



WP-8131



WP-8431



WP-8831



WP-8141



WP-8441



WP-8841

## WP-8131, WP-8431, WP-8831 WP-8141, WP-8441, WP-8841

**Standard WinPAC-8000 controller.**

### Introduction

WinPAC-8000 is the second generation PAC of ICP DAS. It equips PXA270 CPU (520MHz) running a Windows CE .NET 5.0 operating system, variant connectivities (VGA, USB, Ethernet, RS-232/485) and 1/4/8 slots for high performance parallel I/O modules (high profile I-8K series) and serial-type I/O modules (high profile I-87K I/O modules).

Its operating system, Windows CE 5.0, has 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 5.0 in the WinPAC-8000 gives it the ability to run PC-based Control software such as Visual Basic.NET, Visual C#, Embedded Visual C++, SCADA software, Soft PLC ...etc.

### Software Features

1. Windows CE.Net 5.0
2. Remote Maintenance via FTP Server and VCEP Software
3. Built-In OPC Server (Quicker)
4. Rich Software Solutions (VS.Net 2003/2005/2008 and eVC)
5. Upgrading applications from WinCon to WinPAC Just Copy and Play

### Hardware Features

1. Built-in VGA Port
2. I/O Module Hot Swap Ability (Will be available)  
(For High Profile I-87K Modules Only)
3. Rich I/O Expansion Ability (RS-232/485, Ethernet, FRnet, CAN)
4. Built-In Flash Disk (31 MB for WP-8x4x, 63 MB for WP-8x3x)
5. Dual Watchdog Timer
6. Dual Battery-Backup SRAM (512KB)
7. Dual Ethernet Ports
8. Redundant Power Input
9. Ventilated Housing Design Allows Operation Between -25 °C ~ +75 °C

### Specifications

Models	WP-8131	WP-8141	WP-8431	WP-8441	WP-8831	WP-8841
<b>System Software</b>						
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					
<b>CPU Module</b>						
CPU	PXA270 or compatible (32-bit and 520 MHz)					
SDRAM	128 MB					
Dual Battery Backup SRAM	512 Kbytes (for 5 years data retain)					
Flash	WP-8x31: 128 MB (64, 63, 1) WP-8x41: 96 MB (64 MB for OS image, 31 MB for built-in Flash disk, 1 MB for registry)					

EEPROM	16 Kbytes Data Retention: 40 years; 1,000,000 erase/write cycles		
microSD	WP-8x31: with one 2 GB microSD card (can support 16 GB microSD card) WP-8x41: with one 1 GB microSD card (can support 16 GB microSD card)		
RTC (real time clock)	Year-2000 compliance; seconds, minutes, hours, date of the month; month, year, valid up from 1980 to 2079		
64-bit Hardware Serial Number	Yes		
Dual Watchdog Timer	Yes		
Programmable LED Indicator	1		
Rotary Switch	Yes (0 ~ 9)		
DIP Switch	-	Yes (8 bits)	
<b>VGA &amp; Communication Ports</b>			
VGA	WP-8x31: resolution: 1024 x 768, 800 x 600, 640 x 480; with one extra GPU. WP-8x41: resolution: 800 x 600, 640 x 480; without extra GPU.		
Ethernet	RJ-45 x 2, 10/100 Base-TX (Auto-negotiating, LED indicators)		
USB 1.1 (host)	WP-8x31: 2 ports WP-8x41: 1 port		
COM 0	Internal communication with I-87K modules in slots		
COM 1	RS-232 (to update firmware) (RXD, TXD and GND); Non-isolation		
COM 2	RS-485 Isolation	D2+, D2-; self-tuner ASIC inside 2500 VDC	3000 VDC
COM 3	-	RS-232/RS-485 (RXD, TXD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); Non-isolation	
COM 4	-	RS-232 (RXD, TXD, CTS, RTS, DSR, DTR, CD, RI and GND); Non-isolation	
<b>I/O Expansion Slots</b>			
Slot Number	1 slot	4 slots	8 slots
	(For High Profile I-87K Modules Only)		
Hot Plug * Will be available	I/O Module Hot Swap Ability (For High Profile I-87K Modules Only)		
<b>Mechanical</b>			
Dimensions (W x L x H)	95 x 132 x 111 mm	231 x 132 x 111 mm	355 x 132 x 111 mm
Installation	DIN-Rail or Wall Mounting		
<b>Environmental</b>			
Operating Temperature	-25 °C ~ +75 °C		
Storage Temperature	-30 °C ~ +85 °C		
Ambient Relative Humidity	5% ~ 90% RH, non-condensing		
<b>Power</b>			
Input Range	+10 VDC ~ +30 VDC		
Isolation	1 kV		
Redundant Power Inputs	Yes, with one power relay (1 A @ 24 VDC) for alarm		
Capacity	1.0A, 5V supply to CPU and backplane, 0.6A, 5V supply to I/O expansion slots, total 8 W	1.1A, 5V supply to CPU and backplane, 4.9A, 5V supply to I/O expansion slots, total 30 W	1.2A, 5V supply to CPU and backplane, 4.8A, 5V supply to I/O expansion slots, total 30 W
Consumption	7.3 W (0.3 A @ 24 VDC)	9.1 W (0.38 A @ 24 VDC)	9.6 W (0.4 A @ 24 VDC)

## Ordering information

<b>WP-8131-EN-G</b>	Standard WinPAC-8000 with 1 I/O slots (English verison of OS)
<b>WP-8431-EN-G</b>	Standard WinPAC-8000 with 4 I/O slots (English verison of OS)
<b>WP-8831-EN-G</b>	Standard WinPAC-8000 with 8 I/O slots (English verison of OS)
<b>WP-8141-EN-G</b>	Standard WinPAC-8000 with 1 I/O slots (English verison of OS)
<b>WP-8441-EN-G</b>	Standard WinPAC-8000 with 4 I/O slots (English verison of OS)
<b>WP-8841-EN-G</b>	Standard WinPAC-8000 with 8 I/O slots (English verison of OS)

## Accessories

DP-665	AC 85~270V input, DC 24V/1.7A and 5V/0.5A output power supply
DP-660	AC 85~270V input, DC 24V/2.5A and 5V/0.5A output power supply
DP-1200	AC 85~270V input, DC 24V/5.0A output power supply
MDR-60-24	85 ~ 264VAC input, 60W Single Output Industrial DIN Rail Power Supply