



### Highlight Information

- Windows CE.NET 5.0 Core
- Hard Real-Time Capability
- Fast Boot Speed
- PXA270 CPU (32-bit & 520 MHz)
- 128 MB SDRAM & 64 MB Flash
- Support VS.Net 2003/2005/2008 & eVC
- 64-bit Hardware Serial Number for Software Protection
- Audio with Microphone-In and Earphone-Out
- I/O Expansion Bus
- Support VGA (640 × 480 / 800 × 600)
- Support microSD Socket
- Dual 10/100M Ethernet Ports
- 3 Serial Ports (RS-232/485)
- Operating Temperature: -25 ~ +75 °C



### Introduction

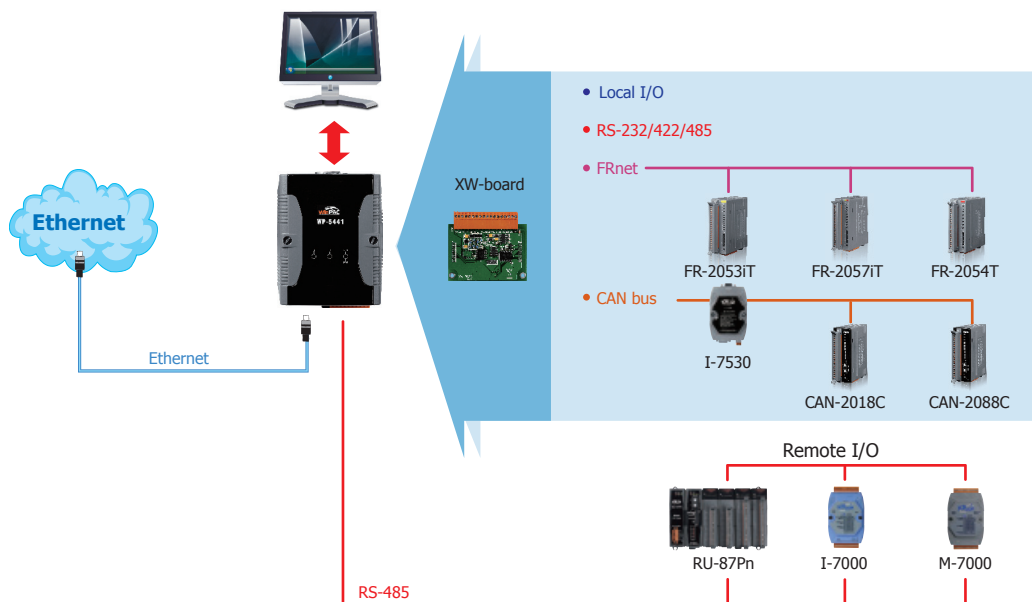
The ICP DAS WinPAC-5000 Series is the new generation PAC (Programmable Automation Controller). It is equipped a PXA270 CPU (520 MHz) running a Windows CE.NET 5.0 operating system, various connectivity (VGA, USB, Ethernet, RS-232/485) and I/O expansion bus.

The WinPAC-5000 series 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.NET 5.0 gives it the ability to run PC-based control software such as Visual Basic.NET, Visual C#, Embedded Visual C++, SCADA software, SoftPLC ...etc. It give users all of the best features of both traditional PLCs and Windows capable PCs.

For hardware expansion, it also supports an I/O expansion bus. The I/O expansion bus can be used to implement various I/O functions such as D/I, D/O,A/ D, D/A, Timer/Counter, UART, and other I/O functions. Nearly all kinds of I/O functions can be implemented by this bus. But the bus can support only one board. There are more than 10 boards available for WinPAC-5000 series, users can choose one of them to expand hardware features.

### Applications

Rich I/O Expansion Ability



## Specifications

3

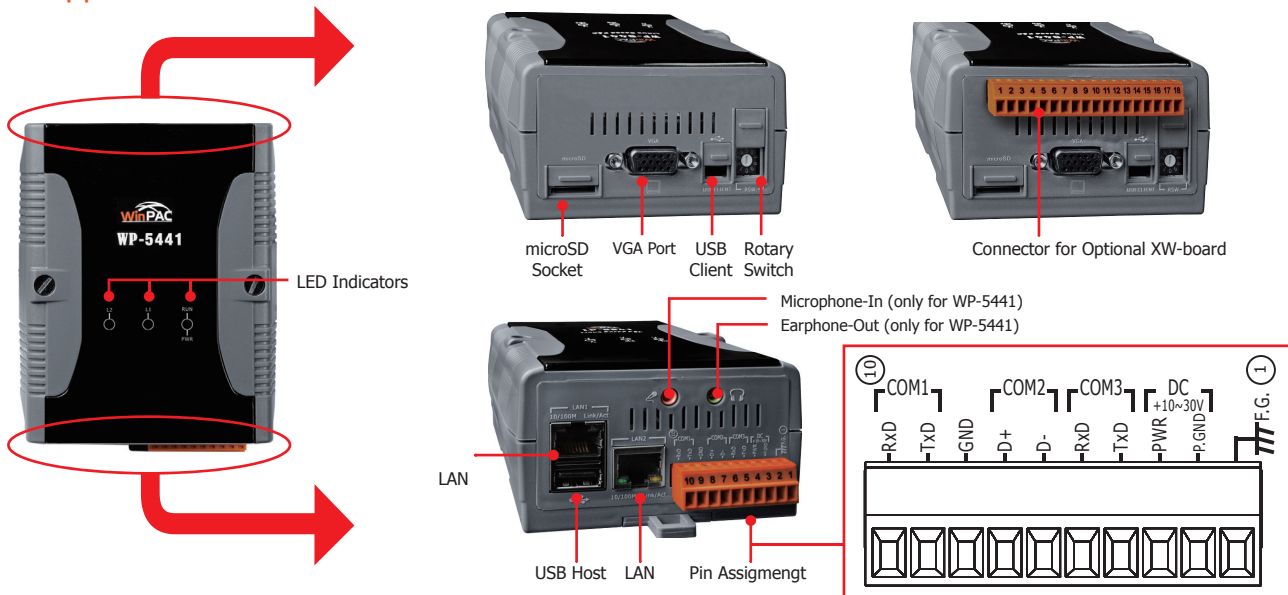
5000 Series μPAC

2

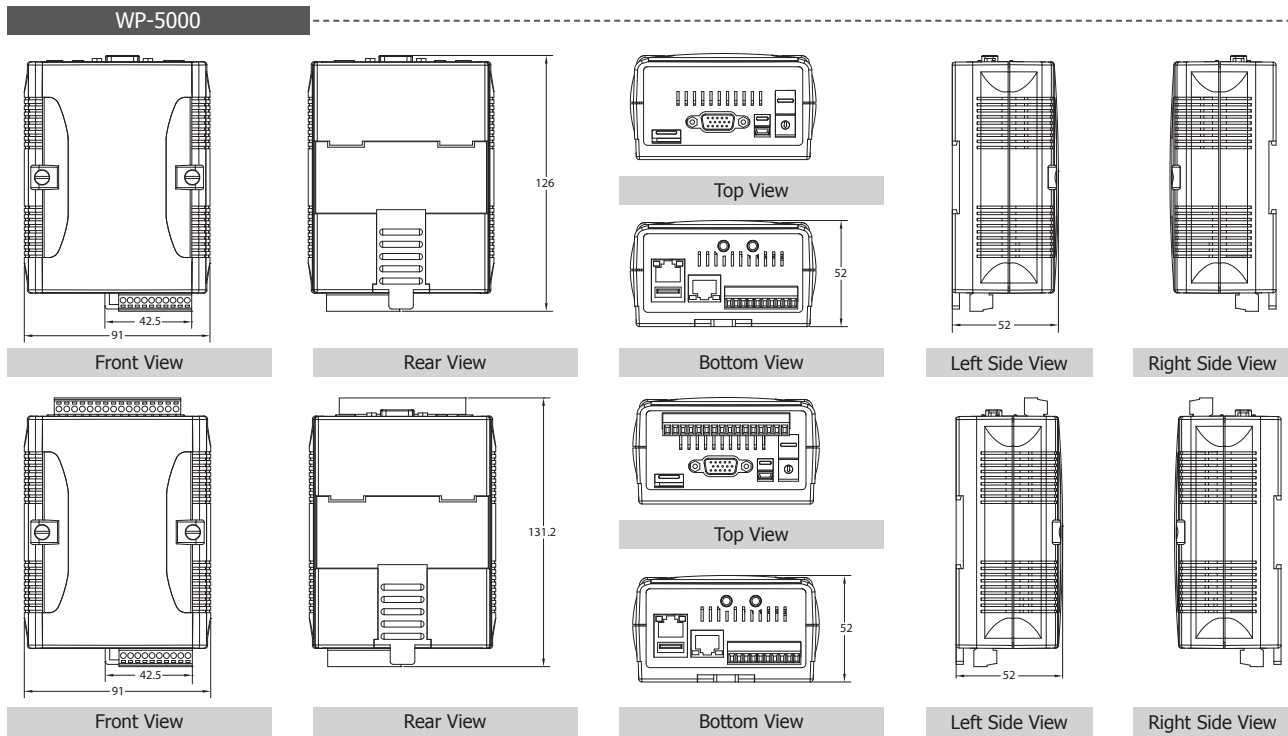
WinPAC-5000 Series

Models	WP-5141	WP-5441
<b>System Software</b>		
OS	Windows CE 5.0 Core	
.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	
Flash	64 MB (32 MB for OS, 32 MB for System_Disk and System Registry)	
EEPROM	16 KB Data Retention: 40 years; 1,000,000 erase/write cycles	
Expansion Flash Memory	microSD socket with one 2 GB microSD card (support up to 16 GB microSDHC card)	
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	
LED Indicators	1 LED for Power and Running 2 LED for user programmable	
Rotary Switch	Yes (0 ~ 9)	
<b>VGA &amp; Communication Ports</b>		
VGA	Yes 640 × 480 / 800 × 600	
Ethernet	RJ-45 × 2, 10/100 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)	
USB 1.1 (client)	1	
USB 1.1 (host)	1	
Audio Port (Microphone-In and Earphone-Out)	-	Yes
COM 1	RS-232 (Rx, Tx and GND); Non-isolated	
COM 2	RS-485 (D2+, D2-); 2500 V <sub>oc</sub> ; isolated	
COM 3	RS-232 (Rx, Tx and GND); Non-isolated	
<b>I/O Expansion</b>		
I/O Expansion Bus	Yes, to mount one optional XW-board.	
<b>Mechanical</b>		
Dimensions (W x L x H)	91 mm x 132 mm x 52 mm	
Installation	DIN-Rail 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	
Consumption	4.8 W (0.2 A @ 24 V <sub>dc</sub> )	6 W (0.25 A @ 24 V <sub>dc</sub> )

Appearance



Dimensions (Unit: mm)



Ordering Information

WP-5141-EN CR	Standard WinPAC-5000 (English Version of OS) (RoHS)
WP-5441-EN CR	Standard WinPAC-5000 with Audio (English Version of OS) (RoHS)
WP-5141-TC CR	Standard WinPAC-5000 (Traditional Chinese Version of OS) (RoHS)
WP-5441-TC CR	Standard WinPAC-5000 with Audio (Traditional Chinese Version of OS) (RoHS)
WP-5141-SC CR	Standard WinPAC-5000 (Simplified Chinese Version of OS) (RoHS)
WP-5441-SC CR	Standard WinPAC-5000 with Audio (Simplified Chinese Version of OS) (RoHS)

Option 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-20-24 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)
XW-Board	Add-on I/O Expansion Board