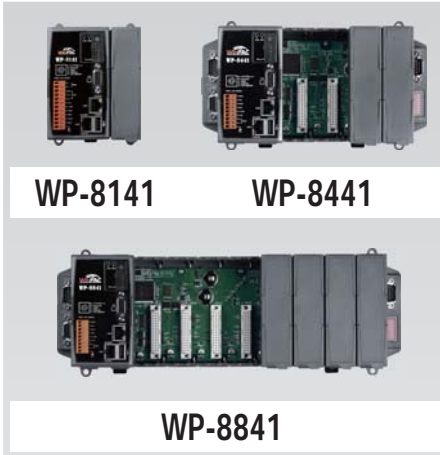


WP-8141/8441/8841

Windows CE.Net 5.0 Inside

WinPAC-8000 Series Programmable Automation Controller WP-8141 / WP-8441 / WP-8841



Highlight Information

- PXA270 CPU (32-bit & 520 MHz)
- 128 MB SDRAM & 96 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-8141, WP-8441 and WP-8841 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-8141, WP-8441 and WP-8841 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.

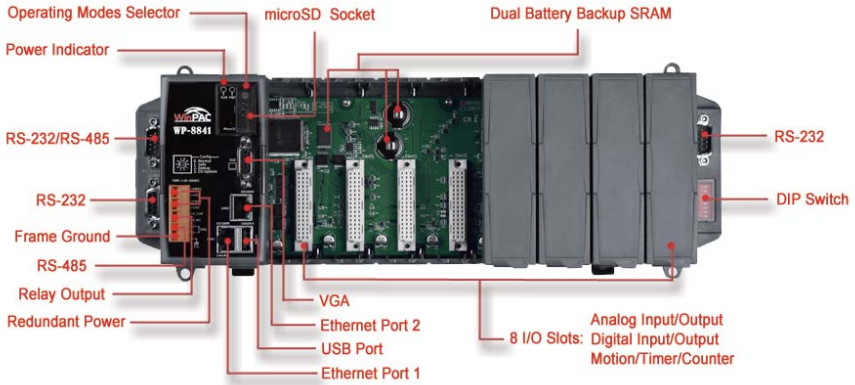
● Features

Software	Hardware
<ul style="list-style-type: none"> ■ Windows CE.NET 5.0 Operating System ■ Easy Remote Maintenance Via Ethernet <ul style="list-style-type: none"> □ FTP server □ VCEP software ■ Built-in OPC Server: Quicker <ul style="list-style-type: none"> □ 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 <ul style="list-style-type: none"> □ Visual Studio.NET 2003/2005/2008 and eVC □ SDK/Demo Programs for C#, VB.NET & eVC ■ Upgrade Applications Just Copy and Play 	<ul style="list-style-type: none"> ■ Powerful CPU Module ■ Built-in VGA Port (800 x 600, 640 x 480) ■ 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 (31 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

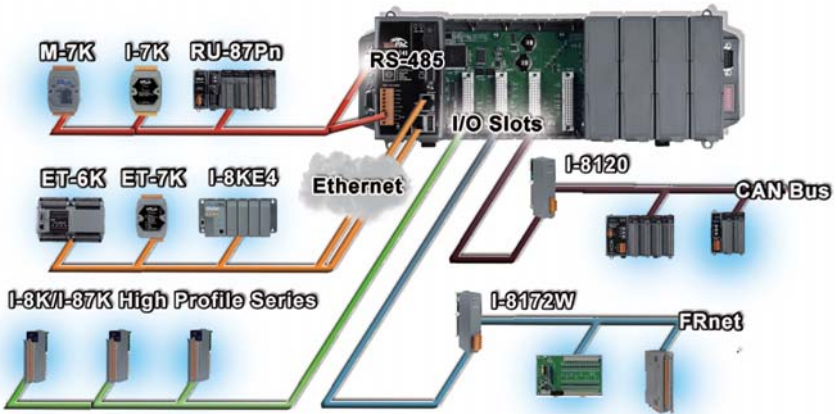
Specifications

Models	WP-8141	WP-8441	WP-8841
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	96 MB (64 MB for OS image, 31 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 Time 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 (resolution: 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)	1		
COM 0	Internal communication with I-87K modules in slots		
COM 1	RS-232 (to update firmware) (Rx, Tx 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 (Rx, Tx, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated	
COM 4	-	RS-232 (Rx, Tx, 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

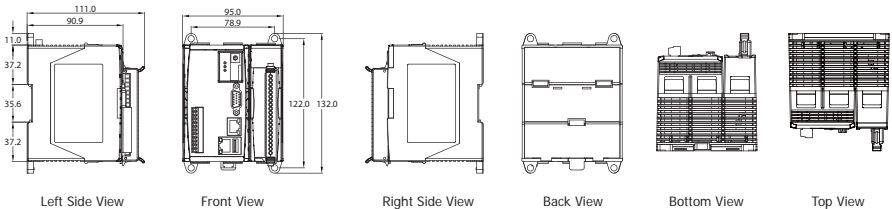


● Rich I/O Expansion Ability

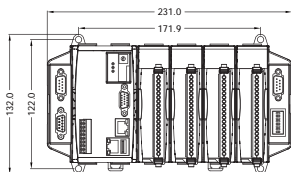


● Dimensions (Unit: mm)

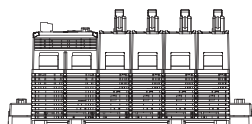
WP-8141



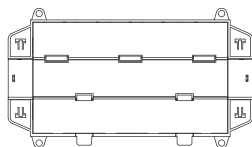
WP-8441



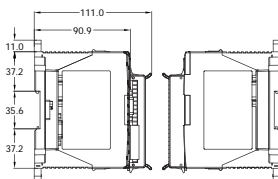
Front View



Bottom View



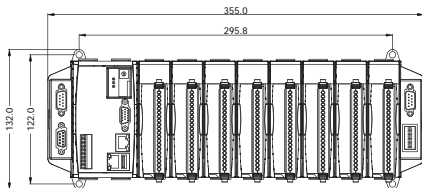
Back View



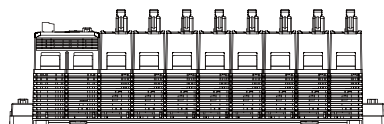
Left Side View

Right Side View

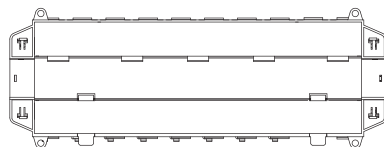
WP-8841



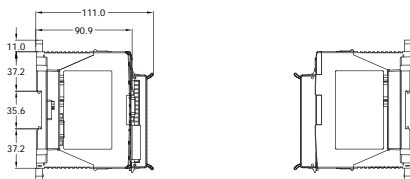
Front View



Bottom View



Back View



Left Side View

Right Side View

Ordering Information

WP-8141-EN	Standard WinPAC-8000 with 1 I/O Slot (English Version of OS)
WP-8441-EN	Standard WinPAC-8000 with 4 I/O Slots (English Version of OS)
WP-8841-EN	Standard WinPAC-8000 with 8 I/O Slots (English Version of OS)
WP-8141-TC	Standard WinPAC-8000 with 1 I/O Slot (Traditional Chinese Version of OS)
WP-8441-TC	Standard WinPAC-8000 with 4 I/O Slots (Traditional Chinese Version of OS)
WP-8841-TC	Standard WinPAC-8000 with 8 I/O Slots (Traditional Chinese Version of OS)
WP-8141-SC	Standard WinPAC-8000 with 1 I/O Slot (Simplified Chinese Version of OS)
WP-8441-SC	Standard WinPAC-8000 with 4 I/O Slots (Simplified Chinese Version of OS)
WP-8841-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