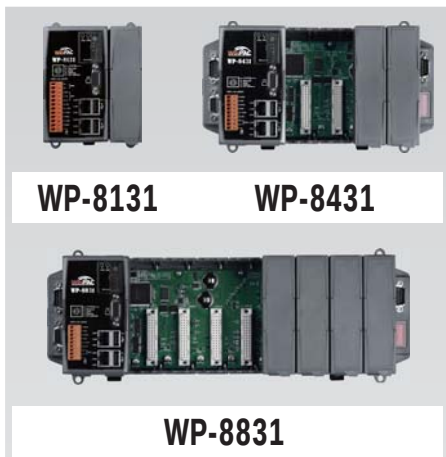


WP-8131/8431/8831

Windows CE.Net 5.0 Inside



Highlight Information

- PXA270 CPU (32-bit & 520 MHz)
- 128 MB SDRAM & 128 MB Flash
- VS.Net 2003/2005/2008 & eVC Supported
- 64-bit Hardware Serial Number for Software Protection
- 1/4/8 Slots for High Profile I/O Modules
- Dual 10/100M Ethernet Ports
- 2/4 Serial Ports (RS-232/485)
- Operating Temperature: -25 ~ +75 °C



Introduction

The ICP DAS WP-8131, WP-8431 and WP-8831 are the new generation PAC (Programmable Automation Controller). They equip a PXA270 CPU (520 MHz) running a Windows CE.NET 5.0 operating system, variant connectivity (VGA, USB, Ethernet, RS-232/485) and 1/4/8 slots for high performance parallel I/O modules (high profile I-8K I/O series) and serial-type I/O modules (high profile I-87K I/O modules).

The WP-8131, WP-8431 and WP-8831 have many advantages, including hard real-time capability, small core size, fast boot speed, interrupt handling at a deeper level, achievable deterministic control and low cost. Using Windows CE.NET 5.0 gives them the ability to run PC-based control software such as Visual Basic.NET, Visual C#, Embedded Visual C++, SCADA software, Soft PLC ...etc. They give you all of the best features of both traditional PLCs and Windows capable PCs.

Features

Software

- Windows CE.NET 5.0 Operating System
- Easy Remote Maintenance Via Ethernet
 - FTP server
 - VCEP software
- Built-in OPC Server: Quicker
 - An OPC Server & SCADA Software
 - Integrate Local/Remote I/O Modules Via RS-232/485 or Ethernet
 - Provide Library for eVC, C# or VB.NET
 - Support Modbus and DCON Protocols
- Development Software
 - Visual Studio.NET 2003/2005/2008 and eVC
 - SDK/Demo Programs for C#, VB.NET & eVC
- Upgrade Applications Just Copy and Play

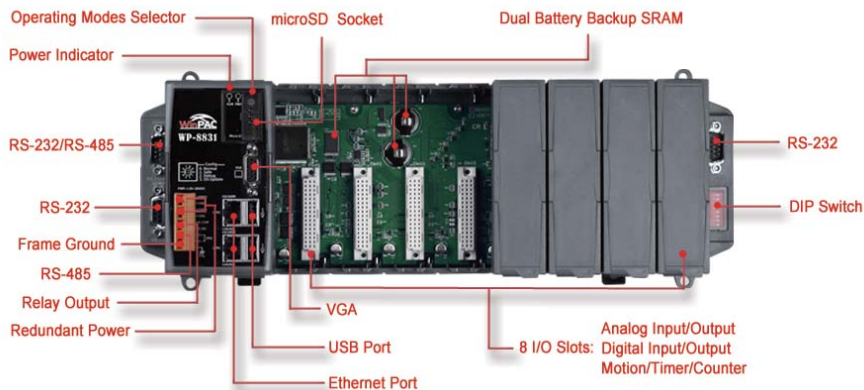
Hardware

- Powerful CPU Module
- Built-in VGA Port (640 x 480 ~ 1024 x 768)
- 64-bit Hardware Serial Number for Software Protection
- Rich I/O Expansion Ability
- I/O Module Hot Swap Ability * Will be available (For High Profile I-87K Modules Only)
- Built-in Flash Disk (63 MB)
- Dual Watchdog Timers
- Dual Battery Backup SRAM (512 KB)
- Dual Ethernet Ports
- Redundant Power Inputs
- DIN-Rail or Wall Mounting
- Operating Temperature: -25 ~ +75 °C

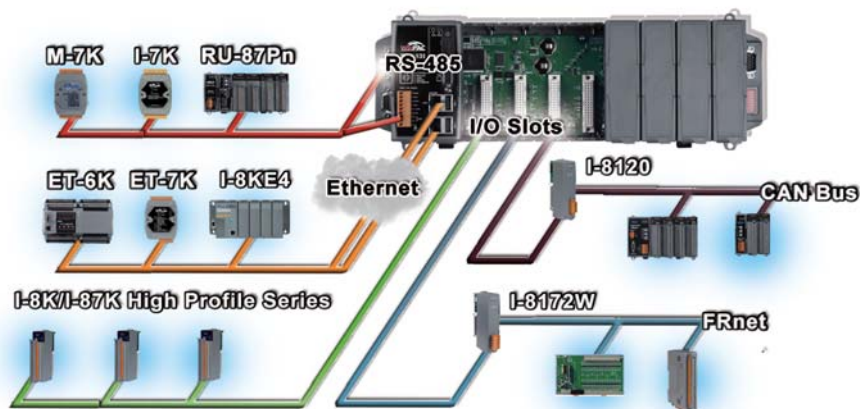
Specifications

Models		WP-8131	WP-8431	WP-8831
System Software				
OS		Windows CE 5.0		
.Net Compact Framework		2.0		
Embedded Service		FTP server, Web server (supports VB script, JAVA script), Embedded SQL server		
SDK Provided		DII for eVC, DII for Visual Studio.Net 2003/2005/2008		
CPU Module				
CPU		PXA270 or compatible (32-bit and 520 MHz)		
SDRAM		128 MB		
Dual Battery Backup SRAM		512 KB (for 5 years data retention)		
Flash		128 MB (64 MB for OS image, 63 MB for built-in Flash disk, 1 MB for registry)		
EEPROM		16 KB		
		Data Retention: 40 years; 1,000,000 erase/write cycles		
Expansion Flash Memory		microSD socket with one 1 GB microSD card (support up to 16 GB microSDHC card)		
RTC (Real Rime Clock)		Provide seconds, minutes, hours, day of week/month, month and year, valid from 1980 to 2079		
64-bit Hardware Serial Number		Yes		
Dual Watchdog Timers		Yes		
Programmable LED Indicator		1		
Rotary Switch		Yes (0 ~ 9)		
DIP Switch		-	Yes (8 bits)	Yes (8 bits)
VGA & Communication Ports				
VGA		Yes, with one extra GPU (resolution: 1024 x 768, 800 x 600, 640 x 480)		
Ethernet		RJ-45 x 2, 10/100 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)		
USB 1.1 (host)		2		
COM 0		Internal communication with I-87K modules in slots		
COM 1		RS-232 (to update firmware) (RxD, TxD and GND); non-isolated		
COM 2	RS-485	D2+, D2-; self-tuner ASIC inside		
	Isolation	2500 V _{DC}	3000 V _{DC}	
COM 3		-	RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated	
COM 4		-	RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated	
I/O Expansion Slots				
Slot Number		1 slot	4 slots	8 slots
		(For High Profile I-8K and I-87K Modules Only)		
Hot Swap * Will be available		For High Profile I-87K Modules Only		
Mechanical				
Dimensions (W x L x H, Unit: mm)		95 x 132 x 111	231 x 132 x 111	355 x 132 x 111
Installation		DIN-Rail or Wall Mounting		
Environmental				
Operating Temperature		-25 ~ +75 °C		
Storage Temperature		-30 ~ +85 °C		
Ambient Relative Humidity		5 ~ 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		1.0 A, 5 V supply to CPU and backplane, 0.6 A, 5 V supply to I/O expansion slots, total 8 W	1.1 A, 5 V supply to CPU and backplane, 4.9 A, 5 V supply to I/O expansion slots, total 30 W	1.2 A, 5 V supply to CPU and backplane, 4.8 A, 5 V supply to I/O expansion slots, total 30 W
Consumption		7.3 W (0.3 A @ 24 V _{DC})	9.1 W (0.38 A @ 24 V _{DC})	9.6 W (0.4 A @ 24 V _{DC})

● Appearance

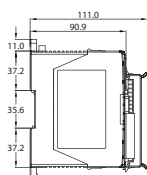


● Rich I/O Expansion Ability

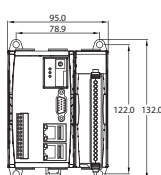


● Dimensions (Unit: mm)

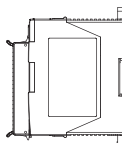
WP-8131



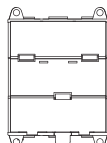
Left Side View



Front View



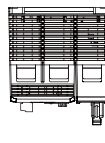
Right Side View



Back View

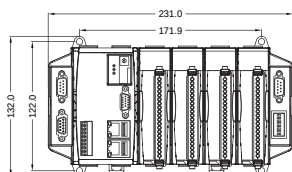


Bottom View

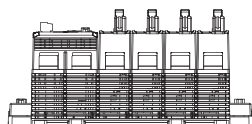


Top View

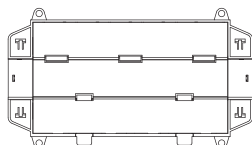
WP-8431



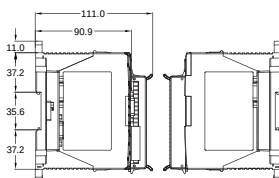
Front View



Bottom View



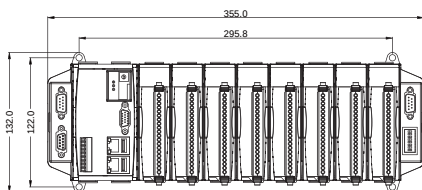
Back View



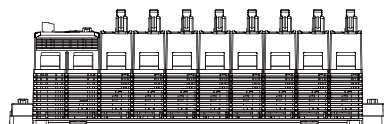
Left Side View

Right Side View

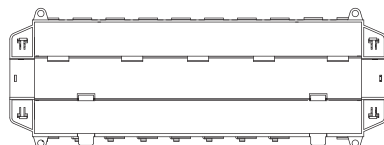
WP-8831



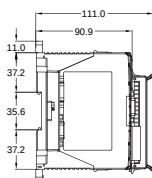
Front View



Bottom View



Back View



Left Side View

Right Side View

Ordering Information

WP-8131-EN	Standard WinPAC-8000 with 1 I/O Slot (English Version of OS)
WP-8431-EN	Standard WinPAC-8000 with 4 I/O Slots (English Version of OS)
WP-8831-EN	Standard WinPAC-8000 with 8 I/O Slots (English Version of OS)
WP-8131-TC	Standard WinPAC-8000 with 1 I/O Slot (Traditional Chinese Version of OS)
WP-8431-TC	Standard WinPAC-8000 with 4 I/O Slots (Traditional Chinese Version of OS)
WP-8831-TC	Standard WinPAC-8000 with 8 I/O Slots (Traditional Chinese Version of OS)
WP-8131-SC	Standard WinPAC-8000 with 1 I/O Slot (Simplified Chinese Version of OS)
WP-8431-SC	Standard WinPAC-8000 with 4 I/O Slots (Simplified Chinese Version of OS)
WP-8831-SC	Standard WinPAC-8000 with 8 I/O Slots (Simplified Chinese 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	24 V _{DC} /5.0 A, 120 W Power Supply with DIN-Rail Mounting
MDR-20-24	24 V _{DC} /1.0 A, 24 W Power Supply with DIN-Rail Mounting
MDR-60-24	24 V _{DC} /2.5 A, 60 W Power Supply with DIN-Rail Mounting