7.3 W | 9.1 W | 9.1 W | 7.3 W | 9.1 W | 9.1 W | 8.4 W | 9.6 W | 10 W |

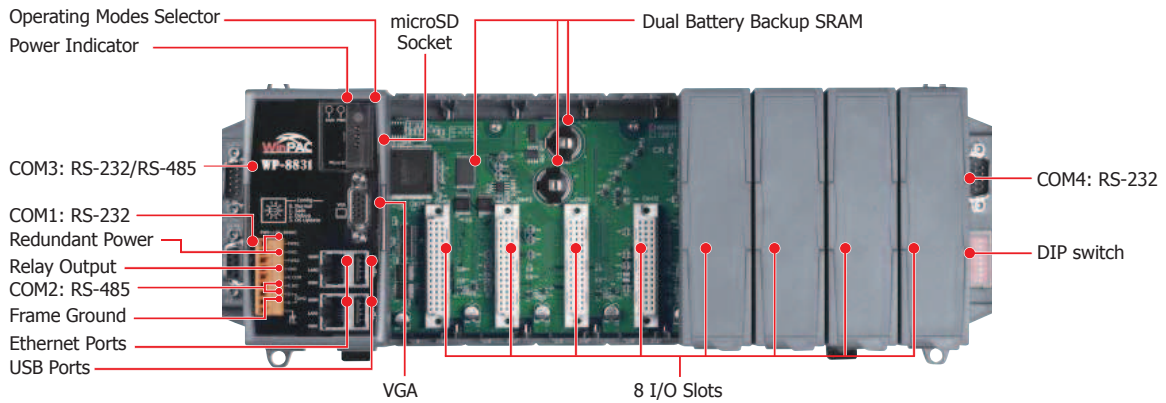
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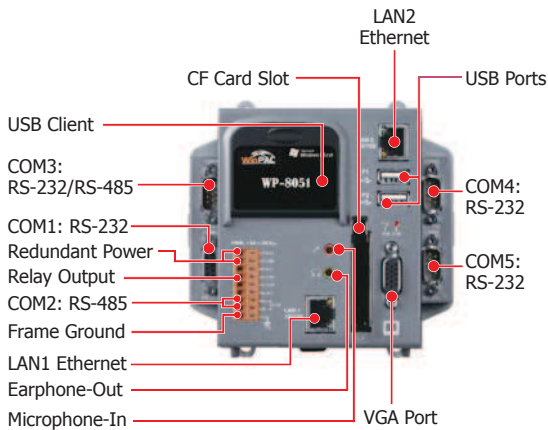
Compact PAC

Appearance

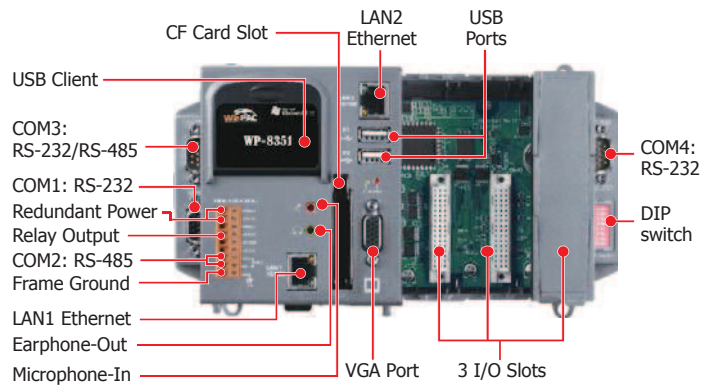
WP-8831



WP-8051



WP-8351



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Compact PAC

Ordering Information

| | | |
|------------|------------|---|
| WP-8131-EN | WP-8141-EN | Standard WinPAC-8000 with 1 I/O Slot (Multilanguage Version of OS) |
| WP-8431-EN | WP-8441-EN | Standard WinPAC-8000 with 4 I/O Slots (Multilanguage Version of OS) |
| WP-8831-EN | WP-8841-EN | Standard WinPAC-8000 with 8 I/O Slots (Multilanguage Version of OS) |
| WP-8131-TC | WP-8141-TC | Standard WinPAC-8000 with 1 I/O Slot (Traditional Chinese Version of OS) |
| WP-8431-TC | WP-8441-TC | Standard WinPAC-8000 with 4 I/O Slots (Traditional Chinese Version of OS) |
| WP-8831-TC | WP-8841-TC | Standard WinPAC-8000 with 8 I/O Slots (Traditional Chinese Version of OS) |
| WP-8131-SC | WP-8141-SC | Standard WinPAC-8000 with 1 I/O Slot (Simplified Chinese Version of OS) |
| WP-8431-SC | WP-8441-SC | Standard WinPAC-8000 with 4 I/O Slots (Simplified Chinese Version of OS) |
| WP-8831-SC | WP-8841-SC | Standard WinPAC-8000 with 8 I/O Slots (Simplified Chinese Version of OS) |
| WP-8051 | | Standard WinPAC-8000 without I/O Slot (Multilanguage Version of OS) |
| WP-8351 | | Standard WinPAC-8000 with 3 I/O Slots (Multilanguage Version of OS) |
| WP-8751 | | Standard WinPAC-8000 with 7 I/O Slots (Multilanguage Version of OS) |

Accessories

| | |
|--------------|---|
| DP-660 | 24 V _{dc} /2.5 A, 60 W and 5 V _{dc} /0.5 A, 2.5 W Power Supply with DIN-Rail Mounting |
| DP-1200 CR | 24 V _{dc} /5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS) |
| MDR-60-24 CR | 24 V _{dc} /2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) |