



### Highlight Information

- Windows CE 6.0
- Hard Real-Time Capability
- Intel Atom Z510 CPU (1.1 GHz)
- Audio with Microphone-In and Earphone-Out
- VGA Port Output
- Support eLogger HMI
- High Performance PC Power, Open System
- Redundant Power Inputs
- Operating Temperature: -25 ~ +75 °C



### Introduction

XP-8x41-Atom-CE6 Series is the new generation Windows CE 6.0 based PACs of ICP DAS. It is equipped with an Intel Atom Z500 Series CPU, various connectivity (VGA, USB, Ethernet, RS-232/485) and 0/1/3/7 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 6.0 on XPAC-Atom include hard real-time capability, small core size, fast boot speed, interrupt handling at a deeper level and achievable deterministic control. XPAC-Atom is also capable of running PC-based control software such as Visual Basic .NET, Visual C#,..... 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.

### Features

#### Software

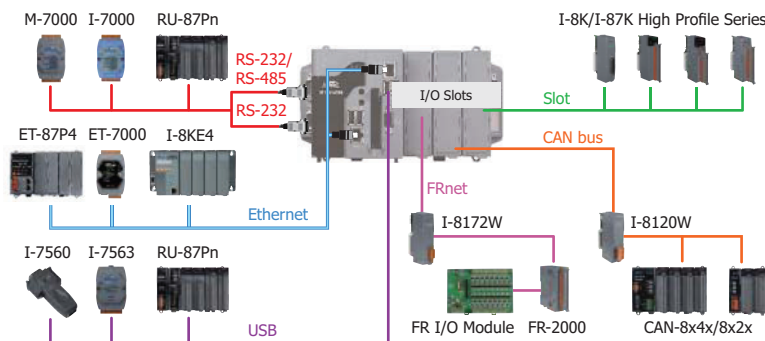
- Windows Compact Edition 6.0
- System Rescue Mechanism
- ASP
- SQL Compact Edition 3.5
- .NET Compact Framework 3.5
- Remote Display
- Built-In OPC Server (Quicker)
- InduSoft
  - HMI and SCADA development tool
- Rich Software Solutions
  - SDK for Microsoft Visual Studio.NET 2005/2008

#### Hardware

- Powerful CPU Module
  - Intel Atom Z510 CPU (1.1 GHz)
- Memory size:
  - DDR2 SDRAM (512 MB), Built-in Flash Disk (1 GB)
  - EEPROM (16 KB), CF Card (2 GB)
  - Dual Battery Backup SRAM (512 KB)
- VGA Port x 1, USB 2.0 Ports x 4
- Programmable LED indicator x 2
- Audio with Microphone-In and Earphone-Out
- 64-bit Hardware Serial Number
- Dual Watchdog Timers
- 4/5 Serial Ports (RS-232/RS-485)
- Dual Giga bit Ethernet Ports (10/100/1000M)
- Redundant Power Inputs
- DIN-Rail or Wall Mounting
- Operating Temperature: -25 ~ +75 °C

### Applications

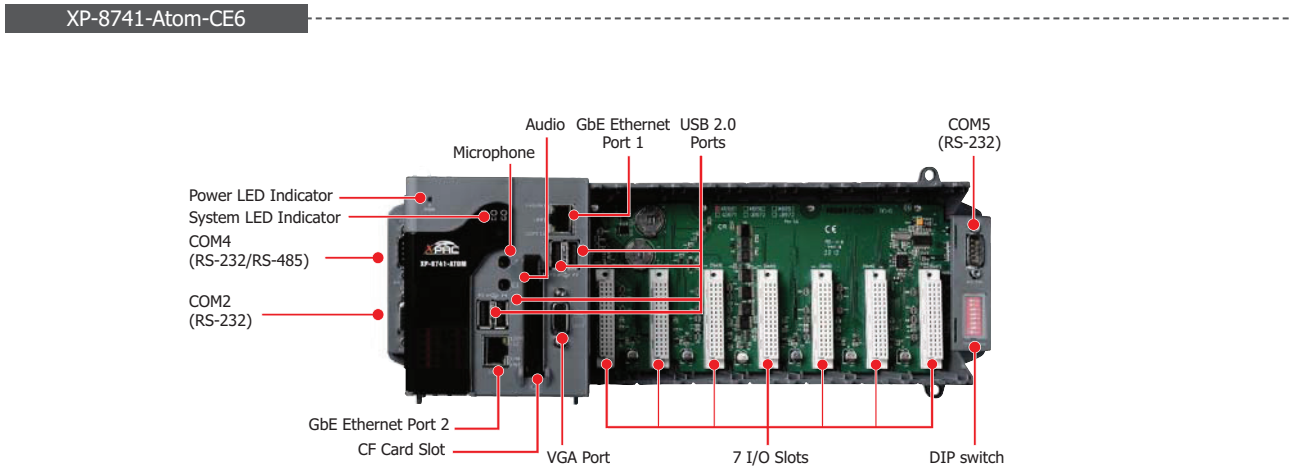
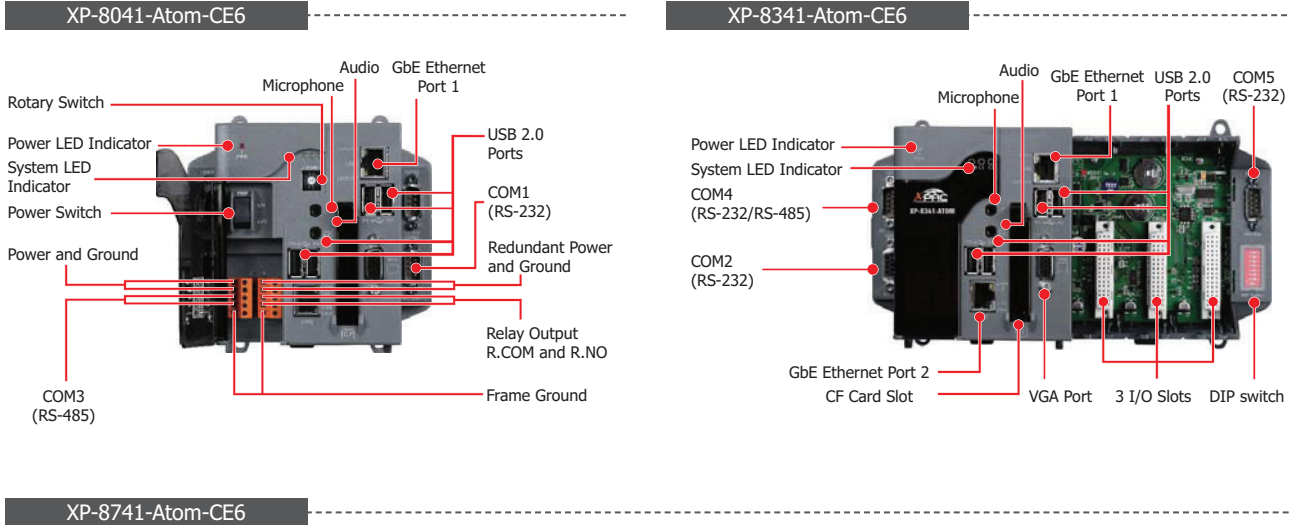
#### Rich I/O Expansion Ability



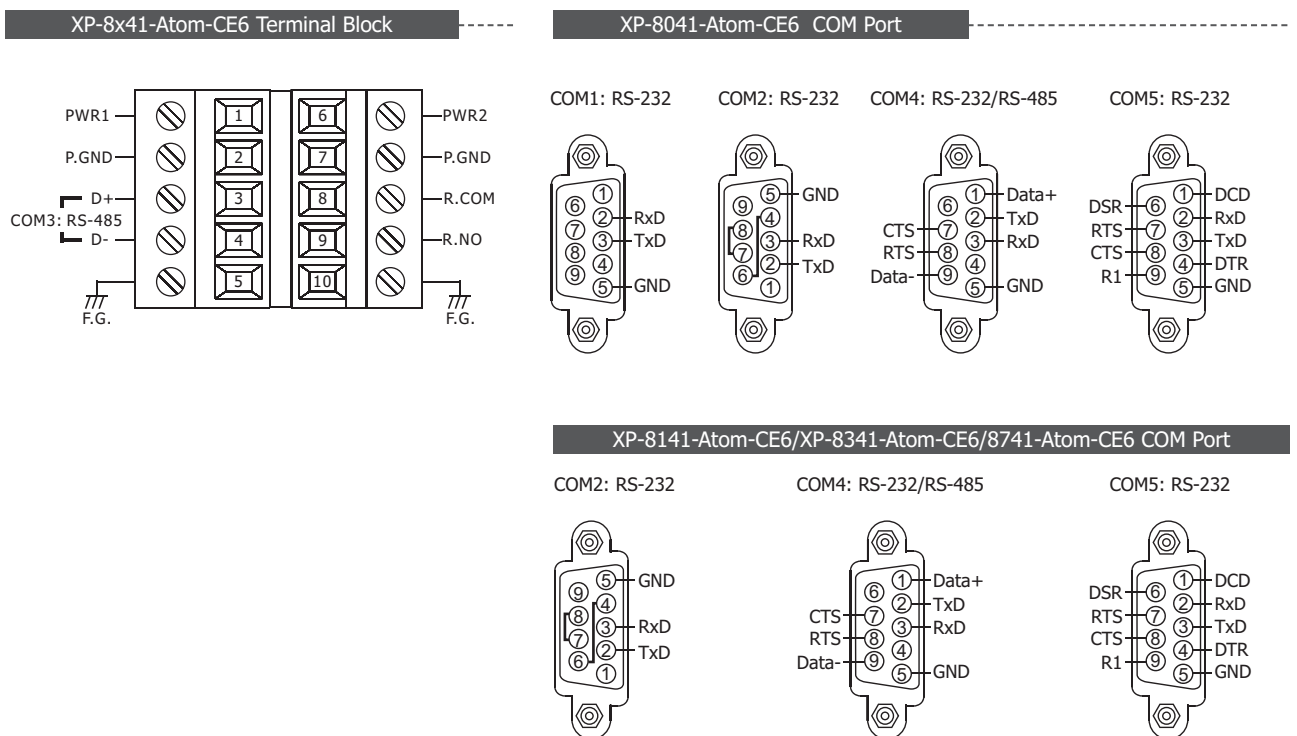
**Specifications**

Models	XP-8041-Atom-CE6	XP-8141-Atom-CE6	XP-8341-Atom-CE6	XP-8741-Atom-CE6
<b>System Software</b>				
OS	Windows CE 6.0 core version			
.Net Compact Framework	3.5			
Embedded Service	FTP Server, ASP (Java Script, VB Script), SQL Compact Edition 3.5			
SDK Provided	DII for Visual Studio .Net 2005/2008			
Multilanguage Support	English, German, French, Spanish, Russian, Italian, Japanese, Simplified Chinese, Traditional Chinese			
<b>CPU Module</b>				
CPU	Intel Atom Z510 CPU (1.1 GHz)			
System Memory	512 MB DDR2 SDRAM			
Dual Battery Backup SRAM	512 KB (for 5 years data retain while power off)			
Flash	1 GB as IDE Master			
EEPROM	16 KB			
	Data Retention: 40 years; 1,000,000 erase/write cycles			
CF Card	2 GB (support up to 32 GB)			
RTC (Real Time Clock)	Provide second, minute, hour, date, day of week, month, year			
Programmable LED Indicator	2			
64-bit Hardware Serial Number	Yes, for Software Copy Protection			
Dual Watchdog Timers	Yes			
Rotary Switch	Yes (0 ~ 9)			
DIP Switch	-	Yes (8 bits)		
Audio	Microphone-In and Earphone-Out			
<b>VGA &amp; Communication Ports</b>				
VGA	Yes, (resolution: 1024 x 768, 800 x 600 , 640 x 480)			
Ethernet (Giga bit)	RJ-45 x 2, 10/100/1000 Base-T (Auto-negotiating, Auto MDI/MDI-X, LED indicators)			
USB 2.0	4			
COM 1	RS-232 (Rx/D, Tx/D and GND); non-isolated	Internal communication with the high profile I-87K series modules in slots		
COM 2	RS-232 (Rx/D, Tx/D and GND); non-isolated			
COM 3	RS-485	D2+, D2-; self-tuner ASIC inside		
	Isolation	3000 Vdc		
COM 4	RS-232/RS-485 (Rx/D, Tx/D, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated			
COM 5	RS-232 (Rx/D, Tx/D, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated			
<b>I/O Expansion Slots</b>				
Slot Number	0	1	3	7
Hot Swap * Will be available	-	For High Profile I-87K Modules Only		
<b>Mechanical</b>				
Dimensions (W x L x H)	137 mm x 132 mm x 125 mm	169 mm x 132 mm x 125 mm	231 mm x 132 mm x 125 mm	355 mm x 132 mm x 125 mm
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 Vdc			
Isolation	1 kV			
Redundant Power Inputs	Yes, with one power relay (1 A @ 24 Vdc) for alarm			
Capacity	3.6 A, 5 V supply to CPU and backplane, 25 W in total	3.7 A, 5 V supply to CPU and backplane, 1.3 A, 5 V supply to I/O expansion slots, 25 W in total	3.8 A, 5 V supply to CPU and backplane, 3.2 A, 5 V supply to I/O expansion slots, 35 W in total	4.0 A, 5 V supply to CPU and backplane, 3.0 A, 5 V supply to I/O expansion slots, 35 W in total
Consumption	16.3 W (0.68 A @ 24 Vdc)	16.6 W (0.69 A @ 24 Vdc)	16.8 W (0.7 A @ 24 Vdc)	18 W (0.75 A @ 24 Vdc)

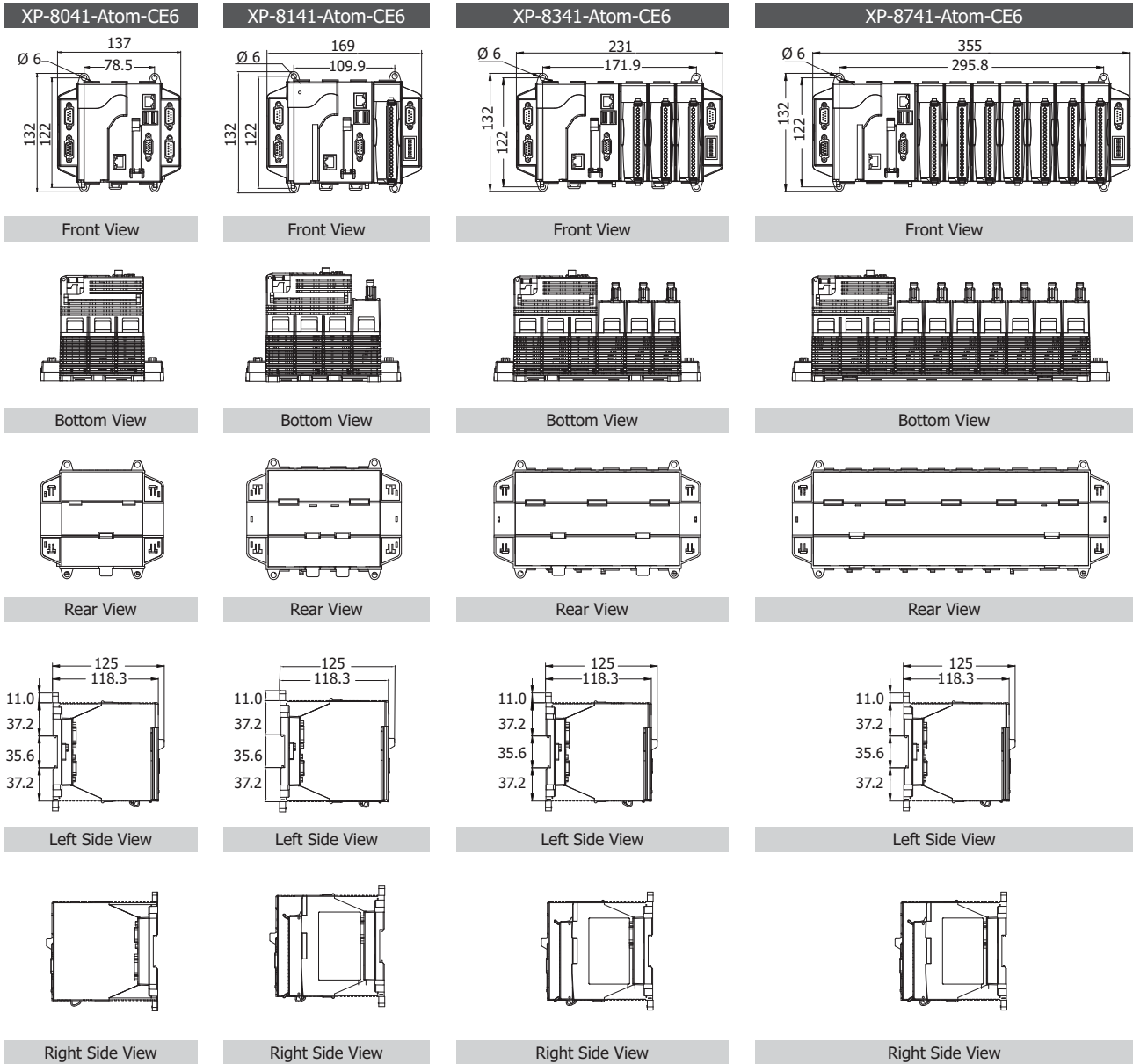
Appearance



Pin Assignments



## Dimensions (Units: mm)



## Ordering Information

XP-8041-Atom-CE6 CR	0 I/O slot WinCE 6.0 Based Standard XPAC (OS: Multi-Language version) (RoHS)
XP-8141-Atom-CE6 CR	1 I/O slot WinCE 6.0 Based Standard XPAC (OS: Multi-Language version) (RoHS)
XP-8341-Atom-CE6 CR	3 I/O slot WinCE 6.0 Based Standard XPAC (OS: Multi-Language version) (RoHS)
XP-8741-Atom-CE6 CR	7 I/O slot WinCE 6.0 Based Standard XPAC (OS: Multi-Language version) (RoHS)
<b>Note:</b> Call for customized XPAC-8000-Atom-CE6	

## 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)
NS-205 CR	Unmanaged 5-port Industrial 10/100 Ethernet Switch with Plastic Case (RoHS)
NS-208 CR	Unmanaged 8-port Industrial 10/100 Ethernet Switch with Plastic Case (RoHS)