


WP-8139/8439/8839

WP-8149/8449/8849

Highlight Information

- Windows CE.NET 5.0
- Hard Real-Time Capability
- Fast Boot Speed
- InduSoft Runtime Inside
- Human Machine Interface
- PXA270 CPU (32-bit & 520 MHz)
- 128 MB SDRAM & 128 MB Flash (for WP-8x39)
- 128 MB SDRAM & 96 MB Flash (for WP-8x49)
- 64-bit Hardware Serial Number for Software Protection
- 1/4/8 Slots for High Profile I/O Modules
- Support VGA (800 × 600 / 1024 × 768)
- Support microSD Socket
- Dual 10/100M Ethernet Ports
- Dual USB Ports (for WP-8x39)
- 2/4 Series Ports (RS-232/485)
- Real-time Control and Data Acquisition
- Operating Temperature: -25 ~ +75 °C



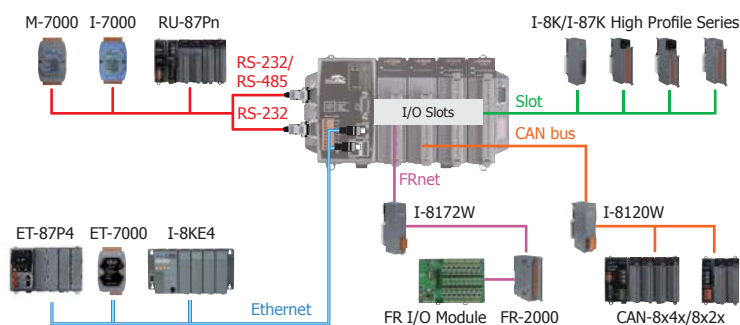
Introduction

WinPAC-8xx9 Series (WP-8139/8439/8839/8149/8449/8849) is the new generation WinCE based InduSoft PAC (Programmable Automation Controller) of ICP DAS. It is equipped a PXA270 CPU (520 MHz) running Windows CE.NET 5.0 Operating System, various connectivity (10/100 Base-TX dual Ethernet Ports, 2 or 4 RS-232/485 Ports, 1 VGA, 2 USB Port) and 1/4/8 slots for high performance Parallel-type I/O modules (High Profile I-8K series) and Serial-type I/O modules (Hot-Swap High Profile I-87K I/O modules). Memories come with 128 MB SRAM, 512 KB dual battery backup SRAM, 2 GB microSD, 128 MB Flash for WP-8x39, and 96 MB Flash for WP-8x49. For redundant supporting: dual Watchdog Timers, redundant power inputs, dual battery backup SRAM, dual Ethernet Ports.

InduSoft Web Studio is a powerful, integrated collection of automation tools that includes all the building blocks required to develop modern Human Machine Interfaces (HMI), and Supervisory Control and Data Acquisition System (SCADA) applications that run native on Windows NT, 2000, XP, CE and CE.NET or in an Internet and Intranet environment. A simple drag-and-drop, point-and-click development environment lets you mimic the most complex behavior of your live processes. InduSoft Web Studio is the ideal E-Automation solution in the industry.

Applications

Rich I/O Expansion Ability



Access Database Easily

- Supports third-party SQL relational databases such as SQL Server, MS Access, Excel, Oracle ...etc.
- Database connectivity from any platform supported by IWS or CEView, through the unique Studio Database Gateway.
- Supports Secondary Database in the modes "Redundancy" or "Store and Forward" to increase the reliability of the system and avoid loss of data.



SNMP Protocol Supported

- I/O Status of WinPAC can be gathered via Internet by polling or inform actively (trap) mode to remote SNMP manager station.
- WinPAC controller can be treated as a SNMP gateway to transfer the information including I/O and user-defined data to SNMP manager station.
- Integrating I/O and Network information in SNMP manager station.



Features

Software

- Windows CE.NET 5.0 Operating System
- Easy Remote Maintenance Via Ethernet
- Built-in OPC Server: Quicker
- Simply Copy and Play to Upgrade Applications
- Pre-installed Run-time InduSoft v6.1 SP3
 - ☐ Intuitive Scripting Language
 - ☐ Support Microsoft .NET, OPC, DDE, ODBC, XML
 - ☐ Support Modbus RTU/TCP Protocol
 - ☐ Full-Featured WinCE-based Run-time Environment
 - ☐ Dynamic Library of Symbols
 - ☐ ActiveX Container
 - ☐ Communication Driver of ICP DAS is Provided

Hardware

- Powerful CPU Module
- Built-in VGA Port with Extra GPU
- 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 63 MB Flash Disk (for WP-8x39)
 - Built-in 31 MB Flash Disk (for WP-8x49)
 - Dual Watchdog Timers
 - Dual Battery Backup SRAM (512 KB)
 - Dual Ethernet Ports
 - Dual USB Ports (for WP-8x39)
 - Redundant Power Inputs
 - DIN-Rail or Wall Mounting
 - Operating Temperature: -25 ~ +75 °C

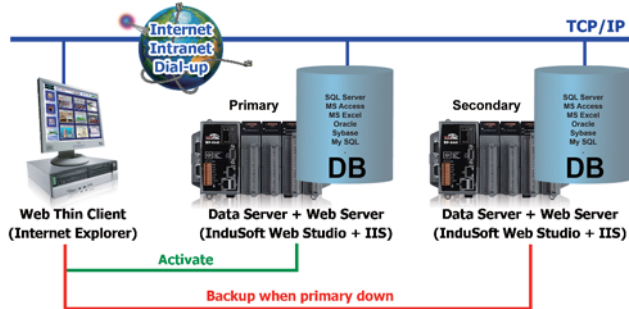
WP-8xx9 Total Solution

WP-8436 + I-87K I/O Modules

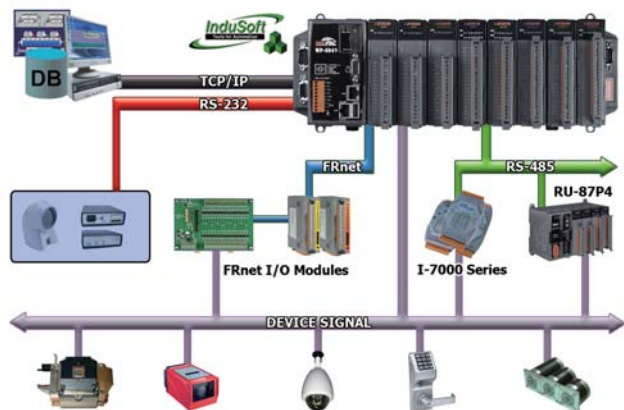


WP-8439 + I-87K I/O Modules

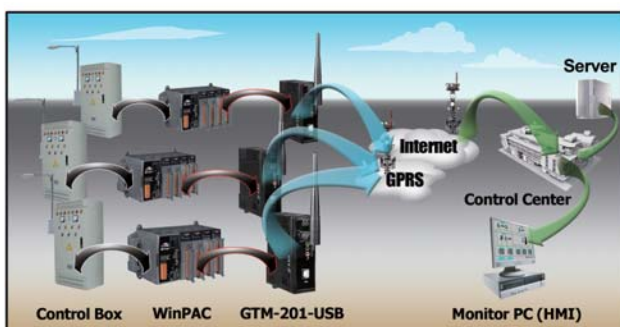
Database & Redundancy



Variety of I/O supported



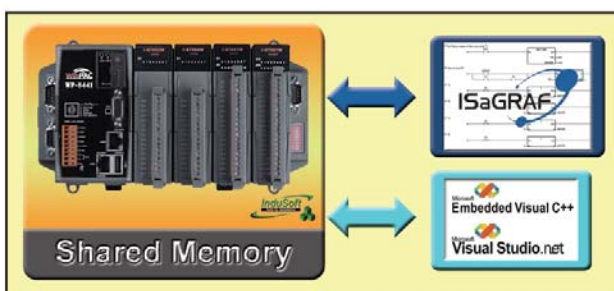
Street lamp monitor and control system



Variety of communication drivers



Share data with 3rd. party application



2

Compact PAC

3

WinPAC-8000 Series

WP-8139/8439/8839/8149/8449/8849

Specifications

2

Compact PAC

3

WinPAC-8000 Series

WP-8139/8439/8839/8149/8449/8849

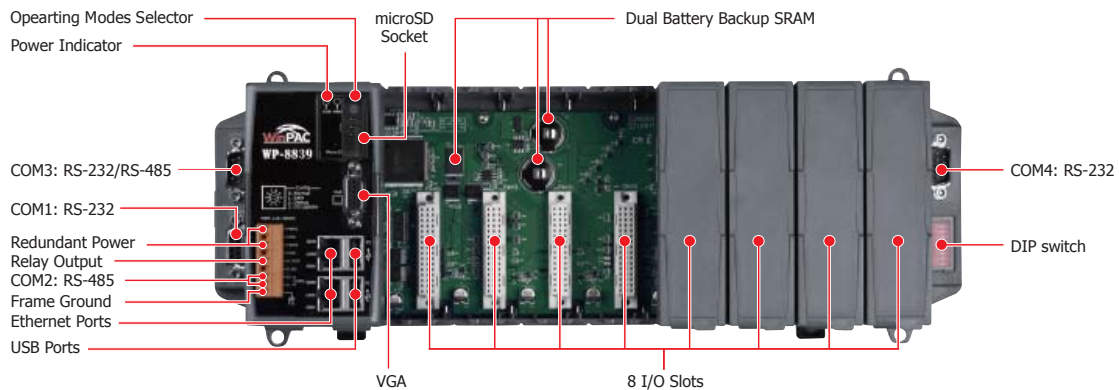
Models	WP-8139	WP-8149	WP-8439	WP-8449	WP-8839	WP-8849	
System Software							
OS	Windows CE 5.0						
.Net Compact Framework	2.0						
Embedded Service	FTP server, Web server (supports VB script, JAVA script), Embedded SQL server						
Multilanguage Support	English, German, French, Spanish, Russian, Italian, Portuguese-BR, Simplified Chinese, Traditional Chinese, Korean						
Development Software							
InduSoft Software	InduSoft Web Studio v6.1 Service Pack 6						
Non-ISaGRAF	Options: Microsoft EVC++4.0 or VS .NET 2003/2005/2008 (VB .NET 2003/2005/2008, C# .NET 2003/2005/2008)						
Web Service							
Web HMI	Support Web HMI function, PC running Internet Explorer can access to the WP-8x39 via Local Ethernet or Internet or dial Modem, monitoring and control.						
Security	Web HMI supports three levels user name and password protection						
CPU Module							
CPU	PXA270 or compatible (32-bit and 520 MHz)						
SDRAM	128 MB						
Dual Battery Backup SRAM	512 KB (for 5 years data retain)						
Flash	Total size	128 MB	96 MB	128 MB	96 MB	128 MB	96 MB
	OS image	64 MB					
	Built-in Flash disk	63 MB	31 MB	63 MB	31 MB	63 MB	31 MB
	Registry	1 MB					
EEPROM	16 KB Data Retention: 40 years; 1,000,000 erase/write cycles						
microSD	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						
Dual Watchdog Timers	Yes						
Programmable LED Indicator	1						
Rotary Switch	Yes (0 ~ 9)						
DIP Switch	-			Yes (8 bits)			
LED, NET ID	1 programmable LED indicator. NET ID: From 1 ~ 255, set by software						
VGA & Communication Ports							
VGA	Extra GPU	Yes	-	Yes	-	Yes	-
	Resolution	1024 x 768, 800 x 600, 640 x 480	800 x 600, 640 x 480	1024 x 768, 800 x 600, 640 x 480	800 x 600, 640 x 480	1024 x 768, 800 x 600, 640 x 480	800 x 600, 640 x 480
Ethernet	RJ-45 x 2, 10/100 Base-TX (Auto-negotiating, LED indicators)						
USB 1.1 (host)	2	1	2	1	2	1	
COM 0	Internal communication with the high profile I-87K series modules in slots						
COM 1	RS-232 (to update firmware) (Rx/D, Tx/D 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/D, Tx/D, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated			
COM 4	-			RS-232 (Rx/D, Tx/D, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated			
I/O Expansion Slots							
Slot Number	1 (For High Profile I-8K and I-87K Modules Only)			4		8	
Hot Swap * Will be available	For High Profile I-87K Modules Only						
Mechanical							
Dimensions (W x L x H)	95 mm x 132 mm x 111 mm			231 mm x 132 mm x 111 mm		355 mm x 132 mm x 111 mm	
Installation	DIN-Rail or Wall Mounting						
Environmental							
Operating Temperature	-25 ~ +75 °C						
Storage Temperature	-30 ~ +80 °C						
Ambient Relative Humidity	10 ~ 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, 8 W in total			1.1 A, 5 V supply to CPU and backplane, 4.9 A, 5 V supply to I/O expansion slots, 30 W in total for WP-8449 25 W in total for WP-8439		1.2 A, 5 V supply to CPU and backplane, 4.8 A, 5 V supply to I/O expansion slots, 30 W in total for WP-8849 25 W in total for WP-8839	
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})	

InduSoft Features

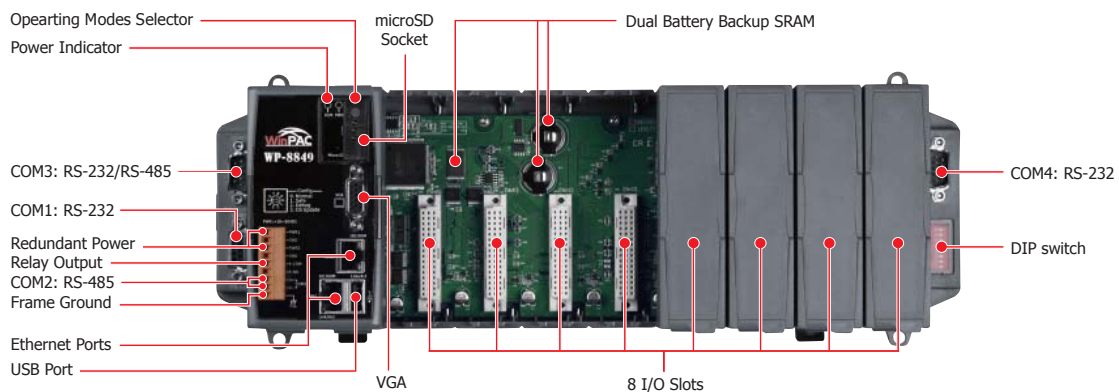
- Elegant Graphics
- Multi-Language
- Database (Access, Excel, SQL, Oracle...)
- Recipes and Reports
- Online and History Alarm / Event / Trend
- Various Communication Driver (DCON, Modbus, OPC, DDE, TCP/IP...)
- Remote Web Client Control & Security
- ActiveX (GSM / SHM / COM /WEB provided by ICP DAS)
- System Redundancy
- Online Configuration and debugging
- Others (VBScript, E-mail, FTP, SNMP...)

Appearance

WP-8839

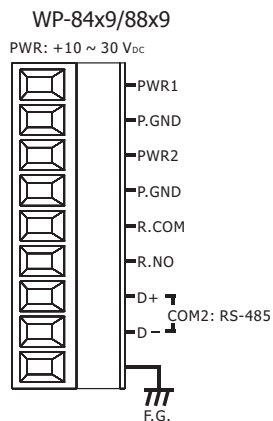
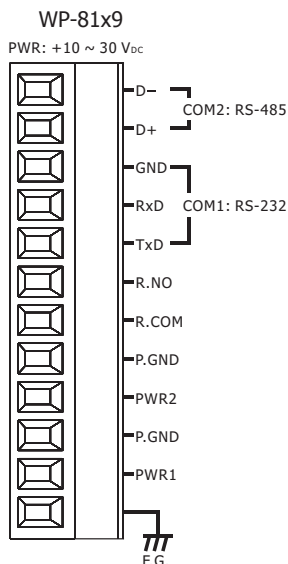


WP-8849



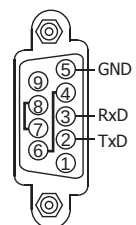
Pin Assignments

Terminal Block

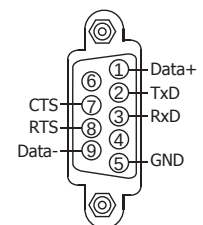


WP-84x9/88x9 COM Port

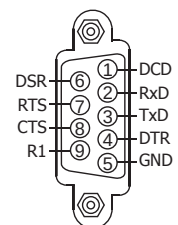
COM1: RS-232



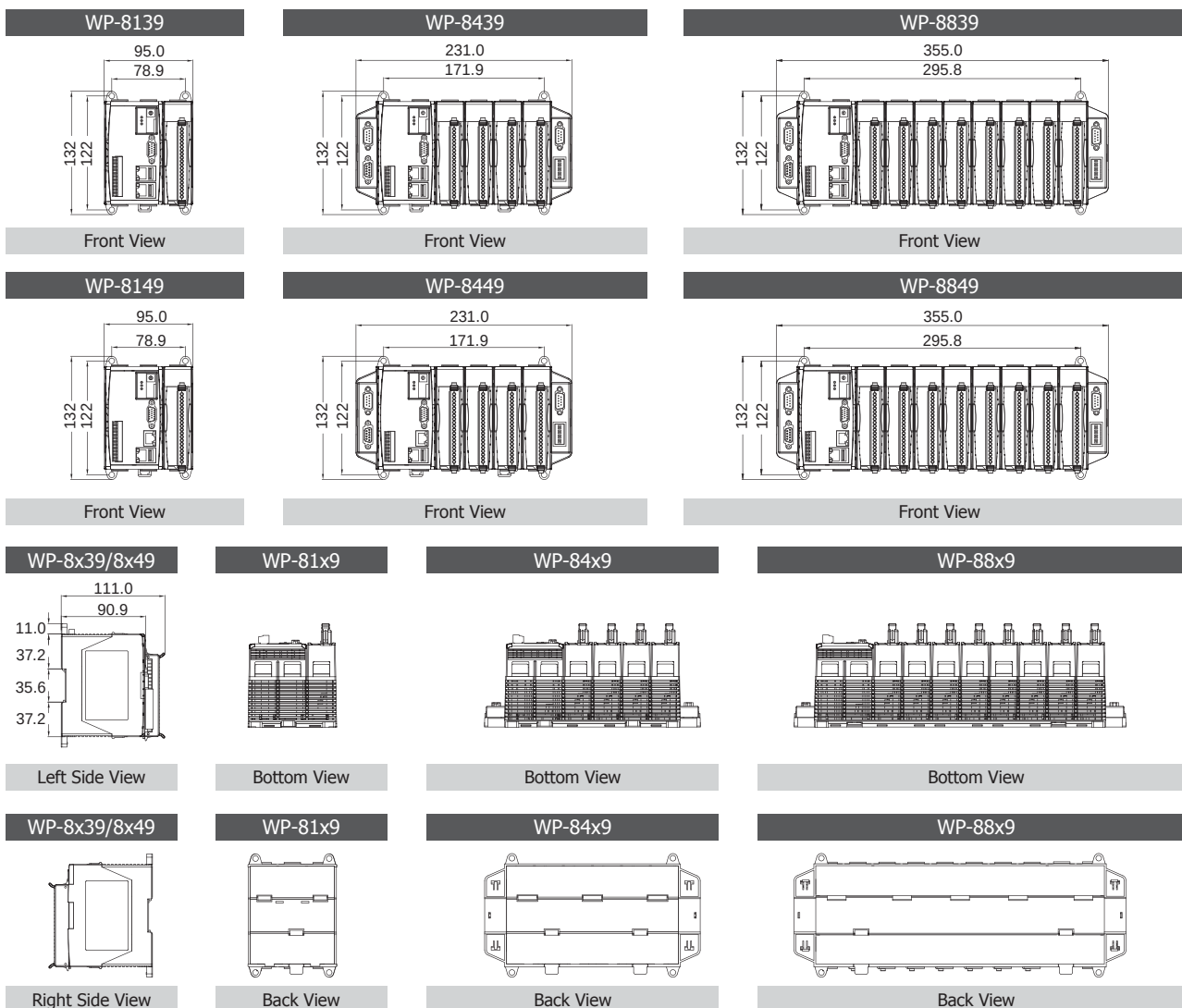
COM3: RS-232/RS-485



COM4: RS-232



Dimensions (Unit: mm)



Ordering Information

WP-8139-EN	WP-8149-EN	InduSoft based WinPAC-8000 with 1 I/O Slot (Multilanguage Version of OS)
WP-8439-EN	WP-8449-EN	InduSoft based WinPAC-8000 with 4 I/O Slots (Multilanguage Version of OS)
WP-8839-EN	WP-8849-EN	InduSoft based WinPAC-8000 with 8 I/O Slots (Multilanguage Version of OS)
WP-8139-TC	WP-8149-TC	InduSoft based WinPAC-8000 with 1 I/O Slot (Traditional Chinese Version of OS)
WP-8439-TC	WP-8449-TC	InduSoft based WinPAC-8000 with 4 I/O Slots (Traditional Chinese Version of OS)
WP-8839-TC	WP-8849-TC	InduSoft based WinPAC-8000 with 8 I/O Slots (Traditional Chinese Version of OS)
WP-8139-SC	WP-8149-SC	InduSoft based WinPAC-8000 with 1 I/O Slot (Simplified Chinese Version of OS)
WP-8439-SC	WP-8449-SC	InduSoft based WinPAC-8000 with 4 I/O Slots (Simplified Chinese Version of OS)
WP-8839-SC	WP-8849-SC	InduSoft based WinPAC-8000 with 8 I/O Slots (Simplified Chinese Version of OS)
Note: The default runtime license (CEView Lite Plus - 300 tags and 3 driver) is installed.		

Accessories

InduSoft Development Software	
InduSoft-NT512000D	Advanced Server for Windows NT/2000/XP (512,000 Tags, unlimited drivers)
InduSoft-NT64000D	Control Room for Windows NT/2000/XP (64,000 Tags, 8 drivers)
InduSoft-NT4000D	Operator Workstation for Windows NT/2000/XP (4,000 Tags, 5 drivers)
InduSoft-NT1500D	Local Interface for Windows NT/2000/XP (1500 Tags, 3 drivers)
InduSoft-NT300D	NTView PRO for Windows NT/2000/XP (300 Tags, 3 drivers)
InduSoft Runtime License	
InduSoft-CE1500R	CEView standard for Windows CE Run-time (CE View)(1500 Tags, 3 drivers)
InduSoft-CE300R	CEView Lite Plus for Windows CE Run-time (300 Tags, 3 drivers)
Power Supply	
DP-660	24 Vdc/2.5 A, 60 W and 5 Vdc/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting
DP-1200	24 Vdc/5.0 A, 120 W Power Supply with DIN-Rail Mounting
MDR-20-24	24 Vdc/1.0 A, 24 W Power Supply with DIN-Rail Mounting
MDR-60-24	24 Vdc/2.5 A, 60 W Power Supply with DIN-Rail Mounting