

### 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

## 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.

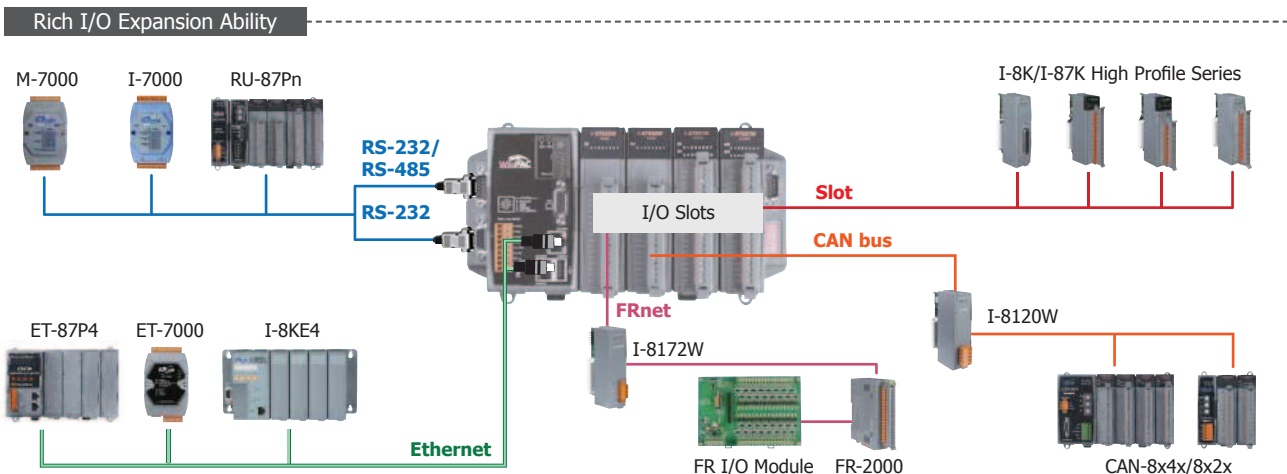
## Windows CE5



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
- ★ OPC Server (NAPOPC\_CE5 DA Server)
- ★ Web Server
- ★ Soft PLC solution: WP-8xx7, WP-5xx7 and VP-25W7 (ISaGRAF inside)
- ★ SQL Compact Edition 3.5
- ★ SCADA solution: WP-8xx9, WP-5xx9 and VP-25W9 (InduSoft inside)
- ★ .NET Compact Framework 3.5
- ★ Virtual CE Pro (VCEP)

## Applications



## Specifications

Models	WP-8131	WP-8431	WP-8831	WP-8141	WP-8441	WP-8841	WP-8051	WP-8351	WP-8751	
<b>System Software</b>										
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									
<b>CPU Module</b>										
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									
<b>VGA &amp; Communication Ports</b>										
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)	-									
COM 0	Internal communication with the high profile I-87K series modules in slots									
COM 1	RS-232 (Rx/D, Tx/D and GND); non-isolated									
COM 2	RS-485 (Data+, Data-) with internal self-tuner ASIC; 2500 V <sub>dc</sub> isolated for WP-8131 and WP-8141; 3000 V <sub>dc</sub> isolated for other models.									
COM 3	-	Yes	-	Yes						
	RS-232/RS-485 (Rx/D, Tx/D, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated									
COM 4	-	Yes	-	Yes						
	RS-232 (Rx/D, Tx/D, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated									
COM 5	-						Yes	-		
	RS-232 (Rx/D, Tx/D, and GND); non-isolated									
<b>I/O Expansion Slots</b>										
Slot Number	1	4	8	1	4	8	0	3	7	
	Note: For High Profile I-8K and I-87K Modules Only									
<b>Mechanical</b>										
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									
<b>Environmental</b>										
Operating Temperature	-25 ~ +75°C									
Storage Temperature	-30 ~ +80°C									
Ambient Relative Humidity	10 ~ 90% RH (non-condensing)									
<b>Power</b>										
Input Range	+10 ~ +30 V <sub>dc</sub>									
Isolation	1 kV									
Redundant Power Inputs	Yes, with one power relay (1 A @ 24 V <sub>dc</sub> ) 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	

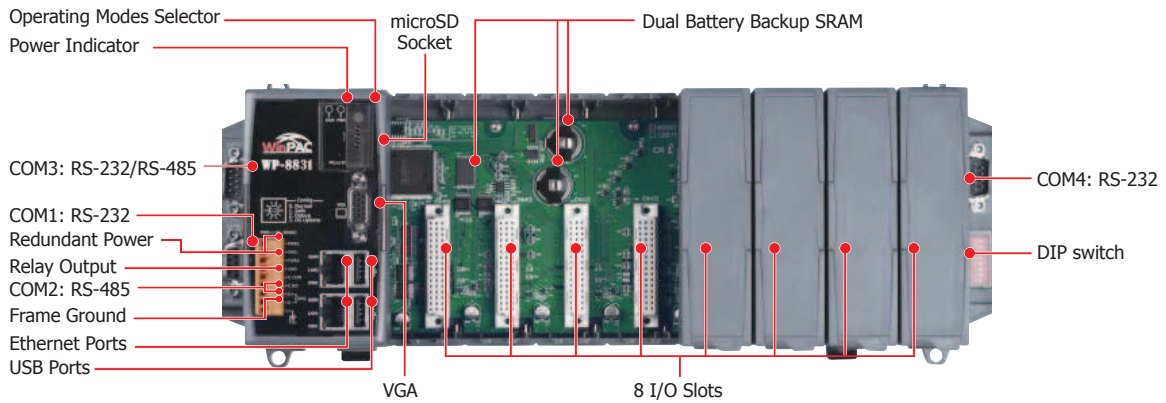
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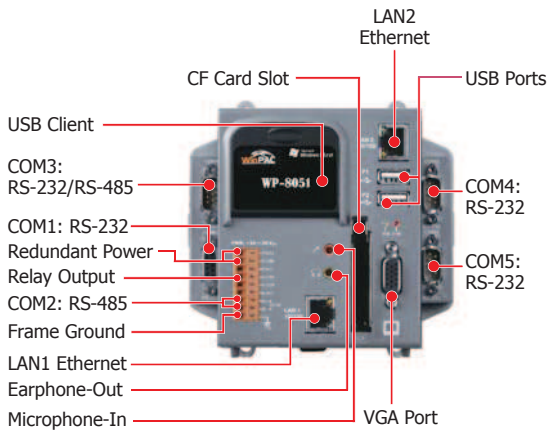
Compact PAC

## Appearance

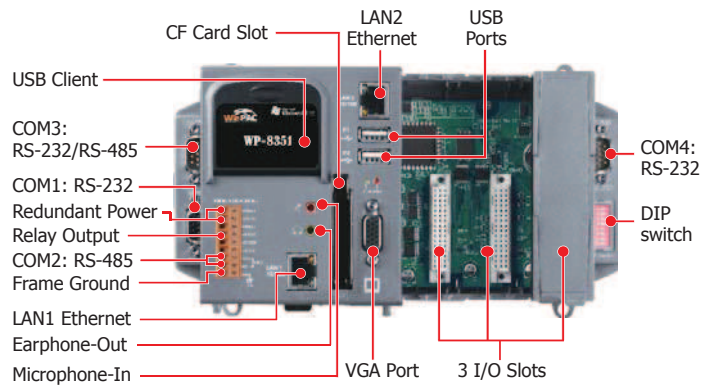
WP-8831



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 <sub>DC</sub> /2.5 A, 60 W and 5 V <sub>DC</sub> /0.5 A, 2.5 W Power Supply with DIN-Rail Mounting
DP-1200 CR	24 V <sub>DC</sub> /5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS)
MDR-60-24 CR	24 V <sub>DC</sub> /2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS)