Compact PAC



2.3. WinPAC-8000 Series

Overview



WinPAC-8000 is the new generation PAC of ICP DAS. It is equipped a PXA270 CPU (520 MHz) running a Windows CE.NET 5.0 operating system, various 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 I/O modules (high profile I-87K I/O modules).

WinPAC operating system, Windows CE 5.0, has many advantages, including hard real-time capability, small core size, short boot time, interrupt handling at a deeper level, achievable deterministic control, and low cost. Using Windows CE.Net 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, SoftPLC ... etc.

WinPAC ≒ IPC+PLC



Compared with the first generation WinCon-8000, WinPAC-8000 not only improves the CPU performance (from 206 MHz to 520 MHz) and upgrading OS (from CE 4.1 to CE 5.0), but also adds many reliability features, such as dual LAN, redundant power input, dual battery backup SRAM, etc. It gives you all of the best features of both traditional PLCs and Windows capable PCs.

Main Components:

1 Main Control Unit (MCU)

The MCU is the powerhouse of the WinPAC-8000. Each MCU comprises a Central Processor Module (CPM), a power supply, and a 1, 4, 8-slot backplane for 1, 4, 8 I/O modules. The CPM is powerful integrated processing engine comprising a CPU, RAM and ROM, and an option of communication interfaces including Ethernet, RS-485, CAN bus and FRnet.

I/O Modules

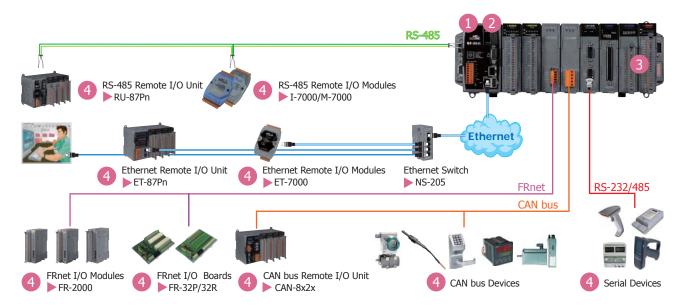
There are two types of I/O modules, Parallel and Serial. The Parallel I/O modules (I-8K high profile series) are high-speed modules and have to be installed in slots of the WinPAC. The Serial I/O modules (I-87K high profile series) can be installed in slots or Expansion Units (RU-87Pn).

2 Embedded OS

All WinPAC have Windows CE OS inside, and most of the popular features in MS software are included, such as FTP Server, HTTP Server, ASP (Java/VB script), SQL Server embedded 3.5 and compact .NET Framework 2.0. WinPAC supports rich software & development solutions: VB.Net 2005/2008, Visual C#.NET 2005/2008, eVC++ 4.0, ISaGRAF, InduSoft etc.

Remote I/O Expansion

WinPAC uses built-in RS-485 and Ethernet ports to connect RS-485/Ethernet remote I/O units (Ru-87Pn/ET-87Pn) or modules (I-7000/M-7000/ET-7000). In this configuration, WinPAC expands the I/O very easily. Using CAN or FRnet communication module, WinPAC can connect CAN bus devices, remote I/O units or FRnet I/O modules for deterministic control system.



Selection Guide

WP-8







Hardware

- 3: PXA270 CPU & VGA 1024 x 768 4: PXA270 CPU & VGA 800 x 600
- 5: PXA270 CPU & VGA 1024 x 768



Software

- 1: Standard 7: ISaGRAF
- 9: InduSoft



Language

- EN: English
- TC: Traditional Chinese
- SC: Simplified Chinese

Standard WinPAC

| Model Name | OS | Pre-installed Software | CPU | Flash | SDRAM | VGA Resolution | USB | RS-232/RS-485 | I/O Slot | Memory Expansion | Audio | Page |
|------------|--------|------------------------|--------------------|--------|--------|----------------|-----|---------------|----------|------------------|-------|-------|
| WP-8131 | | | B)/4870 | | | | | 2 | 1 | | | |
| WP-8431 | CE 5.0 | None | PXA270, 520 MHz | 128 MB | 128 MB | 1024 x 768 | 2 | 4 | 4 | microSD | - | 2-3-3 |
| WP-8831 | | | 320 11112 | | | | | 4 | 8 | | | |
| WP-8141 | | | D./ | | | | | 2 | 1 | | | |
| WP-8441 | CE 5.0 | None | PXA270, 520 MHz | 96 MB | 128 MB | 800 x 600 | 1 | 4 | 4 | microSD | - | 2-3-3 |
| WP-8841 | | | 320 11112 | | | | | 4 | 8 | | | |
| WP-8051 | | | DV4.270 | | | | | 5 | 0 | | | |
| WP-8351 | CE 5.0 | None | PXA270, 520 MHz | 128 MB | 128 MB | 1024 x 768 | 2 | 4 | 3 | CF | Yes | 2-3-7 |
| WP-8751 | | | 320 11112 | | | | | 7 | 7 | | | |

The controller supports the following software development tools:

- 1. DLLs of I/O modules for eVC, VS.Net 2005/2008
- 2. DLLs of Modbus/RTU and Modbus/TCP for eVC and VS.Net 2005/2008
- 3. OPC server (Quicker)

ISaGRAF Based WinPAC

| Model Name | OS | Pre-installed Software | CPU | Flash | SDRAM | VGA Resolution | USB | RS-232/RS-485 | I/O Slot | Memory Expansion | Audio | Page |
|------------|--------|------------------------|--------------------|--------|--------|----------------|-----|---------------|----------|------------------|-------|--------|
| WP-8137 | | | B)/4878 | | | | | 2 | 1 | | | |
| WP-8437 | CE 5.0 | ISaGRAF | PXA270, 520 MHz | 128 MB | 128 MB | 1024 x 768 | 2 | 4 | 4 | microSD | - | 2-3-11 |
| WP-8837 | | | 320 11112 | | | | | 4 | 8 | | | |
| WP-8147 | | | D)/4.270 | | | | | 2 | 1 | | | |
| WP-8447 | CE 5.0 | ISaGRAF | PXA270, 520 MHz | 96 MB | 128 MB | 800 x 600 | 1 | 4 | 4 | microSD | - | 2-3-11 |
| WP-8847 | | | 320 1 1112 | | | | | 4 | 8 | | | |
| WP-8057 | | | DV4.270 | | | | | 5 | 0 | | | |
| WP-8357 | CE 5.0 | ISaGRAF | PXA270, 520 MHz | 128 MB | 128 MB | 1024 x 768 | 2 | 4 | 3 | CF | Yes | 2-3-17 |
| WP-8757 | | | 323 1 11 12 | | | | | 4 | 7 | | | |

The controller fully supports all five of the IEC61131-3 standard PLC languages:

- 1. Ladder diagram
- 2. Function block diagram
- 3. Sequential function chart
- 4. Structured text
- 5. Instruction List plus flow chart
- It supports Modbus protocol and can link to distributed I/O modules with Modbus or DCON protocol via the RS-232/485 or Ethernet.

InduSoft Based WinPAC

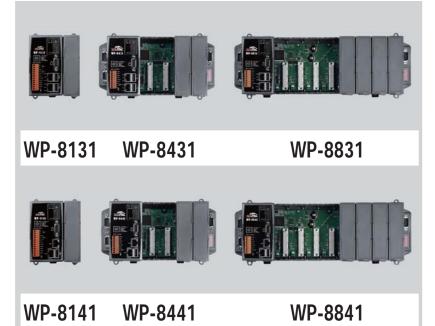
| Model Name | OS | Pre-installed Software | CPU | Flash | SDRAM | VGA Resolution | USB | RS-232/RS-485 | I/O Slot | Memory Expansion | Audio | Page |
|------------|--------|------------------------|--------------------|--------|--------|----------------|-----|---------------|----------|------------------|-------|--------|
| WP-8139 | | | B)/4878 | | | | | 2 | 1 | | | |
| WP-8439 | CE 5.0 | InduSoft | PXA270, 520 MHz | 128 MB | 128 MB | 1024 x 768 | 2 | 4 | 4 | microSD | - | 2-3-23 |
| WP-8839 | | | 320 11112 | | | | | 4 | 8 | | | |
| WP-8149 | | | D)/4.270 | | | | | 2 | 1 | | | |
| WP-8449 | CE 5.0 | InduSoft | PXA270, 520 MHz | 96 MB | 128 MB | 800 x 600 | 1 | 4 | 4 | microSD | - | 2-3-23 |
| WP-8849 | | | 320 1 11 12 | | | | | 4 | 8 | | | |
| WP-8059 | | | DV4.270 | | | | | 5 | 0 | | | |
| WP-8359 | CE 5.0 | InduSoft | PXA270, 520 MHz | 128 MB | 128 MB | 1024 x 768 | 2 | 4 | 3 | CF | Yes | 2-3-28 |
| WP-8759 | | | 320 1 11 12 | | | | | 7 | 7 | | | |

The controller supports the following software development tools:

- 1. DLLs of I/O modules for eVC, VS.Net 2005/2008
- 2. DLLs of Modbus/RTU and Modbus/TCP for eVC and VS.Net 2005/2008
- 3. OPC server (Quicker)







Highlight Information

- Windows CE 5.0
- Hard Real-Time Capability
- Fast Boot Speed
- PXA270 CPU (32-bit & 520 MHz)
- VGA Port Output
- Support eLogger HMI
- Open System
- Redundant Power Input
- Operating Temperature: -25 ~ +75 °C







Introduction -

WP-8x31 and WP-8x41 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 0/4/8 I/O slots for high performance parallel I/O modules (high profile I-8K Series) and serial $\ensuremath{\mathrm{I/O}}$ 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.

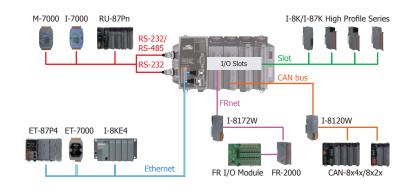
Features .

Software

- Windows CE.NET 5.0 Operating System
- Easy Remote Maintenance Via Ethernet
- ☐ FTP server
- ☐ VCFP software
- Built-in OPC Server: Quicker
- $\hfill\Box$ An OPC Server & SCADA Software
- ☐ Integrate Local/Remote I/O Modules Via RS-232/485 or Ethernet
- ☐ Provide Library for eVC, C# or VB.NET
- $\hfill \square$ Support Modbus and DCON Protocols
- Development Software
 - ☐ Visual Studio.NET 2005/2008 and eVC
- $\hfill \square$ SDK/Demo Programs for C#, VB.NET & eVC
- Upgrade Applications Just Copy and Play

Applications _

Rich I/O Expansion Ability ------



Hardware

- Powerful CPU Module
- Built-in VGA Port: 640 x 480 ~ 1024 x 768 (for WP-8x31)
- Built-in VGA Port: 640 x 480 ~ 800 x 600 (for WP-8x41)
- 64-bit Hardware Serial Number
- Rich I/O Expansion Ability
- I/O Module Hot Swap Ability

* Will be available

(For High Profile I-87K Modules Only)

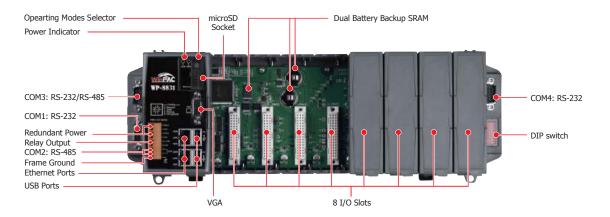
- Built-in 63 MB Flash Disk (for WP-8x31)
- Built-in 31 MB Flash Disk (for WP-8x41)
- Dual Watchdog Timers
- Dual Battery Backup SRAM (512 KB)
- Dual Ethernet Ports
- Redundant Power Input
- DIN-Rail or Wall Mounting
- Operating Temperature: -25 ~ +75 °C

Specifications _

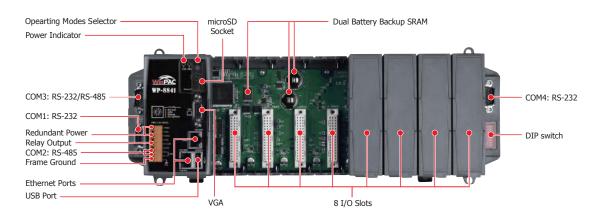
| Madala | | WP-8131 | WP-8141 | WP-8431 | WP-8441 | WP-8831 | WP-8841 | | | |
|---|---|--|--|---------------------------|--|--------------------------|---|--|--|--|
| Models | vowo. | WP-8131 | WP-8141 | WP-8431 | WP-8441 | WP-8831 | WP-8841 | | | |
| System Softw OS | vale | Windows CE 5.0 | | | | | | | | |
| | t Framaucado | 2.0 | | | | | | | | |
| .Net Compact | | | | | | | | | | |
| Embedded Se | | FTP server, Web server (supports VB script, JAVA script), Embedded SQL server | | | | | | | | |
| SDK Provided | | Dll for eVC, Dll for Visual Studio.Net 2005/2008 English, German, French, Spanish, Russian, Italian, Simplified Chinese, Traditional Chinese | | | | | | | | |
| Multilanguage | e Support | English, German, Frei | ncn, Spanish, Russian, I | italian, Simplined Chines | se, Traditional Chinese | | | | | |
| CPU Module | | DV4.272 | (22.11) | | | | | | | |
| CPU | | | e (32-bit and 520 MHz) | | | | | | | |
| SDRAM | | 128 MB | | | | | | | | |
| Dual Battery | Backup SRAM | | ata retain while power | | T | T | 1 | | | |
| | Total size | 128 MB | 96 MB | 128 MB | 96 MB | 128 MB | 96 MB | | | |
| Flash | OS image | 64 MB | Ī | 64 MB | I | 64 MB | | | | |
| | Built-in Flash disk | 63 MB | 31 MB | 63 MB | 31 MB | 63 MB | 31 MB | | | |
| | Registry | 1 MB | | 1 MB | | 1 MB | | | | |
| EEPROM | | 16 KB | | | | | | | | |
| | | Data Retention: 40 ye | ears; 1,000,000 erase/v | vrite cycles | | | | | | |
| microSD | | | | (support 1 GB, 2 GB mi | croSD card only) | | | | | |
| RTC (Real Tin | me Clock) | Provide second, minu | te, hour, date, day of w | eek, month, year | | | | | | |
| | are Serial Number | Yes, for Software Cop | y Protection | | | | | | | |
| Dual Watchdo | og Timers | Yes | | | | | | | | |
| Programmabl | le LED Indicator | 1 | | | | | | | | |
| Rotary Switch | า | Yes (0 ~ 9) | | | | | | | | |
| DIP Switch | | - | | Yes (8 bits) | | | | | | |
| VGA & Comm | nunication Ports | | | | | | | | | |
| | Extra GPU | Yes | - | Yes | - | Yes | - | | | |
| VGA | | 1024 x 768, | 800 x 600, | 1024 x 768, | 800 x 600, | 1024 x 768, | 800 x 600, | | | |
| | Resolution | 800 x 600, | 640 x 480 | 800 x 600, | 640 x 480 | 800 x 600, | 640 x 480 | | | |
| | | 640 x 480 | | 640 x 480 | | 640 x 480 | | | | |
| Ethernet | | | se-TX (Auto-negotiating | | I | I | 1 | | | |
| USB 1.1 (hos | t) | 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 fin | mware) (RxD, TxD and | GND); non-isolated | | | | | | |
| COM 2 | RS-485 | D2+, D2-; self-tuner | ASIC inside | | | | | | | |
| | Isolation | 2500 V _{DC} | 2500 V _{DC} 3000 V _{DC} | | | | | | | |
| COM 3 | | RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Da non-isolated | | | | nd Data- for RS-48 | | | | |
| COM 4 | | - RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated | | | | | | | | |
| I/O Expansion | · | | | | | Ta ana Grab // Horr ison | atcu | | | |
| | n Slots | | | | | Ta ana araby, non ison | atcu | | | |
| , = 2.1501010 | n Slots | 1 | | 4 | | - | ateu | | | |
| Slot Number | n Slots | 1 (For High Profile I-8K | and I-87K Modules Onl | 4 (v) | | 8 | uccu | | | |
| Slot Number | | (For High Profile I-8K | and I-87K Modules Onl | | ,,,,, | - | accu | | | |
| Slot Number Hot Swap * V | Nill be available | | | | | - | acci | | | |
| Slot Number Hot Swap * V Mechanical | Will be available | (For High Profile I-8K For High Profile I-87K | Modules Only | ly) | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (| Will be available | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 | Modules Only 11 mm | | | - | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (V Installation | Will be available | (For High Profile I-8K For High Profile I-87K | Modules Only 11 mm | ly) | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmenta | Will be available W x L x H) | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mour | Modules Only 11 mm | ly) | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmental Operating Ter | Will be available W x L x H) al mperature | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C | Modules Only 11 mm | ly) | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmenta Operating Ten Storage Temp | W x L x H) al mperature perature | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C | Modules Only 11 mm hting | ly) | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmenta Operating Ten Storage Temp Ambient Rela | Will be available W x L x H) al mperature | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C | Modules Only 11 mm hting | ly) | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmenta Operating Ter Storage Temp Ambient Rela Power | W x L x H) al mperature perature | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-co | Modules Only 11 mm hting | ly) | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmenta Operating Ter Storage Temp Ambient Rela Power Input Range | W x L x H) al mperature perature | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-control of the control of | Modules Only 11 mm hting | ly) | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmenta Operating Ter Storage Temp Ambient Rela Power Input Range Isolation | Will be available W x L x H) al mperature perature tive Humidity | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-control of the control of | Modules Only 11 mm nting ondensing) | 231 mm x 132 mm x | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmenta Operating Ter Storage Temp Ambient Rela Power Input Range | Will be available W x L x H) al mperature perature tive Humidity | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-control of the control of | Modules Only 11 mm hting | 231 mm x 132 mm x | | 8 | | | | |
| Slot Number Hot Swap * V Mechanical Dimensions (' Installation Environmenta Operating Ter Storage Temp Ambient Rela Power Input Range Isolation | Will be available W x L x H) al mperature perature tive Humidity | (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-control of the control of | Modules Only 11 mm Inting Inting Indensing) Intelligence of the second of the sec | 231 mm x 132 mm x | 111 mm CPU and backplane, /O expansion slots, | 8 | 111 mm CPU and backplane (/O expansion slots | | | |



Appearance



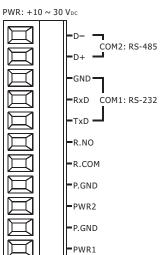
WP-8841



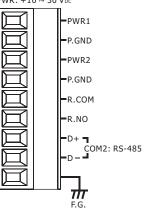
Pin Assignments

Terminal Block

WP-81x1 WP-84x1/88x1 PWR: +10 ~ 30 V_{DC}

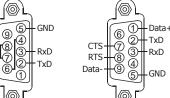


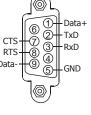
/// F.G.



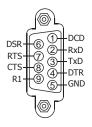
WP-84x1/88x1 COM Port

COM1: RS-232



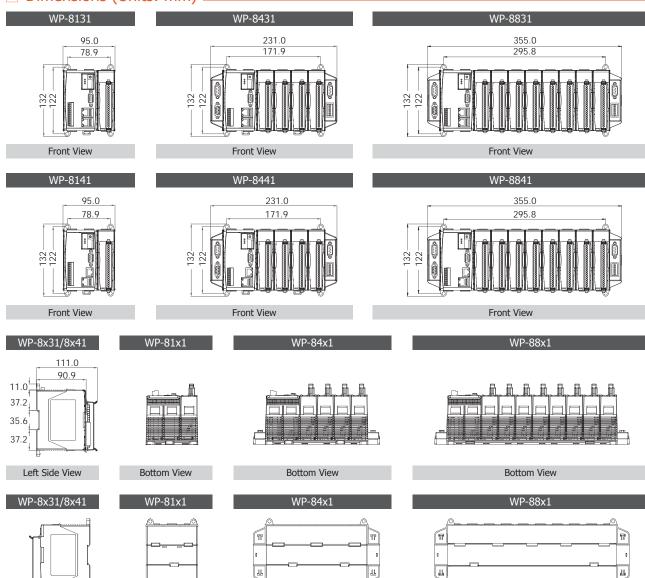


COM3: RS-232/RS-485



COM4: RS-232

Dimensions (Units: mm) -



Ordering Information _

Rear View

Right Side View

| 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) |

Rear View

Accessories .

| DP-660 | 24 Vbc/2.5 A, 60 W and 5 Vbc/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting |
|--------------|---|
| DP-1200 CR | 24 Vbc/5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS) |
| MDR-60-24 CR | 24 Voc/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) |

Rear View





Highlight Information

- Windows CE 5.0
- Hard Real-Time Capability
- Fast Boot Speed
- PXA270 CPU (32-bit & 520 MHz)
- Audio with Microphone-In and Earphone-Out
- VGA Port Output
- Support eLogger HMI
- Open System
- Redundant Power Input
- Operating Temperature: -25 ~ +75 °C





Introduction _

WP-8x51 Series is 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 0/3/7 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 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.

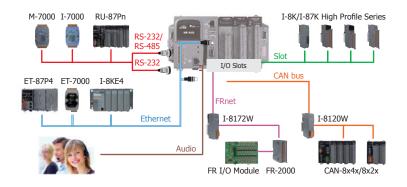
Features .

Software

- Windows CE.NET 5.0 Operating System
- Easy Remote Maintenance Via Ethernet
 - $\ \square$ FTP server
- ☐ VCEP software
- Built-in OPC Server: Quicker
 - $\hfill \square$ An OPC Server & SCADA Software
 - ☐ Integrate Local/Remote I/O Modules Via RS-232/485 or Ethernet
- $\hfill\Box$ Provide Library for eVC, C# or VB.NET
- ☐ Support Modbus and DCON Protocols
- Development Software
 - ☐ Visual Studio.NET 2005/2008 and eVC
- $\hfill\Box$ SDK/Demo Programs for C#, VB.NET & eVC
- Upgrade Applications Just Copy and Play

Applications _

Rich I/O Expansion Ability



Hardware

- Powerful CPU Module
- Built-in VGA Port: 640 x 480 ~ 1024 x 768
- 64-bit Hardware Serial Number
- lacktriangle Audio with Microphone-In and Earphone-Out
- 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
- Dual Watchdog Timers
- Dual Battery Backup SRAM (512 KB)
- Dual Ethernet Ports
- Redundant Power Input
- DIN-Rail or Wall Mounting
- Operating Temperature: -25 ~ +75 °C

☑ Specifications ______

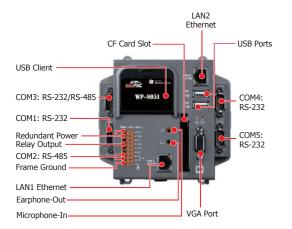
| Section | Models | | WP-8051 | WP-8351 | WP-8751 | | | | |
|--|---|-------------------|--|--|-------------------------------------|--|--|--|--|
| Mick Compact Famework 2.0 cm Embedded Service FTP Service, Web server (supports VB script, 1MVA script), Embedded SQL server SDK Provided Office verC, 1D five Visual Sundin Net 2000/2008 Willbriamsgase Support Employer (Specific Community Cerc), Specific Colleges, Traditional Chinese CPU VISUAL STATE | System Softw | are | | | | | | | |
| Para | | | Windows CE 5.0 | | | | | | |
| Pin | .Net Compact | Framework | 2.0 | | | | | | |
| Mary Number Def For well, 70 feb Wise Mary Station, Merc 2005/2005 Col Mary Mise Mise Mise Mise Mise Mise Mise Mise | | | | | | | | | |
| Multibringsuiges Seprot Project Sepret | | | | | | | | | |
| PAIL | | | | | | | | | |
| PAGE | | . эарроге | English, German, French, Spanish, Nassian, | randing simplified crimese, maditional crimese | | | | | |
| SDRAM 128 MB | | | DVA270 or compatible (32-bit and 520 MHz) | | | | | | |
| Data Buttery Butter | | | | | | | | | |
| Flash Fla | | Packup CDAM | | off) | | | | | |
| Path | Duai battery i | | | on) | | | | | |
| Flash | | | | | | | | | |
| EEPROM | Flash | | | | | | | | |
| Page | | | | | | | | | |
| Compact Flash | | Registry | | | | | | | |
| Compact Flash 4 68 CF card (support up to 32 GB) RTC (Real Time Clock) Provide second, minute, hour, date, day of week, month, year Celeficial Time Clock) Provide second, minute, hour, date, day of week, month, year Celeficial Time Clock Ves (0 ~ 9) Subject of the Clock of Subject of Time Clock Ves (0 ~ 9) Subject of Clock of Subject of Clock of | EEPROM | | | | | | | | |
| RTC (Real Time Clock) | | | | vrite cycles | | | | | |
| Match Mat | | | | | | | | | |
| Dual Watchdog Timers Yes | RTC (Real Tin | ne Clock) | Provide second, minute, hour, date, day of v | veek, month, year | | | | | |
| Programmable LED Indicator Text | 64-bit Hardwa | are Serial Number | Yes, for Software Copy Protection | | | | | | |
| Note | Dual Watchdo | g Timers | Yes | | | | | | |
| DIP Switch | Programmabl | e LED Indicator | 1 | | | | | | |
| Audio Microphone-In and Earphone-Out VGA Mark GPU Yes Resolution 1024 x 768, 800 x 600, 640 x 480 Ethernet RP-45 x 2, 10/100 Base-TX (Auto-negotiating, LED indicators) USB 1.1 (Incet) 2 USB 1.1 (clemt) 1 Internal communication with the high profile I-87K series modules in slots COM 1 RS-232 (to update firmware) (RXD, TXD and GND); non-isolated COM 2 RS-485 (RXD, TXD, CTS, RTS, DSR, DTR, CD, RT and GND); non-isolated COM 3 RS-232 (RxD, TXD, D, CTS, RTS, DSR, DTR, CD, RT and GND); non-isolated COM 4 RS-232 (RxD, TXD, D, CTS, RTS, DSR, DTR, CD, RT and GND); non-isolated COM 4 RS-232 (RxD, TXD, and GND); non-isolated Slot Number 0 RS-232 (RxD, TXD, and GND); non-isolated PR-232 (RxD, TXD, CTS, RTS, DSR, DSR, DTR, CD, RT and GND); non-isolated Slot Number 0 0 (RXD, TXD, CTS, RTS, DSR, DTR, DTR, DTR, DTR, DTR, DTR, DTR, DT | Rotary Switch | | Yes (0 ~ 9) | | | | | | |
| VGA Extra GPU Ves Resolution 1024 x 768, 800 x 600, 640 x 480 | DIP Switch | | - | Yes (8 bits) | | | | | |
| Extra GPU Yes Resolution 1024 x 768, 800 x 600, 640 x 480 | Audio | | Microphone-In and Earphone-Out | | | | | | |
| Resolution 1024 x 768, 800 x 600, 640 x 480 | VGA & Comm | unication Ports | | | | | | | |
| Resolution 1024 x 768, 800 x 600, 640 x 480 | 1/04 | Extra GPU | Yes | | | | | | |
| USB 1.1 (client) 1 USB 1.1 (client) 1 COM 0 - Internal communication with the high profile I-87K series modules in slots COM 1 R5-232 (to update firmware) (RxD, TxD and GND); non-isolated COM 2 R5-485 (O2+, D2-); 3000 Vcc isolated COM 3 R5-232/R5-485 (RxD, TxD, CTS, RTS and GND) for R5-232, Data+ and Data- for R5-485); non-isolated COM 4 R5-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, R1 and GND); non-isolated COM 5 R5-232 (RxD, TxD, and GND); non-isolated COM 5 R5-232 (RxD, TxD, and GND); non-isolated COM 5 R5-232 (RxD, TxD, and GND); non-isolated COM 6 R5-232 (RxD, TxD, and GND); non-isolated COM 7 (For High Profile I-87K Modules Only Hot Swap * Will be available For High Profile I-87K Modules Only Mechanical Dimensions (W x L x H) Dimensions (W x L x H) Dinensions (W x L x H) Dinensions (W x L x H) Dinensions (W a L x H) Dinensions (W a L x H) Dinensions (W x L | VGA | Resolution | 1024 x 768, 800 x 600, 640 x 480 | | | | | | |
| USB 1.1 (client) 1 | Ethernet | - | RJ-45 x 2, 10/100 Base-TX (Auto-negotiating | g, LED indicators) | | | | | |
| COM 0 | USB 1.1 (host | :) | 2 | | | | | | |
| COM 1 RS-232 (to update firmware) (RxD, TxD and GND); non-isolated COM 2 RS-485 (D2+, D2-); 3000 Voc isolated COM 3 RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated COM 4 RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated COM 5 RS-232 (RxD, TxD, and GND); non-isolated COM 5 RS-232 (RxD, TxD, and GND); non-isolated | USB 1.1 (clier | nt) | 1 | | | | | | |
| COM 2 RS-485 (D2+, D2-); 3000 Voc isolated COM 3 RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated COM 4 RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated COM 5 RS-232 (RxD, TxD, and GND); non-isolated COM 6 RS-232 (RxD, TxD, and GND); non-isolated COM 7 RS-232 (RxD, TxD, and GND); non-isolated COM 5 RS-232 (RxD, TxD, and GND); non-isolated COM 6 RS-232 (RxD, TxD, and GND); non-isolated COM 7 RS-232, Data+ and Data- for RS-485); non-isolated COM 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated COM 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated COM 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated COM 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated COM 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232, Data+ and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, CD, RI and GND); non-isolated Com 6 RS-232 (RxD, TxD, and GND); non-isolated Com 6 RS-232 (RxD, | COM 0 | | - | Internal communication with the high profil | e I-87K series modules in slots | | | | |
| COM 2 RS-485 (D2+, D2-); 3000 Voc isolated COM 3 RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated COM 4 RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated COM 5 RS-232 (RxD, TxD, and GND); non-isolated Com 4 Solate (Rich Structure) Com 4 | COM 1 | | RS-232 (to update firmware) (RxD, TxD and | GND); non-isolated | | | | | |
| COM 3 RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated COM 4 RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated Image: RS-232 (RxD, TxD, and GND); non-isolated Image: RS-232 (RxD, TxD | COM 2 | | RS-485 (D2+, D2-); 3000 Vpc isolated | | | | | | |
| COM 4 RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated COM 5 RS-232 (RxD, TxD, and GND); non-isolated - I/O Expansion Slots Slot Number 0 3 7 GFOR High Profile I-8K and I-87K Modules Only Mechanical Dimensions (W x L x H) 137 mm x 132 mm x 111 mm 231 mm x 132 mm x 111 mm 355 mm x 132 mm x 131 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 Voc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Voc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to I/O expansion slots, 30 W in total | COM 3 | | | ND for RS-232, Data+ and Data- for RS-485); I | non-isolated | | | | |
| COM 5 RS-232 (RxD, TxD, and GND); non-isolated - I/O Expansion Slots Slot Number 0 | | | | | | | | | |
| Slot Number O 3 7 | | | | | | | | | |
| Slot Number 0 3 7 (For High Profile I-8K and I-87K Modules Only) Hot Swap * Will be available For High Profile I-87K Modules Only Mechanical Dimensions (W x L x H) 137 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 Vbc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Vbc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to CPU and backplane, 4.6 A, 5 V supply to I/O expansion slots, 30 W in total | | Slots | === (,, | | | | | | |
| Slot Number (For High Profile I-8K and I-87K Modules Only) | 2, 0 2, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10 | . 0.0.0 | 0 | 3 | 7 | | | | |
| Hot Swap * Will be available Mechanical Dimensions (W x L x H) Installation DIN-Rail or Wall Mounting Environmental Operating Temperature -25 ~ +75 °C Storage Temperature -30 ~ +80 °C Ambient Relative Humidity Input Range Input Range +10 ~ +30 Voc Isolation 1 kV Redundant Power Inputs Capacity For High Profile I-87K Modules Only Mechanical 231 mm x 132 mm x 111 mm 355 mm x 132 mm x 131 mm 355 mm x 132 mm x 111 mm Alt I | Slot Number | | | | | | | | |
| Mechanical Dimensions (W x L x H) 137 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 Voc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Voc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to CPU and backplane, 4.6 A, 5 V supply to I/O expansion slots, 30 W in total | Hot Swan * V | /ill he available | | •17 | | | | | |
| Dimensions (W x L x H) 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 Voc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Voc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to I/O expansion slots, 30 W in total | | viii be available | To Flight Folice 1 of K Florates Only | | | | | | |
| 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 Voc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Voc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 1.5 W in total 1.5 W in total 1.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.0 A S V supply to I/O expansion slots, 30 W in total 3.0 W | | M v I v II) | 127 mm v 122 mm v 111 mm | 221 mm v 122 mm v 111 mm | 2EE mm v 122 mm v 111 mm | | | | |
| Environmental Operating Temperature -25 ~ +75 °C Storage Temperature -30 ~ +80 °C Ambient Relative Humidity 10 ~ 90% RH (non-condensing) Power Input Range +10 ~ +30 Vbc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Vbc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to I/O expansion slots, 30 W in total | | N A L X II) | | 531 11111 X 132 11111 X 111 11111 | 222 HIIII X 132 HIIII X 111 HIIII | | | | |
| Operating Temperature -25 ~ +75 °C Storage Temperature -30 ~ +80 °C Ambient Relative Humidity 10 ~ 90% RH (non-condensing) Power Input Range +10 ~ +30 Vpc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Vpc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to I/O expansion slots, 30 W in total | | ı | DIN-Kall OF Wall Mounting | | | | | | |
| Storage Temperature -30 ~ +80 °C Ambient Relative Humidity 10 ~ 90% RH (non-condensing) Power Input Range +10 ~ +30 Voc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Voc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to I/O expansion slots, 30 W in total | | | 25 475 00 | | | | | | |
| Ambient Relative Humidity 10 ~ 90% RH (non-condensing) Power Input Range | | | | | | | | | |
| Input Range +10 ~ +30 Vpc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Vpc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 15 W in total 1.5 W | | | | | | | | | |
| Input Range +10 ~ +30 Voc Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Voc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 15 W in total 1.3 W in total 1.4 A, 5 V supply to CPU and backplane, 1.4 A, 5 V supply to I/O expansion slots, 30 W in total 3.3 W in total | | tive Humidity | 10 ~ 90% RH (non-condensing) | | | | | | |
| Isolation 1 kV Redundant Power Inputs Yes, with one power relay (1 A @ 24 Voc) for alarm Capacity 1.2 A, 5 V supply to CPU and backplane, 15 W in total 1.3 W in total 1.3 W in total 1.4 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to I/O expansion slots, 30 W in total 3.0 W in t | Power | | | | | | | | |
| Redundant Power Inputs Yes, with one power relay (1 A @ 24 Vbc) for alarm 1.2 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to CPU and backplane, 4.6 A, 5 V supply to I/O expansion slots, 30 W in total | Input Range | | +10 ~ +30 V _{DC} | | | | | | |
| Capacity 1.2 A, 5 V supply to CPU and backplane, 15 W in total 1.3 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 1.4 A, 5 V supply to CPU and backplane, 4.6 A, 5 V supply to I/O expansion slots, 30 W in total | Isolation 1 kV | | | | | | | | |
| Capacity 1.2 A, 5 V supply to CPU and backplane, 15 W in total 4.7 A, 5 V supply to I/O expansion slots, 30 W in total 4.6 A, 5 V supply to I/O expansion slots, 30 W in total | Redundant Po | ower Inputs | Yes, with one power relay (1 A @ 24 V _{DC}) fo | r alarm | | | | | |
| Consumption 8.4 W (0.35 A @ 24 V _{DC}) 9.6 W (0.4 A @ 24 V _{DC}) 10 W (0.42 A @ 24 V _{DC}) | Capacity 1.2 A, 5 V supply to CPU and backplane, 1.5 W in total 1.3 A, 5 V supply to CPU and backplane, 4.7 A, 5 V supply to I/O expansion slots, 4.6 A, 5 V supply | | 4.6 A, 5 V supply to I/O expansion slots, | | | | | | |
| | Consumption | | 8.4 W (0.35 A @ 24 V _{DC}) | 9.6 W (0.4 A @ 24 V _{DC}) | 10 W (0.42 A @ 24 V _{DC}) | | | | |

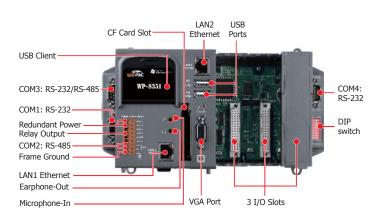


Appearance

W/D_Q05

WP-8351

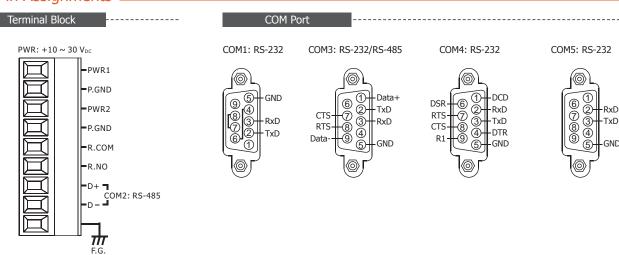




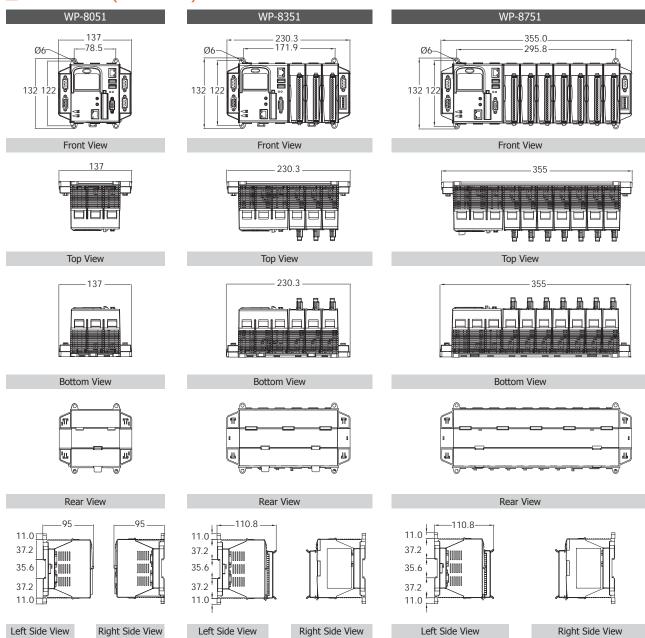
WP-8751

CF Card Slot -LAN2 USB Dual Battery Backup SRAM Ethernet Ports **USB** Client COM3: RS-232/RS-485 COM4: RS-232 COM1: RS-232 Redundant Power Relay Output — DIP switch COM2: RS-485 Frame Ground LAN1 Ethernet Earphone-Out 7 I/O Slots VGA Port Microphone-In

Pin Assignments



Dimensions (Units: mm) _



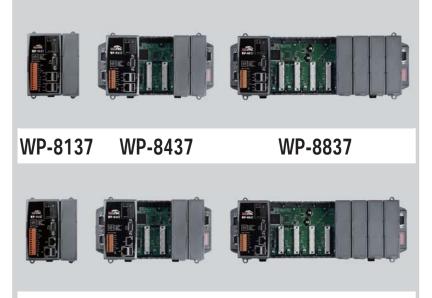
Ordering Information _____

| 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 Voc/2.5 A, 60 W and 5 Voc/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting |
|--------------|---|
| DP-1200 CR | 24 Voc/5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS) |
| MDR-60-24 CR | 24 Voc/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) |





Highlight Information

- Windows CE 5.0
- Hard Real-Time Capability
- Fast Boot Speed
- ISaGRAF Ver.3 SoftLogic Inside (IEC 61131-3)
- PXA270 CPU (32-bit & 520 MHz)
- VGA Port Output
- Simple graphic HMI
- Support eLogger HMI
- Open System
- Redundant Power Input
- Operating Temperature: -25 ~ +75 °C







Introduction -

WP-8147

WP-8x37 and WP-8x47 Series are the new generation ISaGRAF based PACs of ICP DAS. It is equipped with a PXA270 CPU (520 MHz), various connectivity (VGA, USB, Ethernet, RS-232/485) and 1/4/8 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 ISaGRAF and 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.

WP-8847

WP-8447

ISaGRAF is the most powerful SoftLogic package on the market. ISaGRAF is a PLC-like software and it supports IEC 61131-3 standard PLC programming languages (LD, FBD, SFC, ST, IL, FC), and can run the application generated by the workbench on any ISaGRAF PACs. The ISaGRAF workbench Ver. 3.x features

- IEC 61131-3 Standard Open PLC Programming Languages (LD, FBD, SFC, ST, IL, FC) + Flow Chart (FC)
- Auto-Scan I/O
- On-Line Debug/Control/Monitor, Off-Line Simulation
- Simple Graphic HMI
- Support eLogger HMI

Features

Software

- Windows CE.NET 5.0 Operating System
- Development Softwre: ISaGRAF Ver.3
 - ☐ Windows 95/98/NT/2000/XP/Vista/7
 - ☐ All-in-one design environment
- ☐ Easy to integrating with HMI/SCADA/MMI
- Support Modbus Master & Slave Protocols
 - ☐ Modbus TCP Master (Max. 100 devices)
- ☐ Modbus RTU, ASCII, RS-232/485/422 Master (Max. 10 ports)
- ☐ Modbus RTU (RS-232/485/422) Slave (Max. 5 ports)
- ☐ Modbus TCP/IP Slave (Max. 32 connections)
- Support GPS/ZigBee/Radio Wireless & SMS
- Support Ebus/Fbus Data Exchange
- Support CAN/CANopen
- Support FRnet I/O (Via I-8172W)
- Support Data-Recorder & Data-Logger
- Support Motion Control & VW Solutions
- Support eLogger HMI

Hardware

- Powerful CPU Module
- Built-in VGA Port: 640 x 480 ~ 1024 x 768 (for WP-8x37)
- Built-in VGA Port: 640 x 480 ~ 800 x 600 (for WP-8x47)
- 64-bit Hardware Serial Number
- Rich I/O Expansion Ability
- High Profile I-87K I/O Modules Hot Swap Ability
- Built-in 2 USB Ports (for WP-8x37)
- Built-in 1 USB Ports (for WP-8x47)
- Built-in 128 MB Flash (for WP-8x37)
- Built-in 96 MB Flash (for WP-8x47)
- Dual Watchdog Timers
- Dual Battery-Backup SRAM (512 KB)
- Dual Ethernet Ports
- Redundant Power Input
- DIN-Rail or Wall Mounting
- Operating Temperature: -25 ~ +75 °C

Applications _

Rich I/O Expansion Ability M-7000 I-7000 RU-87Pn CAN/CANopen Devices I-7530 RS-485 (COM2 or COM3) FRnet I-8172W I-8KE4-MTCP ET-7000 ET-7000 I-8KE8-MTCP I-8K/I-87K High Profile Series NS-205 FR I/O Module FR-2000

Soft-GRAF: Create A Colorful HMI in the ISaGRAF PAC

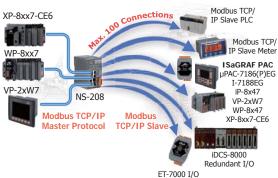


Modbus RTU/ASCII Master WP-8447/8847 Modbus Device M-7000 Modules

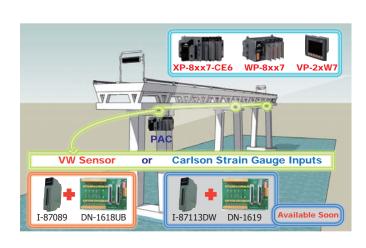
RS-485

Modbus Master Ports

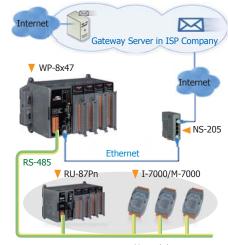
Modbus TCP/IP Master



Stress Monitoring of Constructions



Send Email with one Attached File

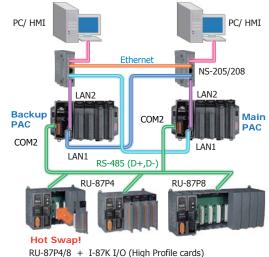


Remote I/O Modules

Modbus RTU/TCP Slave Ports



New Hot-Swap Redundant System





PAC Specifications .

| Models | | WP-8137 | WP-8147 | WP-8437 | WP-8447 | WP-8837 | WP-8847 | | | | |
|--|--|---|---|--|--|---|--|--|--|--|--|
| System Softw | are | | | | | | | | | | |
| OS | | Windows CE 5.0 | | | | | | | | | |
| .Net Compact | Framework | 2.0 | | | | | | | | | |
| Embedded Se | rvice | FTP server, Web server | | | | | | | | | |
| Multilanguage | Support | English, German, French, Spanish, Russian, Italian, Simplified Chinese, Traditional Chinese | | | | | | | | | |
| Development | Software | | | | | | | | | | |
| | ISaGRAF Ver.3 | IEC 61131-3 standard | IEC 61131-3 standard. | | | | | | | | |
| ISaGRAF | Languages | LD, ST, FBD, SFC, IL | & FC | | | | | | | | |
| Software | Max. Code Size | 1 MB | | | | | | | | | |
| | Scan Time | 3 ~ 15 ms for norma | | | | | | | | | |
| | | 15 ~ 50 ms for complex or large program | | | | | | | | | |
| Non-ISaGRAF Options: MS eVC++ 4.0 or VS.NET 2005/2008 (VB.NET, C#.NET) | | | | | | | | | | | |
| Web Service | | | | | | | | | | | |
| Web HMI | | | explorer can monitor/co | | | | | | | | |
| Security | | Support three levels | username and password | I protection. (high/mide | fle/low) | | | | | | |
| CPU Module | | | | | | | | | | | |
| CPU | | | e (32-bit and 520 MHz) | | | | | | | | |
| SDRAM | | 128 MB | | | | | | | | | |
| Dual Battery B | | | ata retain while power | 1 | | | | | | | |
| | Total size | 128 MB | 96 MB | 128 MB | 96 MB | 128 MB | 96 MB | | | | |
| Flash | OS image | 64 MB | | 64 MB | | 64 MB | | | | | |
| i idəli | Built-in Flash disk | 63 MB | 31 MB | 63 MB | 31 MB | 63 MB | 31 MB | | | | |
| | Registry | 1 MB | | 1 MB | | 1 MB | | | | | |
| EEPROM | | 16 KB | | | | | | | | | |
| LLFROM | | Data Retention: 40 ye | ears; 1,000,000 erase/w | rite cycles | | | | | | | |
| microSD | | microSD socket with one 2 GB microSD card (support up to 16 GB microSDHC card) | | | | | | | | | |
| RTC (Real Tim | ne Clock) | Provide second, minute, hour, date, day of week, month, year | | | | | | | | | |
| 64-bit Hardwa | are Serial Number | Yes, for Software Copy Protection | | | | | | | | | |
| Dual Watchdo | g Timers | Yes | | | | | | | | | |
| Programmable | e LED Indicator | 1 | | | | | | | | | |
| Rotary Switch Yes (0 ~ 9) | | | | | | | | | | | |
| DIP Switch | | - | | Yes (8 bits) | | | | | | | |
| VGA & Comm | unication Ports | | | | | | | | | | |
| | Extra GPU | Yes | - | Yes | - | Yes | - | | | | |
| VGA | 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 Ba | se-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 fir | mware) (RxD, TxD and | GND); non-isolated | | | | | | | |
| COM 2 | RS-485 | D2+, D2-; self-tuner | ASIC inside | | | | | | | | |
| COPTZ | Isolation | 2500 V _{DC} | | 3000 V _{DC} | | | | | | | |
| COM 3 | | - | | non-isolated | , TxD, CTS, RTS and GN | · | | | | | |
| COM 4 | Clota | - | | KS-232 (KXD, TXD, C | TS, RTS, DSR, DTR, CD, | , KI ANG GIVD); NON-ISOI | ated | | | | |
| I/O Expansion | I SIOTS | 4 | | | | | | | | | |
| Slot Number | | 1 | | 4 | | 8 | | | | | |
| Side Number | | , , | and I-87K Modules Onl | у) | | | | | | | |
| Hot Com * 11 | viii be avallable | For High Profile I-87K Modules Only | | | | | | | | | |
| Hot Swap * W | | | | | | | | | | | |
| Mechanical | M v I v U | 0E mrs :: 122 | 11 | 221 | 111 mm | 95 mm x 132 mm x 111 mm 231 mm x 132 mm x 111 mm 355 mm x 132 mm x 111 mm | | | | | |
| Mechanical Dimensions (\ | WxLxH) | | | 231 mm x 132 mm x | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (\text{\text{\text{Unitary installation}}} | | 95 mm x 132 mm x 1 DIN-Rail or Wall Mou | | 231 mm x 132 mm x | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (V Installation Environmenta | ı | DIN-Rail or Wall Mou | | 231 mm x 132 mm x | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (V Installation Environmenta Operating Ten | l nperature | DIN-Rail or Wall Mou | | 231 mm x 132 mm x | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp | I nperature serature | DIN-Rail or Wall Mou -25 ~ +75 °C -30 ~ +80 °C | nting | 231 mm x 132 mm x | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp Ambient Relat | I nperature serature | DIN-Rail or Wall Mou | nting | 231 mm x 132 mm x | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp Ambient Relat Power | I nperature serature | DIN-Rail or Wall Mou -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-c | nting | 231 mm x 132 mm x | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (\text{\text{\text{N}}} Installation Environmenta Operating Tem Storage Temp Ambient Relat Power Input Range | I nperature serature | DIN-Rail or Wall Mou -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-company) +10 ~ +30 V _{DC} | nting | 231 mm x 132 mm x | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (\text{\text{\text{Installation}}} Environmenta Operating Ten Storage Temp Ambient Relat Power Input Range Isolation | I nperature erature tive Humidity | DIN-Rail or Wall Mou -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-c +10 ~ +30 V _{DC} 1 kV | ondensing) | | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (\text{\text{\text{N}}} Installation Environmenta Operating Tem Storage Temp Ambient Relat Power Input Range | I nperature erature tive Humidity | DIN-Rail or Wall Mou -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-c +10 ~ +30 V _{DC} 1 kV | nting | | 111 mm | 355 mm x 132 mm x | 111 mm | | | | |
| Mechanical Dimensions (\text{\text{\text{Installation}}} Environmenta Operating Ten Storage Temp Ambient Relat Power Input Range Isolation | I nperature erature tive Humidity | DIN-Rail or Wall Mou -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-c +10 ~ +30 V _{DC} 1 kV | ondensing) relay (1 A @ 24 V _{DC}) for | | CPU and backplane, I/O expansion slots, 8447 | 1.2 A, 5 V supply to 4.8 A, 5 V supply to 30 W in total for WP-25 W in total for WP-25 W in total for WP- | CPU and backplane, I/O expansion slots, 8847 | | | | |

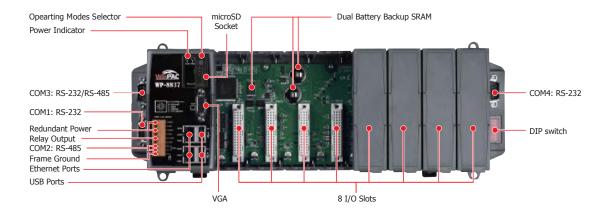
■ ISaGRAF Specifications .



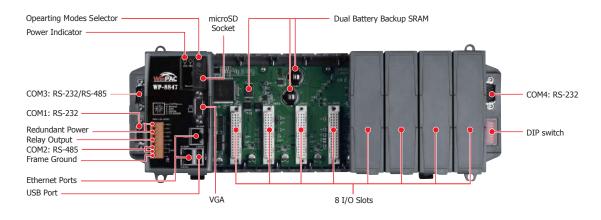
| Web HMT Protocol Ethernet Purts for connecting PC running Internet Explorer | Protocols (some pro | otocols need optional device | s) | | | | |
|--|--------------------------|------------------------------|--|--|--|--|--|
| Modbus RTU/JASCII Master Max. 10 ports: COM1 ~ 14 (To connect to other Modbus Slave devices). Support Multi-ports. (*) Modbus RTU/JASCII Master Max. 5 ports: COM1 ~ 14 (To connect to other Modbus Slave devices). Support Multi-ports. (*) Modbus RTU/JASCII Master Max. 5 ports: COM1 ~ 14 (To connect to PC COM2/3, COM4 ~ 0 (For connecting) Escapes, PC/PMIL/DRC Serve & HIMI panels). (*) Web HMI Protocol Ethernet RU18 LAN2 apport total up to 32 connections. When one port is broken, the other one can still connect to PC Web HMI Protocol Ethernet RU18 LAN2 apport total up to 32 connections. When one port is broken, the other one can still connect to PC Web HMI Protocol Ethernet RU18 LAN2 apport total up to 32 connections. When one port is broken, the other one can still connect to PC Web HMI Protocol Max. 10 R5-485 ports (COM1 - 14) can support M-7000 U.D. Each port can connect up to 32 M-7000 Modules. LAN2 apports IZP DAS Ethernet VID - 18Cek-TOT Can at JASCIA broken, it will swritch to LAN1 automatic continuously work. (LAN1 a LAN2's IP are requested set in the same IP domain) Fixnet I/O Max. 8 pcs. 1-8172W boards in side 0 ~ 7 to connect to Pfent I/O modules Send Email Supports And Web Blay's COMI/JCOM5 can link to a GSM Modem to support SMS. User can request data/ the controller by cellular prione. The connotine and also said data & alarms to user's cellular phone. (*) User Defined Protocol COM1 ~ COM14 by Serial communication function blocks (*) MINICON/LCD COM4 or COM5 and supports ICP DASS MMICCON. (*) User Server & LUP Client : Exchange Message & Auto-Report COM14 ~ CAN14 by Serial communication function blocks (*) LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report COM14 ~ CAN14 can communication function blocks (*) ANI OR LAN2 CAN communication sport data to Indudedfits RCTX driver, or to connect a location camera. This redurdant system has setup two "Active IP" address point to the actives which su | NET ID | | 1~255, user-assigned by software | | | | |
| Modbus RTU Slave Max. 5 ports: COM1, one of COM2/3, COM4 ~ 8 (for connecting IsaGRAF, PC/HMI/OPC Server & HMI panels). (*) Modbus TCP/IP Slave Ethernet LANI & LANZ support total up to 32 connections. When one port is broken, the other one can still connect to PC Web HMI Protocol Ethernet LANI & LANZ support total up to 32 connections. When one port is broken, the other one can still connect to PC Web HMI Protocol Ethernet Ports for connecting PC crusting Internet Explorer One of COM2, COM3 supports 17:7000 I/O modules, 1-87x hase + 1-87x Serial I/O boards and RU-87Pn + 1-87X High Probards as Remote I/O. Max. 255 modules for one controlles. (*) Modbus TCP/IP I/O LANZ supports ICCOM1 - 1-9; can support M7:7000 I/O. Each port can connect up to 32 M-7000 Modules. LANZ supports ICCOM1 - 1-9; can support M7:7000 I/O. Each port can connect up to 32 M-7000 Modules. LANZ supports ICCOM1 - 1-9; can support M7:700 I/O. Each port can connect up to 32 M-7000 Modules. LANZ supports ICCOM1 - 1-9; can support M7:700 I/O. Each port can connect up to 32 M-7000 Modules. LANZ supports ICCOM1 - 1-9; can support M7:700 I/O. Each port can connect up to 32 M-7000 Modules. LANZ supports ICCOM1 - 1-9; can support M7:700 I/O. Each port can connect up to 32 M-7000 Modules. LANZ supports Incidence to Service the Individual Service M7:80 M-80 M-80 M-80 M-80 M-80 M-80 M-80 M- | Modbus TCP/IP Mast | ter | Link to max. 100 devices that support Standard Modbus TCP/IP Slave protocol | | | | |
| ## Ethernet LAN1 & LAN2 support total up to 32 connections. When one port is broken, the other one can still connect to PC Web HMI Protocol 1-7000 & F-87K RS-485 Remote I/O ## Protocol 1-7000 & F-87K RS-485 Remote I/O ## Max. 10 September 1/O. Max. 255 modules for one controller. (*) ## Modus TCP/JP I/O ## And 10 September 1/O. Max. 255 modules for one controller. (*) ## Max. 10 September 1/O. Max. 255 modules for one controller. (*) ## Max. 10 September 1/O. Max. 255 modules for one controller. (*) ## Max. 10 September 1/O. Max. 255 modules for one controller. (*) ## Max. 10 September 1/O. Set Ethernet I/O. 1-SetCh+MTCP and 1-BRCE-MTCP. If LAN2 is broken, it will switch to LAN1 automatic continuously work. (LAN1 & LAN2's IP are requested set in the same IP domain) ## Max. 10 September 1/O ## Max. 10 Set Ethernet I/O: 1-SetCh+MTCP and 1-BRCE-MTCP. If LAN2 is broken, it will switch to LAN1 automatic continuously work. (LAN1 & LAN2's IP are requested set in the same IP domain) ## Max. 10 Set Ethernet I/O: 1-SetCh+MTCP and 1-BRCE-MTCP. If LAN2 is broken, it will switch to LAN1 automatic continuously work. (LAN1 & LAN2's IP are requested set in the same IP domain) ## Max. 10 Set Ethernet I/O: 1-SetCh+MTCP and 1-BRCE-MTCP. If LAN2 is broken, it will switch to LAN1 automatic continuously work. (LAN1 & LAN2's IP are requested set in the same IP domain) ## Max. 10 Set | Modbus RTU/ASCII I | Master | Max. 10 ports: COM1 ~ 14 (To connect to other Modbus Slave devices). Support Multi-ports. (*) | | | | |
| Ethernet Ports for connecting PC running Internet Explore 1-7000 & I-87K RS-485 Remote I/O One of COM2, COM3 supports 1-7000 I/O modules, I-87K base + I-87K Serial I/O boards and RU-87Pm + I-87K High Pro boards as Remote I/O Max. 258 modules for one controller. (*) M-7000 Series Modbus I/O Max. 10 RS-485 ports (COM1 - 14) can support M-7000 I/O, Each port can connect up to 32 M-7000 Modules. Modbus TCP/IP I/O Max. 10 RS-485 ports (COM1 - 14) can support M-7000 I/O, Each port can connect up to 32 M-7000 Modules. LANZ supports ICP DAS Ethernet I/O: I-8KE-MTCP and I-8KE-MTCP. IT LANZ is broken, it will switch to LAN1 automatic continuously work. (LAN1 & LAN2's IP are requested set in the same IP domain.) Renet I/O Max. 8 pcs. I=8172W boards in sixt 0 ~ 7 to connect to FRinet I/O modules. Send Email Supports functions to send email with one attached file via Ethernet port. Ebus LANZ to exchange data between ISSGRAF Ethernet PAC via Ethernet port. SMS: Short Message Service LAN2 to exchange data between ISSGRAF Ethernet PAC via Ethernet port. WP-94x//9887× COM4/5 and VIP-81x7* COM1/LOMS can link to a CSM Modem to support SMS. User can request data/ the controller by cellular phone. The controller can also send data & alams to user's cellular phone. (*) UBP Server & UDP Client : | Modbus RTU Slave | | Max. 5 ports: COM1, one of COM2/3, COM4 ~ 8 (For connecting ISaGRAF, PC/HMI/OPC Server & HMI panels). (*) | | | | |
| Deep of COM2, COM3 supports 1700 J/O modules, 187K base + 187K Serial I/O boards and RU-87Pn + 1-87K High Probards as Remote I/O. M-7000 Series Modbus I/O M-7000 M-7000 Series Modbus I/O M-7000 Series Modbus I/O M-7000 M-7 | Modbus TCP/IP Slave | e | Ethernet LAN1 & LAN2 support total up to 32 connections. When one port is broken, the other one can still connect to PC/HMI. | | | | |
| Doards as Remote I/O Max. 10 RS-465 ports (COM1 ~ 14) can support M-7000 I/O. Each port can connect up to 32 M-7000 Modules. | Web HMI Protocol | | Ethernet Ports for connecting PC running Internet Explorer | | | | |
| CAN/CANopen CONTINUED CONTINUE | I-7000 & I-87K RS-4 | 85 Remote I/O | One of COM2, COM3 supports I-7000 I/O modules, I-87K base + I-87K Serial I/O boards and RU-87Pn + I-87K High Profile I/O boards as Remote I/O. Max. 255 modules for one controller. (*) | | | | |
| PROBLEM TOP JO Continuously work. (LANI & LANZ's IP are requested set in the same IP domain) Finet I/O Max. 8 pcs. I-8172W boards in slot 0 ~ 7 to connect to Finet I/O modules Send Email Supports functions to send email with one attached file via Ethernet port. LANZ to exchange data between ISaGRAF Ethernet PAC via Ethernet port. WP-84x7/88x7's COMI/COMS can link to a GSM Modern to support SMS. User can request data/ the controller by cellular phone. The controller can also send data & alarms to user's cellular phone. (*) USer-Defined Protocol COM1 ~ COM14 by Serial communication function blocks (*) MMICON/LCD COM4 or COM5 and supports ICP DAS's MMICON. (*) UDP Server & UDP Client: Exchange Message & Auto-Report LANI or LANZ (To send/receive message to/from PC/HMI or other devices.) Exchange Message & Auto-Report LANI or LANZ (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Ex: automatically report data to InduSoft's RXTX driver, or to connect a location camera. This redundant system has setup two "Active IP" address point to the actual LANI and LANZ ports always. One or mc HMI/SCADA can communicate with this redundant system via one of the two given active IP. So the PC/HMI/SCADA can to the system easily without any notice about which WP-8xx7 is currently active. MONION CAN/CANopen CAN/CANopen COM1, COM3 ~ COM14 can connect one 1-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and so one of the two given active IP. So the PC/HMI/SCADA can connect and controller content max. 10 1-7530. (*) PWM Output PWM Output PWM Output PO Module as PWM DO Modul | M-7000 Series Modbus I/O | | Max. 10 RS-485 ports (COM1 ~ 14) can support M-7000 I/O. Each port can connect up to 32 M-7000 Modules. | | | | |
| Send Email Supports functions to send email with one attached file via Ethernet port. LAN2 to exchange data between ISaGRAF Ethernet PAC via Ethernet port. WP-84x7/88x7's COM4/5 and WP-81x7's COM1/COM5 can link to a GSM Modem to support SMS. User can request data/ the controller by cellular phone. The controller can also send data & alarms to user's cellular phone. (*) User-Defined Protocol COM1 ~ COM14 by Serial communication function blocks (*) MMCON/LCD COM6 ~ COM5 and supports ICP DAS's MMICON. (*) UDP Server & UDP Client: Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices.) LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Ex: automatically report data to InduSoffs RXTX driver, or to connect a location camera. This redundant system has setup two "Active IP" address point to the active LAN1 and LAN2 ports always. One or me HMI/SCADA can communicate with this redundant system via one of the two given active IP. So the PC/HMI/SCADA can to the system easily without any notice about which WP-9xx7 is currently active. Moreover, the new redundant system can integrate with the RU-87P4/87P8 Expansion Unit plus the I-87K high-profile I/C to support the hot-swape papilication. If the I/O card is damaged, the maintenance person just takes one good-card with model number to hot-swape the admaged one without stopping this recurrently active. Moreover, the new redundant system can integrate with the RU-87P4/87P8 Expansion Unit plus the I-87K high-profile I/C to support the hot-swape papilication. If the I/O card is damaged, the maintenance person just takes one good-card with model number to hot-swape the admaged one without stopping this recurrently active. Moreover, the new redundant system. COM1, COM3 ~ COM14 can connect one I-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and so one WP-8xx7 surports max.10 RS-232 ports to connect max.10 I-7530. (*) Optional I/O Functions (Refer t | Modbus TCP/IP I/O | | LAN2 supports ICP DAS Ethernet I/O: I-8KE4-MTCP and I-8KE8-MTCP. If LAN2 is broken, it will switch to LAN1 automatically to continuously work. (LAN1 & LAN2's IP are requested set in the same IP domain) | | | | |
| Ebus | FRnet I/O | | Max. 8 pcs. I-8172W boards in slot 0 \sim 7 to connect to FRnet I/O modules | | | | |
| SMS: Short Message Service WP-84x7/88x7's COM4/5 and WP-81x7's COM1/COM5 can link to a GSM Modem to support SMS. User can request data/ the controller by cellular phone. The controller can also send data & alarms to user's cellular phone. (*) WB-84x7/88x7's COM4/5 and WP-81x7's COM1/COM5 can link to a GSM Modem to support SMS. User can request data/ the controller by cellular phone. The controller can also send data & alarms to user's cellular phone. (*) WB-84x7/88x7's COM4/5 and WP-81x7's COM1/COM5 can link to a GSM Modem to support SMS. User can request data/ the controller by cellular phone. (*) WB-84x7/88x7's COM4/5 and WP-81x7's COM1/COM5 can link to a GSM Modem to support SMS. User can request data/ the controller phone. (*) WB-84x7/88x7's COM4/5 and WP-81x7's COM1/COM5 can link to a GSM Modem to support SMS. User can leave the controller on all so all and a large and send data & alarms to user's cellular phone. (*) WB-COM1 can alarms to user's cellular phone. (*) USP Server & UDP Client: Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report This redundant system message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report This redundant system phone ph | Send Email | | Supports functions to send email with one attached file via Ethernet port. | | | | |
| the controller by cellular phone. The controller can also send data & alarms to user's cellular phone. (*) USer-Defined Protocol COM1 ~ COM14 by Serial communication function blocks (*) MMICON/LCD COM4 or COM5 and supports ICP DAS's MMICON. (*) UDP Server & UDP Client: Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices.) LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report This redundant system has setup two "Active IP" address point to the active LAN1 and LAN2 ports always. One or method to the server protocol.) Exchange Message & Auto-Report This redundant system setup or the devices which the Possage point to the active LAN1 and LAN2 ports always. One or method to the control of the Counter to the Counter in the Vision of the Message point to the active LAN1 and LAN2 ports always. One or method to the control of the Message point to the active LAN1 and LAN2 ports always. One or method to the counter in the Vision of the Message point to the active LAN1 and LAN2 ports always. One or method to the verice point and the Vision of the Message point to | Ebus | | LAN2 to exchange data between ISaGRAF Ethernet PAC via Ethernet port. | | | | |
| MMICON/LCD COM4 or COM5 and supports ICP DAS's MMICON. (*) UDP Server & UDP Client: Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices.) LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Ex: automatically report data to InduSoft's RXTX driver, or to connect a location camera. This redundant system has setup two "Active IP" address point to the active LAN1 and LAN2 ports always. One or mc HMI/SCADA can communicate with this redundant system via one of the two given active IP. So the PC/HMI/SCADA can to the system easily without which WP-8xo7 is currently active. Moreover, the new redundant system and integrate with the RU-87P4/87P8 Expansion Unit plus the I-87K high-profile I/C to support the hot-swap application. If the I/O card is damaged, the two given active IP. So the PC/HMI/SCADA can to the system easily without any notice about which WP-8xo7 is currently active. Moreover, the new redundant system can integrate with the RU-87P4/87P8 Expansion Unit plus the I-87K high-profile I/C to support the hot-swap application. If the I/O card is damaged, the two given active IP. So the PC/HMI/SCADA can to the system easily without within WP-8xo7 is currently active. CAN/CANopen COM1, COM3 ~ COM14 can connect one I-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and so one WP-8xo7 supports max.10 RS-232 ports to connect max.10 I-7530. (*) Optional I/O Functions (Refer to IsaGRAF PAC I/O Selection Guide for I/O Module list) High Speed PWM Module High Speed PWM Module 1-7088, I-8088W, I-87088W: 8-ch. PWM outputs, software support IHz~100KHz (non-continuous), duty: 0.1~99.9% 8-ch max. 250 Hz max. For Off=2 & On=2 ms. Output square wave: Off: 2~32766 ms. On: 2 ~ 32766 ms. Optional Do Boards: I-8037W, 8041W, 8041W, 8041W, 8042W, 8050W (Relay Output boards can not generate fast square wave controlled of the profile I/O profile I/O profile I/O profile I/O profile I/O profile I/O profile I/ | SMS: Short Message | : Service | WP-84x7/88x7's COM4/5 and WP-81x7's COM1/COM5 can link to a GSM Modem to support SMS. User can request data/control the controller by cellular phone. The controller can also send data & alarms to user's cellular phone. (*) | | | | |
| UDP Server & UDP Client: Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Exchange Message & Auto-Report This redundant system has setup two "Active IP" address point to the active LAN1 and LAN2 ports always. One or me HMI/SCADA can communicate with this redundant system via one of the two given active IP. So the PC/HMI/SCADA can to the system easily without any notice about which WP-Bxx7 is currently active. Moreover, the new redundant system an integrate with the RU-87P4/87P8 Expansion Unit plus the 1-87K high-profile I/C to support the hot-swap application. If the I/O card is damaged, the maintenance person just takes one good-card with model number to hot-swap the damaged one without stopping this redundant system. CAN/CANopen COM1, COM3 ~ COM14 can connect one I-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and stone with the Individual system of the Individual system. Piligh Speed PWM Module High Speed PWM Module DO Module as PWM DO Module as PWM Parallel DI Counter Parallel DI Counter Parallel DI Counter Parallel DI Counter All I-7K/I-87K DI Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W. 8051W, 8053W, 8053W, 8053PW, 8054W, 8055W. Serial DI Counter All I-7K/I-87K DI Boards: I-87040W, 8046PW, 8048W, 8048W, 8050W, 8051W, 8053W, 8053W, 8053W, 8055W, 8055W, 8058W 250 Hz max. For Objection Builde for I/O Mill Piliph Report System Sy | User-Defined Protoco | ol | COM1 ~ COM14 by Serial communication function blocks (*) | | | | |
| Exchange Message & Auto-Report TCP Client: Exchange Message & Auto-Report LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Ex: automatically report data to InduSoft's RXTX driver, or to connect a location camera. This redundant system has setup two "Active IP" address point to the active LAN1 and LAN2 ports always. One or more than the provided of the two given active IP. So the PC/HMI/SCADA can communicate with this redundant system via one of the two given active IP. So the PC/HMI/SCADA can to the system easily without any notice about which WP-8xx7 is currently active. Moreover, the new redundant system can integrate with the RU-87P4/87P8 Expansion Unit plus the 1-87K high-profile I/C to support the hot-swap application. If the I/O card is amaged, the maintenance person just takes one good-card with model number to hot-swap the damaged one without stopping this redundant system. CAN/CANopen COM1, COM3 ~ COM14 can connect one I-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and so one WP-8xx7 supports max.10 RS-232 ports to connect max.10 I-7530. (*) Optional I/O Functions (Refer to ISaGRAF PAC I/O Selection Guide for I/O Module list) PWM Output High Speed PWM Module 1-7088, I-8088W, I-87088W: 8-ch. PWM outputs, software support IHz~100KHz (non-continuous), duty: 0.1~99.9% Optional DO Boards: I-8037W, 80-14W, 8042W, 8050W. (Relay Output boards can not generate fast square wave) Optional DI Boards: I-8040W, 8040PW, 8042W, 8050W. (Relay Output boards can not generate fast square wave) Serial DI Counter Counter, Encoder, Frequency Frequency All 1-7KI-87K DI Boards: I-8040W, 8040W, 8046W, 8048W, 8050W, 8051W, 8053W, 8053W, 8053W, 8055W, | MMICON/LCD | | COM4 or COM5 and supports ICP DAS's MMICON. (*) | | | | |
| Ex: automatically report data to InduSoft's RXTX driver, or to connect a location camera. This redundant system has setup two "Active IP" address point to the active LAN1 and LAN2 ports always. One or mot HMI/SCADA can communicate with this redundant system via one of the two given active IP. So the PC/HMI/SCADA can to the system easily without any notice about which WP-8xx7 is currently active. Moreover, the new redundant system can integrate with the RU-87P4/87P8 Expansion Unit plus the I-87K high-profile I/C to support the hot-swap application. If the I/O card is damaged, the maintenance person just takes one good-card with model number to hot-swap the damaged one without stopping this redundant system. CAN/CANopen COM1, COM3 ~ COM14 can connect one I-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and stone WP-8xx7 supports max.10 RS-232 ports to connect max.10 I-7530. (*) Optional I/O Functions (Refer to ISaGRAF PAC I/O Selection Guide for I/O Module list) PWM Output High Speed PWM Module I-7088, I-8088W; I-87088W: 8-ch. PWM outputs, software support 1Hz~100KHz (non-continuous), duty: 0.1~99.9% B-ch max. 250 Hz max. For Off=2 & On=2 ms. Output square wave: Off: 2~32766 ms, On: 2 ~ 32766 ms. Optional DO Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W (Relay Output boards can not generate fast square wave.) Serial DI Counter Serial DI Counter Serial DI Counter Counter, Encoder, Frequency All I-7K/I-87K DI modules support counters. 100 Hz max. Value: 0 ~ 65535 High Speed Counter High Speed Counter I-87082W: 100 kHz max.; I-8084W: 8-6 kHz max. I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency I-87082W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency I-87082W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B | | | LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices.) | | | | |
| HMI/SCADA can communicate with this redundant system via one of the two given active IP. So the PC/HMI/SCADA can to the system easily without any notice about which WP-8xx7 is currently active. Moreover, the new redundant system can integrate with the RU-87P4/87P8 Expansion Unit plus the I-87K high-profile I/C to support the hot-swap application. If the I/O card is damaged, the maintenance person just takes one good-card with model number to hot-swap the damaged one without stopping this redundant system. CAN/CANopen COM1, COM3 ~ COM14 can connect one I-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and stone WP-8xx7 supports max.10 RS-232 ports to connect max.10 I-7530. (*) Optional I/O Functions (Refer to ISaGRAF PAC I/O Selection Guide for I/O Module list) High Speed PWM Module PWM Output DO Module as PWM DO Module as PWM Parallel DI Counter Parallel DI Counter Counter, Encoder, Fequency Remote DI Counter Remote DI Counter All I-7K/I-87K DI Boards: I-8040W, 8042W, 8042W, 8045W, 8055W, 8051W, 8052W, 8053W, 8053PW, 8055W, 87058W. Counter input: 100 Hz max. Counter val: 32 bit. 250 Hz max. value: 0 ~ 65535 Remote DI Counter Counter input: 100 Hz max. Counter val: 32 bit. 250 Hz max. value: 0 ~ 65535 Remote DI Counter High Speed Counter I-87082W: 100 kHz max.; I-8084W: 250 kHz max. I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency Frequency Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | | & Auto-Report | | | | | |
| One WP-8xx7 supports max.10 RS-232 ports to connect max.10 I-7530. (*) Optional I/O Functions (Refer to ISaGRAF PAC I/O Selection Guide for I/O Module list) High Speed PWM Module I-7088, I-8088W, I-87088W: 8-ch. PWM outputs, software support 1Hz~100KHz (non-continuous), duty: 0.1~99.9% B-ch max. 250 Hz max. For Off=2 & On=2 ms. Output square wave: Off: 2~32766 ms, On: 2 ~ 32766 ms. Optional DO Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W (Relay Output boards can not generate fast square wave.) Parallel DI Counter 8 ch. max. for 1 controller. Counter val: 32 bit. 250 Hz max. Min. ON & OFF width must > 2 ms. Optional DI Boards: I-8040W, 8040PW, 8042W, 8048W, 8050W, 8051W, 8053W, 8053PW, 8053PW, 8055W. Serial DI Counter input: 100 Hz max. Counter value: 0 ~ 65535 (16 bit) Optional Serial I-87K DI Boards: I-87040W, 87046W, 87051W, 87052W, 87053W, 87053W-A5, 87054W, 87055W, 87058W (Prequency I-87082W: 100 kHz max.; I-8084W: 250 kHz max. Encoder I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | New Hot-Swap and F | Redundant System | Moreover, the new redundant system can integrate with the RU-87P4/87P8 Expansion Unit plus the I-87K high-profile I/O cards to support the hot-swap application. If the I/O card is damaged, the maintenance person just takes one good-card with same | | | | |
| High Speed PWM Module I-7088, I-87088W: 8-ch. PWM outputs, software support 1Hz~100KHz (non-continuous), duty: 0.1~99.9% 8-ch max. 250 Hz max. For Off=2 & On=2 ms. Output square wave: Off: 2~32766 ms, On: 2 ~ 32766 ms. Optional DO Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W (Relay Output boards can not generate fast square wave) Parallel DI Counter 8 ch. max. for 1 controller. Counter val: 32 bit. 250 Hz max. Min. ON & OFF width must > 2 ms. Optional DI Boards: I-8040W, 8040PW, 8042W, 8046W, 8048W, 8050W, 8051W, 8052W, 8053W, 8053PW, 8053PW, 8053W, 8055W. Counter input: 100 Hz max. Counter value: 0 ~ 65535 (16 bit) Optional Serial I-87K DI Boards: I-87040W, 87046W, 87051W, 87052W, 87053W, 87053W-A5, 87054W, 87055W, 87058W. Remote DI Counter All I-7K/I-87K DI modules support counters. 100 Hz max. value: 0 ~ 65535 High Speed Counter I-87082W: 100 kHz max.; I-8084W: 250 kHz max. I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | CAN/CANopen | | COM1, COM3 ~ COM14 can connect one I-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and sensors. One WP-8xx7 supports max.10 RS-232 ports to connect max.10 I-7530. (*) | | | | |
| PWM Output DO Module as PWM 8-ch max. 250 Hz max. For Off=2 & On=2 ms. Output square wave: Off: 2~32766 ms, On: 2 ~ 32766 ms. Optional DO Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W (Relay Output boards can not generate fast square wave) Parallel DI Counter 8 ch. max. for 1 controller. Counter val: 32 bit. 250 Hz max. Min. ON & OFF width must > 2 ms. Optional DI Boards: I-8040W, 8040PW, 8042W, 8046W, 8050W, 8051W, 8052W, 8053W, 8053PW, 8053W, 8053PW, 8055W. Serial DI Counter Counter input: 100 Hz max. Counter value: 0 ~ 65535 (16 bit) Optional Serial I-87K DI Boards: I-87040W, 87046W, 87051W, 87052W, 87053W, 87053W-A5, 87054W, 87055W, 87058W Remote DI Counter All I-7K/I-87K DI modules support counters. 100 Hz max. value: 0 ~ 65535 High Speed Counter I-87082W: 100 kHz max.; I-8084W: 250 kHz max. I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | Optional I/O Functio | ns (Refer to ISaGRAF PAC | I/O Selection Guide for I/O Module list) | | | | |
| DO Module as PWM Optional DO Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W (Relay Output boards can not generate fast square way generate fast s | | High Speed PWM Module | I-7088, I-8088W, I-87088W: 8-ch. PWM outputs, software support 1Hz~100KHz (non-continuous), duty: 0.1~99.9% | | | | |
| Parallel DI Counter Optional DI Boards: I-8040W, 8042PW, 8046W, 8048W, 8050W, 8051W, 8052W, 8053W, 8053PW, 8054W, 8055W. Serial DI Counter Counter input: 100 Hz max. Counter value: 0 ~ 65535 (16 bit) Optional Serial I-87K DI Boards: I-87040W, 87046W, 87051W, 87052W, 87053W, 87053W-A5, 87054W, 87055W, 87058W. Remote DI Counter All I-7K/I-87K DI modules support counters. 100 Hz max. value: 0 ~ 65535 High Speed Counter I-87082W: 100 kHz max.; I-8084W: 250 kHz max. I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | PWM Output | DO Module as PWM | 8-ch max. 250 Hz max. For Off=2 & On=2 ms. Output square wave: Off: 2~32766 ms, On: 2 ~ 32766 ms. Optional DO Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W (Relay Output boards can not generate fast square wave) | | | | |
| Counter, Encoder, Frequency Remote DI Counter High Speed Counter Encoder Frequency Motion Optional Serial I-87K DI Boards: I-87040W, 87046W, 87051W, 87052W, 87053W, 87053W-A5, 87054W, 87055W, 87058W. Remote DI Counter All I-7K/I-87K DI modules support counters. 100 Hz max. value: 0 ~ 65535 High Speed Counter I-87082W: 100 kHz max.; I-8084W: 250 kHz max. I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | | Parallel DI Counter | 8 ch. max. for 1 controller. Counter val: 32 bit. 250 Hz max. Min. ON & OFF width must > 2 ms. Optional DI Boards: I-8040W, 8042PW, 8042W, 8046W, 8048W, 8050W, 8051W, 8052W, 8053PW, 8054W, 8055W | | | | |
| Frequency Remote DI Counter All 1-7k/1-87k DI modules support counters: 100 Hz max. value: 0 ~ 65535 High Speed Counter I-87082W: 100 kHz max.; I-8084W: 250 kHz max. I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | | Serial DI Counter | Counter input: 100 Hz max. Counter value: 0 ~ 65535 (16 bit) Optional Serial I-87K DI Boards: I-87040W, 87046W, 87051W, 87052W, 87053W, 87053W-A5, 87054W, 87055W, 87058W | | | | |
| High Speed Counter I-87082W: 100 kHz max.; I-8084W: 250 kHz max. I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z- Frequency I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | | Remote DI Counter | All I-7K/I-87K DI modules support counters. 100 Hz max. value: 0 ~ 65535 | | | | |
| Encoder I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-Frequency I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz | . requeriey | High Speed Counter | I-87082W: 100 kHz max.; I-8084W: 250 kHz max. | | | | |
| Motion Motion Control With one I-8091W (2-axis) or two I-8091W (4-axis) | | Encoder | I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input mode. I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-index. | | | | |
| | | Frequency | I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz | | | | |
| *Note: COM5 - COM4 are resided at the expansion heards if they are plugged on slot0 - 7 of MD 9xx7 | Motion | Motion Control | With one I-8091W (2-axis) or two I-8091W (4-axis) | | | | |
| Note: Comp - Compa are resided at the expansion boards if they are plugged on slotto-7 of WP-oxx7. | *Note: COM5 ~ Co | OM14 are resided at the | expansion boards if they are plugged on slot0~7 of WP-8xx7. | | | | |

Appearance

WP-883



WP-8847



Pin Assignments

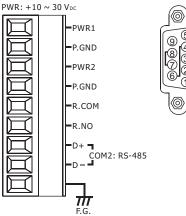
Terminal Block

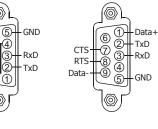
WP-81x7 PWR: +10 ~ 30 Vpc D- COM2: RS-485 D+ COM1: RS-232 TxD R.NO R.COM P.GND PWR2 PROND

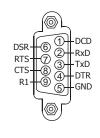
-PWR1

/// F.G.

WP-84x7/88x7 COM Port ----WP-84x1/88x7 COM1: RS-232 COM3: RS-232/RS-485

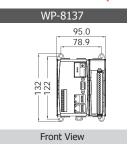


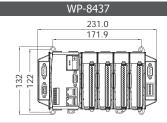




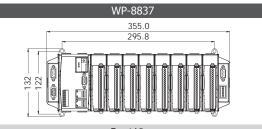
COM4: RS-232

Dimensions (Units: mm).



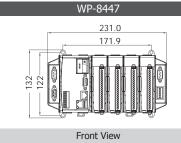


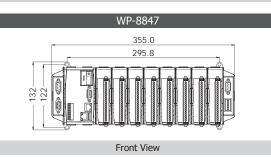
Front View

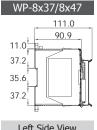


Front View





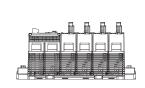




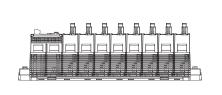
Left Side View



Bottom View



Bottom View

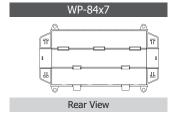


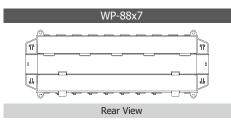
WP-88x7

Bottom View









Ordering Information

| WP-8137-EN | WP-8147-EN | ISaGRAF based WinPAC-8000 with 1 I/O Slot (Multilanguage Version of OS) |
|------------|------------|--|
| WP-8437-EN | WP-8447-EN | ISaGRAF based WinPAC-8000 with 4 I/O Slots (Multilanguage Version of OS) |
| WP-8837-EN | WP-8847-EN | ISaGRAF based WinPAC-8000 with 8 I/O Slots (Multilanguage Version of OS) |
| | | |
| WP-8137-TC | WP-8147-TC | ISaGRAF based WinPAC-8000 with 1 I/O Slot (Traditional Chinese Version of OS) |
| WP-8437-TC | WP-8447-TC | ISaGRAF based WinPAC-8000 with 4 I/O Slots (Traditional Chinese Version of OS) |
| WP-8837-TC | WP-8847-TC | ISaGRAF based WinPAC-8000 with 8 I/O Slots (Traditional Chinese Version of OS) |
| | | |
| WP-8137-SC | WP-8147-SC | ISAGRAF based WinPAC-8000 with 1 I/O Slot (Simplified Chinese Version of OS) |
| WP-8437-SC | WP-8447-SC | ISaGRAF based WinPAC-8000 with 4 I/O Slots (Simplified Chinese Version of OS) |
| WP-8837-SC | WP-8847-SC | ISaGRAF based WinPAC-8000 with 8 I/O Slots (Simplified Chinese Version of OS) |

Accessories

| ISaGRAF Develo | ISaGRAF Development Software | | |
|----------------|---|--|--|
| ISaGRAF-256-E | ISaGRAF Workbench Software Ver.3 (256 I/O Tags) with One Application Book (English version) and one USB Dongle | | |
| ISaGRAF-256-C | ISaGRAF Workbench Software Ver.3 (256 I/O Tags) with One Application Book (Chinese version) and one USB Dongle | | |
| ISaGRAF-32-E | ISaGRAF Workbench Software Ver.3 (32 I/O Tags) with One Application Book (English version) Note: No upgrade service from ISaGRAF-32 to ISaGRAF-256. (Using ISaGRAF-32 can control more than 32 I/O tags. Please refer to ISaGRAF User's Manual Ch. 3.4) | | |
| ISaGRAF-32-C | ISaGRAF Workbench Software Ver.3 (32 I/O Tags) with One Application Book (Chinese version) Note: No upgrade service from ISaGRAF-32 to ISaGRAF-256. (Using ISaGRAF-32 can control more than 32 I/O tags. Please refer to ISaGRAF User's Manual Ch. 3.4) | | |
| Power Supply | | | |
| DP-660 | 24 Vbc/2.5 A, 60 W and 5 Vbc/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting | | |
| DP-1200 CR | 24 Vpc/5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS) | | |
| MDR-60-24 CR | 24 Voc/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) | | |







Available WP-8057

Available WP-8357



Available WP-8757

Introduction -

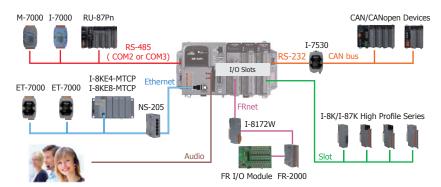
WP-8x57 Series is the new generation ISaGRAF based PACs of ICP DAS. It is equipped with a PXA270 CPU (520 MHz), various connectivity (VGA, USB, Ethernet, RS-232/485) and 0/3/7 I/O slots for high performance parallel I/O modules (high profile I-8K Series) and serial I/O modules (high profile I-87K series). The benefits of running Windows CE 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 ISaGRAF and 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.

ISaGRAF is the most powerful SoftLogic package on the market. ISaGRAF is a PLC-like software and it supports IEC 61131-3 standard PLC programming languages (LD, FBD, SFC, ST, IL, FC), and can run the application generated by the workbench on any ISaGRAF PACs. The ISaGRAF workbench Ver. 3.x features

- IEC 61131-3 Standard Open PLC Programming Languages (LD, FBD, SFC, ST, IL, FC) + Flow Chart (FC)
- Auto-Scan I/O
- On-Line Debug/Control/Monitor, Off-Line Simulation
- Simple Graphic HMI
- Support eLogger HMI

Applications _

Rich I/O Expansion Ability -----



Highlight Information

- Windows CE 5.0
- Hard Real-Time Capability
- Fast Boot Speed
- ISaGRAF Ver.3 SoftLogic Inside (IEC 61131-3)
- PLC Feel
- PXA270 CPU (32-bit & 520 MHz)
- Audio with Microphone-In and Earphone-Out
- VGA Port Output
- Simple graphic HMI
- Support eLogger HMI
- Open System
- Redundant Power Input
- Operating Temperature: -25 ~ +75 °C







Features

Software

- Windows CE.NET 5.0 Operating System
- Development Softwre: ISaGRAF Ver.3
 - $\ \square$ Windows 95/98/NT/2000/XP/Vista/7
 - ☐ All-in-one design environment
- $\hfill\Box$ Easy to integrating with HMI/SCADA/MMI
- Support Modbus Master & Slave Protocols
 - ☐ Modbus TCP Master (Max. 100 devices)
- ☐ Modbus RTU, ASCII, RS-232/485/422 Master (Max. 10 ports)
- ☐ Modbus RTU (RS-232/485/422) Slave (Max. 5 ports)
- $\hfill\square$ Modbus TCP/IP Slave (Max. 32 connections)
- Support GPS/ZigBee/Radio Wireless & SMS
- Support Ebus/Fbus Data Exchange
- Support CAN/CANopen
- Support FRnet I/O (Via I-8172W)
- Support Data-Recorder & Data-Logger
- Support Motion Control & VW Solutions
- Support eLogger HMI

Hardware

- Powerful CPU Module
- Built-in VGA Port: 640 x 480 ~ 1024 x 768
- 64-bit Hardware Serial Number
- Audio with Microphone-In and Earphone-Out
- Rich I/O Expansion Ability
- High Profile I-87K I/O Modules Hot Swap Ability
- Built-in 2 USB Ports
- Built-in 128 MB Flash
- Dual Watchdog Timers
- Dual Battery-Backup SRAM (512 KB)
- Dual Ethernet Ports
- Redundant Power Input
- DIN-Rail or Wall Mounting
- Operating Temperature: -25 ~ +75 °C

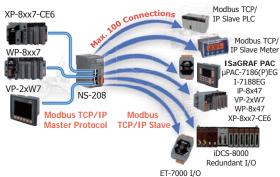
Soft-GRAF: Create A Colorful HMI in the ISaGRAF PAC



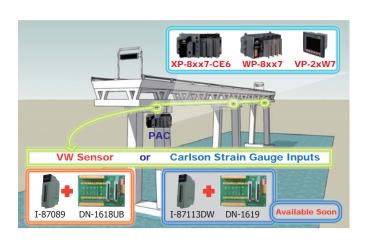
Modbus Master Ports

Modbus RTU/ASCII Master WP-8447/8847 Modbus Device M-7000 Modules RS-485

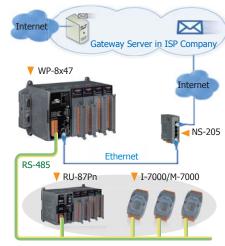
Modbus TCP/IP Master



Stress Monitoring of Constructions



Send Email with one Attached File

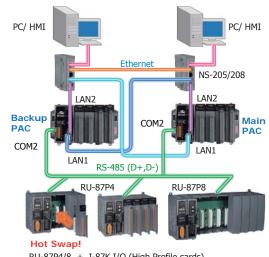


Remote I/O Modules

Modbus RTU/TCP Slave Ports



New Hot-Swap Redundant System ------





PAC Specifications -

| Models | | WP-8057 | WP-8357 | WP-8757 | | | |
|---------------|---------------------------|---|--|---|--|--|--|
| System Softw | vare | | 6557 | 6757 | | | |
| OS OS | idic | Windows CE 5.0 | | | | | |
| .Net Compac | t Framework | 2.0 | | | | | |
| Embedded Se | | FTP server, Web server | | | | | |
| Multilanguage | | | talian, Simplified Chinese, Traditional Chinese | | | | |
| Development | | English, German, French, Spanish, Russian, 1 | talian, Simplined Chinese, Traditional Chinese | | | | |
| Development | ISaGRAF Ver.3 | IEC 61131-3 standard. | | | | | |
| | | LD, ST, FBD, SFC, IL & FC | | | | | |
| ISaGRAF | Languages Max. Code Size | 1 MB | | | | | |
| Software | | 3 ~ 15 ms for normal program | | | | | |
| | Scan Time | 15 ~ 50 ms for complex or large program | | | | | |
| Non-ISaGRAF | | Options: MS eVC++ 4.0 or VS.NET 2005/200 | 8 (VB.NET, C#.NET) | | | | |
| Web Service | | | | | | | |
| Web HMI | | PC running Internet Explorer can monitor/con | ntrol PAC via Internet/modem | | | | |
| Security | | Support three levels username and password | protection. (high/middle/low) | | | | |
| 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 while power of | off) | | | | |
| | Total size | 128 MB | | | | | |
| Flash | OS image | 64 MB | | | | | |
| 110011 | Built-in Flash disk | 63 MB | | | | | |
| | Registry | 1 MB | | | | | |
| EEPROM | | 16 KB | | | | | |
| | | Data Retention: 40 years; 1,000,000 erase/w | rite cycles | | | | |
| Compact Flas | sh | 4 GB CF card (support up to 32 GB) | | | | | |
| RTC (Real Tir | me Clock) | Provide second, minute, hour, date, day of w | eek, month, year | | | | |
| 64-bit Hardw | are Serial Number | Yes, for Software Copy Protection | | | | | |
| Dual Watchdo | og Timers | Yes | | | | | |
| Programmab | e LED Indicator | 1 | | | | | |
| Rotary Switch | 1 | Yes (0 ~ 9) | | | | | |
| DIP Switch | | - Yes (8 bits) | | | | | |
| Audio | | Microphone-In and Earphone-Out | | | | | |
| VGA & Comm | nunication Ports | _ | | | | | |
| VGA | Extra GPU | Yes | | | | | |
| | Resolution | 1024 x 768, 800 x 600, 640 x 480 | | | | | |
| Ethernet | | RJ-45 x 2, 10/100 Base-TX (Auto-negotiating | , LED indicators) | | | | |
| USB 1.1 (hos | <u> </u> | 2 | 1 | | | | |
| USB 1.1 (clie | nt) | - | 1 | | | | |
| COM 0 | | Internal communication with the high profile I-87K series modules in slots DS 232 (to undate firmware) (Purp. Tr.D. and CND), page included. | | | | | |
| COM 1 | | RS-232 (to update firmware) (RxD, TxD and GND); non-isolated | | | | | |
| COM 2 | | RS-485 (D2+, D2-); 3000 Vpc isolated | | | | | |
| COM 3 | | RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated | | | | | |
| COM 4 | | RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, | | | | | |
| COM 5 | GL I | RS-232 (RxD, TxD, and GND); non-isolated - | | | | | |
| I/O Expansio | n Slots | | | | | | |
| Slot Number | | 0 | 3 | 7 | | | |
| | | (For High Profile I-8K and I-87K Modules Only) | | | | | |
| | Vill be available | For High Profile I-87K Modules Only | | | | | |
| Mechanical | NA 1 115 | 427 422 444 | 224 422 444 | 255 422 444 | | | |
| Dimensions (| W x L x H) | 137 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-KAII OF WAII MOUNTING | DIN-Rail or Wall Mounting | | | | |
| Environmenta | | 25 . 75 00 | | | | | |
| Operating Te | | -25 ~ +75 °C | | | | | |
| Storage Temp | | -30 ~ +80 °C | | | | | |
| | tive Humidity | 10 ~ 90% RH (non-condensing) | | | | | |
| Power | | | | | | | |
| Input Range | | +10 ~ +30 Vpc | | | | | |
| Isolation | T ' | 1 kV | | | | | |
| Redundant Po | ower inputs | Yes, with one power relay (1 A @ 24 Vbc) for 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 | alarm 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 | 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 | | | |
| Consumption | | 7.3 W (0.3 A @ 24 Vpc) | 9.1 W (0.38 A @ 24 V _{DC}) | 9.6 W (0.4 A @ 24 V _{DC}) | | | |
| Consumption | | ((2 1 100) | (| (| | | |

■ ISaGRAF Specifications .



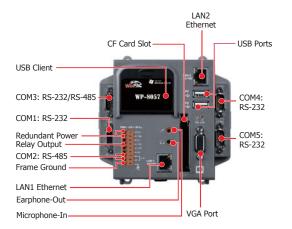
| Protocols (some protocols need optional devices) | | | | |
|--|--------------------------|---|--|--|
| NET ID | | 1~255, user-assigned by software | | |
| Modbus TCP/IP Mast | er | Link to max. 100 devices that support Standard Modbus TCP/IP Slave protocol | | |
| Modbus RTU/ASCII Master | | Max. 10 ports: COM1 ~ 14 (To connect to other Modbus Slave devices). Support Multi-ports. (*) | | |
| Modbus RTU Slave | | Max. 5 ports: COM1, one of COM2/3, COM4 ~ 8 (For connecting ISaGRAF, PC/HMI/OPC Server & HMI panels). (*) | | |
| Modbus TCP/IP Slave | 9 | Ethernet LAN1 & LAN2 support total up to 32 connections. When one port is broken, the other one can still connect to PC/HMI. | | |
| Web HMI Protocol | | Ethernet Ports for connecting PC running Internet Explorer | | |
| I-7000 & I-87K RS-4 | 85 Remote I/O | One of COM2, COM3 supports I-7000 I/O modules, I-87K base + I-87K Serial I/O boards and RU-87Pn + I-87K High Profile I/O boards as Remote I/O. Max. 255 modules for one controller. (*) | | |
| M-7000 Series Modb | us I/O | Max. 10 RS-485 ports (COM1 \sim 14) can support M-7000 I/O. Each port can connect up to 32 M-7000 Modules. | | |
| Modbus TCP/IP I/O | | LAN2 supports ICP DAS Ethernet I/O: I-8KE4-MTCP and I-8KE8-MTCP. If LAN2 is broken, it will switch to LAN1 automatically to continuously work. (LAN1 & LAN2's IP are requested set in the same IP domain) | | |
| FRnet I/O | | Max. 8 pcs. I-8172W boards in slot 0 ~ 7 to connect to FRnet I/O modules | | |
| Send Email | | Supports functions to send email with one attached file via Ethernet port. | | |
| Ebus | | LAN2 to exchange data between ISaGRAF Ethernet PAC via Ethernet port. | | |
| SMS: Short Message | Service | WP-84x7/88x7's COM4/5 and WP-81x7's COM1/COM5 can link to a GSM Modem to support SMS. User can request data/contro the controller by cellular phone. The controller can also send data & alarms to user's cellular phone. (*) | | |
| User-Defined Protoco | ol | COM1 ~ COM14 by Serial communication function blocks (*) | | |
| MMICON/LCD | | COM4 or COM5 and supports ICP DAS's MMICON. (*) | | |
| UDP Server & UDP C Exchange Message & | | LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices.) | | |
| TCP Client : Exchange Message & Auto-Report | | LAN1 or LAN2 (To send/receive message to/from PC/HMI or other devices which support TCP server protocol.) Ex: automatically report data to InduSoft's RXTX driver, or to connect a location camera. | | |
| New Hot-Swap and Redundant System | | This redundant system has setup two "Active IP" address point to the active LAN1 and LAN2 ports always. One or more PC/ HMI/SCADA can communicate with this redundant system via one of the two given active IP. So the PC/HMI/SCADA can access to the system easily without any notice about which WP-8xx7 is currently active. Moreover, the new redundant system can integrate with the RU-87P4/87P8 Expansion Unit plus the I-87K high-profile I/O cards to support the hot-swap application. If the I/O card is damaged, the maintenance person just takes one good-card with same model number to hot-swap the damaged one without stopping this redundant system. | | |
| CAN/CANopen | | COM1, COM3 ~ COM14 can connect one I-7530 (converter: RS-232 to CAN) to support CAN/CANopen devices and sensor One WP-8xx7 supports max.10 RS-232 ports to connect max.10 I-7530. (*) | | |
| Optional I/O Functio | ns (Refer to ISaGRAF PAC | I/O Selection Guide for I/O Module list) | | |
| | High Speed PWM Module | I-7088, I-8088W, I-87088W: 8-ch. PWM outputs, software support 1Hz~100KHz (non-continuous), duty: 0.1~99.9% | | |
| PWM Output | DO Module as PWM | 8-ch max. 250 Hz max. For Off=2 & On=2 ms. Output square wave: Off: 2~32766 ms, On: 2 ~ 32766 ms. Optional DO Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W (Relay Output boards can not generate fast square wave) | | |
| | Parallel DI Counter | 8 ch. max. for 1 controller. Counter val: 32 bit. 250 Hz max. Min. ON & OFF width must > 2 ms. Optional DI Boards: I-8040W, 8040PW, 8042W, 8046W, 8048W, 8050W, 8051W, 8052W, 8053W, 8053PW, 8054W, 8055W | | |
| | Serial DI Counter | Counter input: 100 Hz max. Counter value: 0 ~ 65535 (16 bit) Optional Serial I-87K DI Boards: I-87040W, 87046W, 87051W, 87052W, 87053W, 87053W-A5, 87054W, 87055W, 87058W | | |
| Counter, Encoder, Frequency | Remote DI Counter | All I-7K/I-87K DI modules support counters. 100 Hz max. value: 0 ~ 65535 | | |
| requericy | High Speed Counter | I-87082W: 100 kHz max.; I-8084W: 250 kHz max. | | |
| | Encoder | I-8093W: 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input mode. I-8084W: 250 kHz max., 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), Not support Encoder Z-index. | | |
| | Frequency | I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz | | |
| Motion | Motion Control | With one I-8091W (2-axis) or two I-8091W (4-axis) | | |
| | OM14 are resided at the | expansion boards if they are plugged on slot0~7 of WP-8xx7. | | |

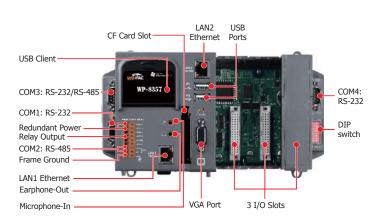


Appearance

WP-8057

WP-8357

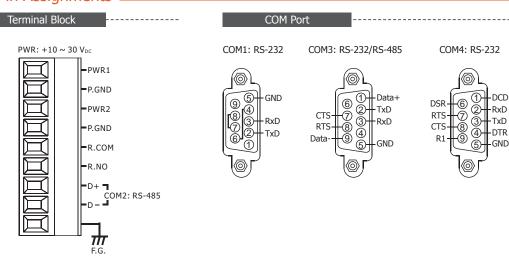




WP-8757

CF Card Slot -LAN2 USB Dual Battery Backup SRAM Ethernet Ports **USB** Client COM3: RS-232/RS-485 COM4: RS-232 COM1: RS-232 Redundant Power Relay Output — DIP switch COM2: RS-485 Frame Ground LAN1 Ethernet Earphone-Out 7 I/O Slots VGA Port Microphone-In

Pin Assignments



COM5: RS-232

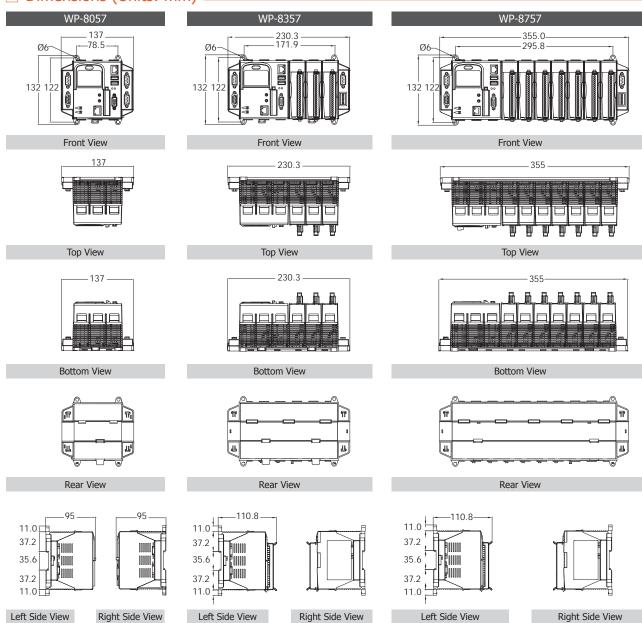
1000000

RxD

-TxD

WP-8057/8357/8757

Dimensions (Units: mm) .



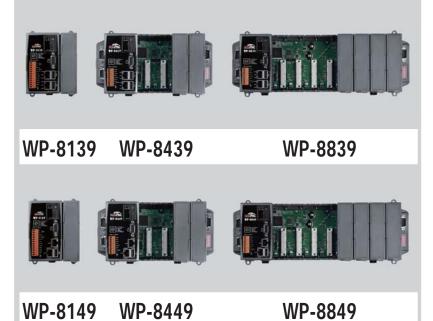
Ordering Information .

| WP-8057 | ISaGRAF based WinPAC-8000 without I/O Slot (Multilanguage Version of OS) |
|---------|--|
| WP-8357 | ISaGRAF based WinPAC-8000 with 3 I/O Slots (Multilanguage Version of OS) |
| WP-8757 | ISaGRAF based WinPAC-8000 with 7 I/O Slots (Multilanguage Version of OS) |

Accessories -

| ISaGRAF Develo | pment Software |
|----------------|---|
| ISaGRAF-256-E | ISaGRAF Workbench Software Ver.3 (256 I/O Tags) with One Application Book (English version) and one USB Dongle |
| ISaGRAF-256-C | ISaGRAF Workbench Software Ver.3 (256 I/O Tags) with One Application Book (Chinese version) and one USB Dongle |
| ISaGRAF-32-E | ISaGRAF Workbench Software Ver.3 (32 I/O Tags) with One Application Book (English version) Note: No upgrade service from ISaGRAF-32 to ISaGRAF-256. (Using ISaGRAF-32 can control more than 32 I/O tags. Please refer to ISaGRAF User's Manual Ch. 3.4) |
| ISaGRAF-32-C | ISaGRAF Workbench Software Ver.3 (32 I/O Tags) with One Application Book (Chinese version) Note: No upgrade service from ISaGRAF-32 to ISaGRAF-256. (Using ISaGRAF-32 can control more than 32 I/O tags. Please refer to ISaGRAF User's Manual Ch. 3.4) |
| Power Supply | |
| DP-660 | 24 Voc/2.5 A, 60 W and 5 Voc/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting |
| DP-1200 CR | 24 Voc/5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS) |
| MDR-60-24 CR | 24 V _{DC} /2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) |





Highlight Information

- Windows CE 5.0
- Hard Real-Time Capability
- Fast Boot Speed
- InduSoft Web Studio v6.1
- PXA270 CPU (32-bit & 520 MHz)
- VGA Port Output
- Open System
- Redundant Power Input
- Operating Temperature: -25 ~ +75 °C







Introduction .

WP-8x39 and WP-8x49 Series are the new generation InduSoft based PACs of ICP DAS. It is equipped with a PXA270 CPU (520 MHz), various connectivity (VGA, USB, Ethernet, RS-232/485) and $0/4/8\ \text{I/O}$ 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 InduSoft and 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.

InduSoft Web Studio is a powerful, integrated collection of automation tools that includes all the building blocks needed to develop modern Human Machine Interfaces (HMI), Supervisory Control and Data Acquisition (SCADA) systems, and ViewPAC applications. InduSoft Web Studio's application runs in native Windows NT, 2000, XP, CE and CE .NET environments and conforms to industry standards such as Microsoft .NET, OPC, DDE, ODBC, XML, and ActiveX.

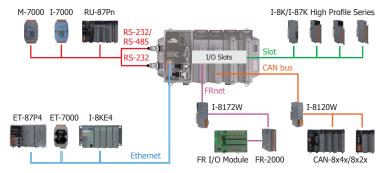
Software

Features

- 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

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 connectivety 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.



Hardware

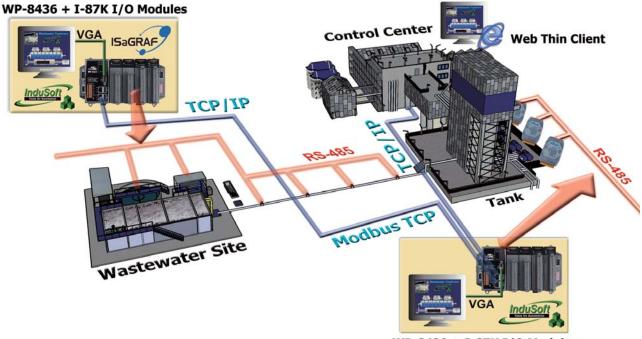
- Powerful CPU Module
- Built-in VGA Port with Extra GPU
- 64-bit Hardware Serial Number
- Rich I/O Expansion Ability
- I/O Module Hot Swap Ability

* Will be available

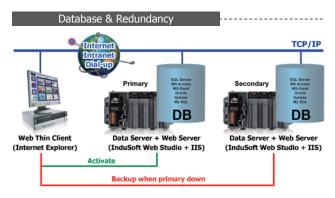
(For High Profile I-87K Modules Only)

- 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 Input
- DIN-Rail or Wall Mounting
- Operating Temperature: -25 ~ +75 °C

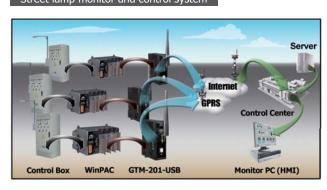
WP-8xx9 Total Solution



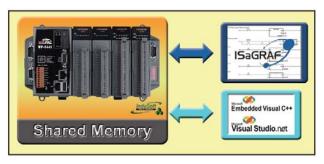
WP-8439 + I-87K I/O Modules

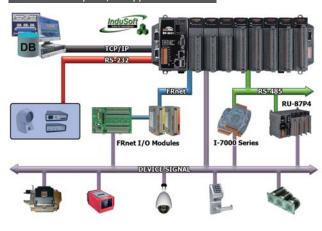


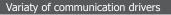
Street lamp monitor and control system

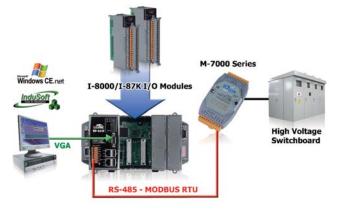


Share data with 3rd. party application











Specifications -

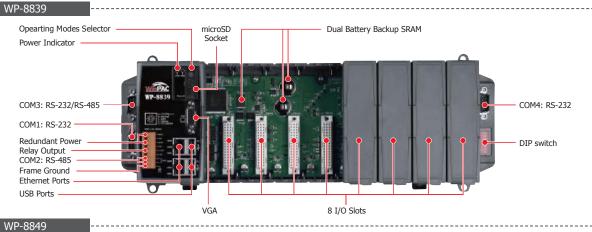
| Models | | WP-8139 | WP-8149 | WP-8439 | WP-8449 | WP-8839 | WP-8849 | | |
|---|---|--|---|---|---|--|---|--|--|
| | | WF-0139 | WF-0149 | WP*0439 | WF-0449 | WF-0039 | WF-6649 | | |
| System Software | | Mindows CF F 0 | | | | | | | |
| OS | | Windows CE 5.0 | | | | | | | |
| .Net Compact Framework | | 2.0 | | = | | | | | |
| Embedded Service | | | | AVA script), Embedded | - | | | | |
| Multilanguage Support | | English, German, Fre | English, German, French, Spanish, Russian, Italian, Simplified Chinese, Traditional Chinese | | | | | | |
| Development Software | | | | | | | | | |
| InduSoft Softv | vare | InduSoft Web Studio | v6.1 Service Pack 6 | | | | | | |
| Non-ISaGRAF | | Options: Microsoft EV | C++4.0 or VS .NET 200 | 05/2008 (VB .NET 2005/ | 2008, C# .NET 2005/20 | 008) | | | |
| Web Service | | | | | | | | | |
| Web HMI | | | | net Explorer can access | to the WP-8x39 via Loc | al Ethernet or Internet | or dial Modem, | | |
| | | monitoring and contro | | | | | | | |
| Security | | web HMI supports th | ree levels user name ar | ad password protection | | | | | |
| CPU Module | | | | | | | | | |
| CPU | | | e (32-bit and 520 MHz) | | | | | | |
| SDRAM | | 128 MB | | | | | | | |
| Dual Battery E | Backup SRAM | 512 KB (for 5 years d | ata retain while power | off) | | | | | |
| | Total size | 128 MB | 96 MB | 128 MB | 96 MB | 128 MB | 96 MB | | |
| Flash | OS image | 64 MB | | | | | | | |
| riasii | Built-in Flash disk | 63 MB | 31 MB | 63 MB | 31 MB | 63 MB | 31 MB | | |
| | Registry | 1 MB | | | | | | | |
| EEDS S. | | 16 KB | | | | | | | |
| EEPROM | | Data Retention: 40 ye | ears; 1,000,000 erase/w | rite cycles | | | | | |
| microSD | | | | (support up to 16 GB m | icroSDHC card) | | | | |
| RTC (Real Tim | ie Clock) | | te, hour, date, day of w | | , | | | | |
| · · · · · · · · · · · · · · · · · · · | re Serial Number | Yes, for Software Cop | | cory monery year | | | | | |
| Dual Watchdo | | Yes | y i rotection | | | | | | |
| | | 1 | | | | | | | |
| | e LED Indicator | | | | | | | | |
| Rotary Switch | | Yes (0 ~ 9) | | | | | | | |
| DIP Switch | | | | Yes (8 bits) | | | | | |
| LED, NET ID | | 1 programmable LED | 1 programmable LED indicator. NET ID: From 1 ~ 255, set by software | | | | | | |
| VGA & Commi | unication Ports | | I | 1 | I | ı | I | | |
| | Extra GPU | Yes | - | Yes | - | Yes | - | | |
| VGA | Danali dian | 1024 x 768, | 800 x 600, | 1024 x 768, | 800 x 600, | 1024 x 768, | 800 x 600, | | |
| | Resolution | 800 x 600, 640 x 480 | 640 x 480 | 800 x 600, 640 x 480 | 640 x 480 | 800 x 600, 640 x 480 | 640 x 480 | | |
| Ethernet | | | l se-TX (Auto-negotiating | | | 040 X 400 | | | |
| USB 1.1 (host | | | | | 1 | 2 | 1 | | |
| COM 0 | , | 2 1 2 1 2 1 Internal communication with the high profile L-97K perior modules in slots | | | | | | | |
| | | Internal communication with the high profile I-87K series modules in slots DS 222 (to undate firmways) (Purp. Typ and CND); paginglated | | | | | | | |
| COM 1 | | RS-232 (to update firmware) (RxD, TxD and GND); non-isolated | | | | | | | |
| CONT | B.C. 405 | | | D2+, D2-; self-tuner ASIC inside | | | | | |
| COM 1 | RS-485 | D2+, D2-; self-tuner | ASIC inside | T | | | | | |
| | RS-485 Isolation | | ASIC inside | 3000 Vpc | | | | | |
| | | D2+, D2-; self-tuner | ASIC inside | RS-232/RS-485 (RxD, | TxD, CTS, RTS and GN | D for RS-232, Data+ ar | d Data- for RS-485); | | |
| COM 2 | | D2+, D2-; self-tuner 2500 Vpc | ASIC inside | RS-232/RS-485 (RxD, non-isolated | | · | | | |
| COM 2 COM 3 COM 4 | Isolation | D2+, D2-; self-tuner 2500 Vpc | ASIC inside | RS-232/RS-485 (RxD, non-isolated | TxD, CTS, RTS and GN | · | | | |
| COM 2 | Isolation | D2+, D2-; self-tuner 2500 Vbc | ASIC inside | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT | | RI and GND); non-isola | | | |
| COM 2 COM 3 COM 4 | Isolation | D2+, D2-; self-tuner. 2500 Vbc - - | | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT | | · | | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number | Isolation Slots | D2+, D2-; self-tuner 2500 Vbc - - - (For High Profile I-8K | and I-87K Modules Onl | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT | | RI and GND); non-isola | | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W | Isolation | D2+, D2-; self-tuner. 2500 Vbc - - | and I-87K Modules Onl | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT | | RI and GND); non-isola | | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical | Isolation Slots fill be available | D2+, D2-; self-tuner 2500 Vbc (For High Profile I-8K For High Profile I-87K | and I-87K Modules Onl Modules Only | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W | Isolation Slots fill be available | D2+, D2-; self-tuner 2500 Vbc - - - (For High Profile I-8K | and I-87K Modules Onl Modules Only | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical | Isolation Slots fill be available | D2+, D2-; self-tuner 2500 Vbc (For High Profile I-8K For High Profile I-87K | and I-87K Modules Onl Modules Only 11 mm | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V | Isolation Slots fill be available V x L x H) | D2+, D2-; self-tuner. 2500 Voc (For High Profile I-8K For High Profile I-87K | and I-87K Modules Onl Modules Only 11 mm | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation | Isolation Slots fill be available V x L x H) | D2+, D2-; self-tuner. 2500 Voc (For High Profile I-8K For High Profile I-87K | and I-87K Modules Onl Modules Only 11 mm | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation Environmental | Isolation Slots fill be available V x L x H) | D2+, D2-; self-tuner. 2500 Voc (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Moul | and I-87K Modules Onl Modules Only 11 mm | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation Environmental Operating Ten | Isolation Slots V x L x H) Inperature erature | D2+, D2-; self-tuner. 2500 Vbc (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Moul | and I-87K Modules Onl Modules Only 11 mm nting | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp Ambient Relation | Isolation Slots V x L x H) Inperature erature | D2+, D2-; self-tuner. 2500 Vpc - - (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C | and I-87K Modules Onl Modules Only 11 mm nting | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp Ambient Relat Power | Isolation Slots V x L x H) Inperature erature | D2+, D2-; self-tuner 2500 Vbc - - (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-compare) | and I-87K Modules Onl Modules Only 11 mm nting | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp Ambient Relat Power Input Range | Isolation Slots V x L x H) Inperature erature | D2+, D2-; self-tuner. 2500 Vbc - - - (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-company) +10 ~ +30 Vbc | and I-87K Modules Onl Modules Only 11 mm nting | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp Ambient Relat Power Input Range Isolation | Isolation Slots V x L x H) Inperature erature ive Humidity | D2+, D2-; self-tuner. 2500 Vbc - - - (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-compared to the compared to t | and I-87K Modules Onl Modules Only 11 mm nting ondensing) | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 y) | rs, rts, dsr, dtr, cd, | RI and GND); non-isola | oted | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp Ambient Relat Power Input Range | Isolation Slots V x L x H) Inperature erature ive Humidity | D2+, D2-; self-tuner. 2500 Vbc (For High Profile I-8K For High Profile I-8K For High Profile I-8K ON High Profile I-8K 95 mm x 132 mm x 1 DIN-Rail or Wall Mount -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-company) +10 ~ +30 Vbc 1 kV Yes, with one power in the power | and I-87K Modules Onl Modules Only 11 mm Inting Indensing) Indensing (1 A @ 24 Voc) for PU and backplane, | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 4 y) 231 mm x 132 mm x alarm 1.1 A, 5 V supply to C | 111 mm | RI and GND); non-isola 8 355 mm x 132 mm x | 111 mm | | |
| COM 2 COM 3 COM 4 I/O Expansion Slot Number Hot Swap * W Mechanical Dimensions (V Installation Environmenta Operating Ten Storage Temp Ambient Relat Power Input Range Isolation | Isolation Slots V x L x H) Inperature erature ive Humidity | D2+, D2-; self-tuner. 2500 Voc (For High Profile I-8K For High Profile I-87K 95 mm x 132 mm x 1 DIN-Rail or Wall Moul -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-c) +10 ~ +30 Voc 1 kV Yes, with one power | and I-87K Modules Onl Modules Only 11 mm Inting Indensing) Indensing (1 A @ 24 Voc) for PU and backplane, | RS-232/RS-485 (RxD, non-isolated RS-232 (RxD, TxD, CT 4 y) 231 mm x 132 mm x | 111 mm PU and backplane, /O expansion slots, | RI and GND); non-isola 8 355 mm x 132 mm x | 111 mm PU and backplane, /O expansion slots, | | |

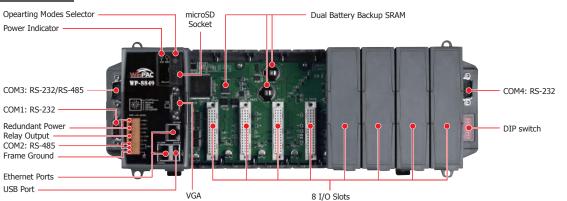
2-3-25

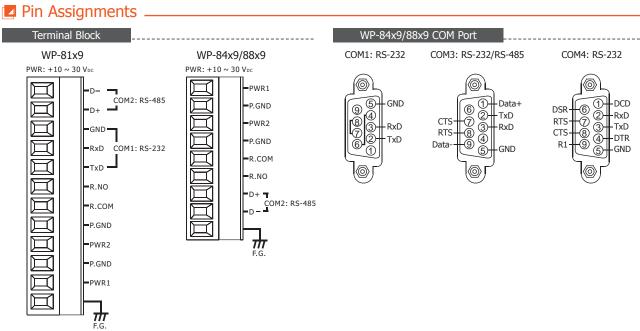
■ InduSoft Features

- 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 .

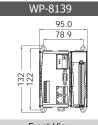




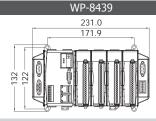




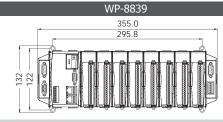
Dimensions (Units: mm)



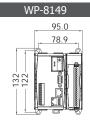
Front View



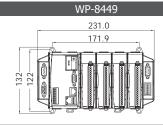
Front View



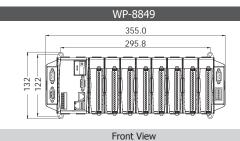
Front View

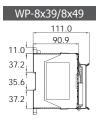


Front View



Front View



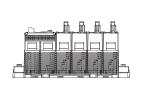


Left Side View



Bottom View

WP-81x9



WP-84x9

Bottom View



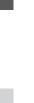
WP-88x9

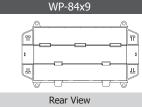
Bottom View

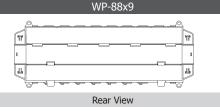










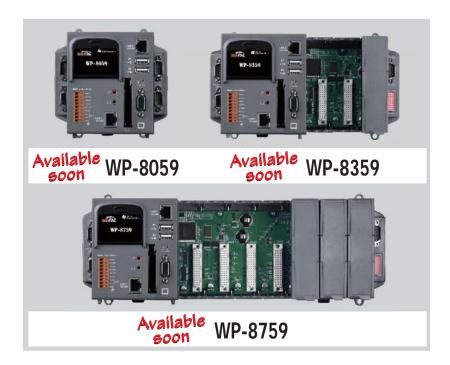


Ordering Information

| 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

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



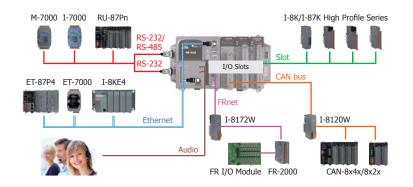
Introduction __

WP-8x59 Series is the new generation InduSoft based PACs of ICP DAS. It is equipped with a PXA270 CPU (520 MHz), various connectivity (VGA, USB, Ethernet, RS-232/485) and 0/3/7 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 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 InduSoft and 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.

InduSoft Web Studio is a powerful, integrated collection of automation tools that includes all the building blocks needed to develop modern Human Machine Interfaces (HMI), Supervisory Control and Data Acquisition (SCADA) systems, and ViewPAC applications. InduSoft Web Studio's application runs in native Windows NT, 2000, XP, CE and CE .NET environments and conforms to industry standards such as Microsoft .NET, OPC, DDE, ODBC, XML, and ActiveX.

Applications __

Rich I/O Expansion Ability



Highlight Information

- Windows CE 5.0
- Hard Real-Time Capability
- Fast Boot Speed
- InduSoft Web Studio v6.1
- PXA270 CPU (32-bit & 520 MHz)
- Audio with Microphone-In and Earphone-Out
- VGA Port Output
- Open System
- Redundant Power Input
- Operating Temperature: -25 ~ +75 °C







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

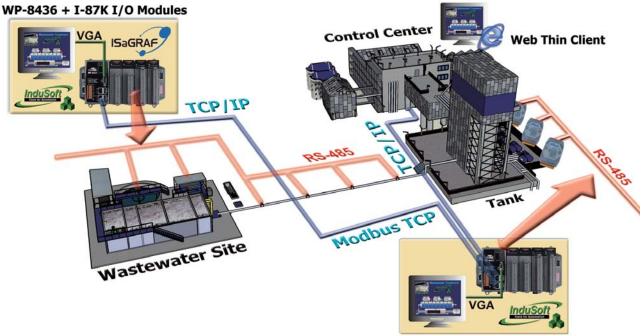
- Powerful CPU Module
- Built-in VGA Port with Extra GPU
- 64-bit Hardware Serial Number
- Audio with Microphone-In and Earphone-Out
- Rich I/O Expansion Ability
- I/O Module Hot Swap Ability
- * Will be available

(For High Profile I-87K Modules Only)

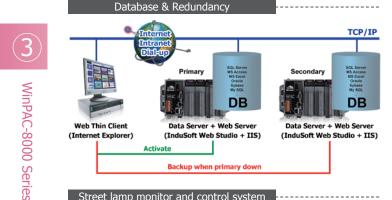
- Built-in 63 MB Flash Disk
- Dual Watchdog Timers
- Dual Battery Backup SRAM (512 KB)
- Dual Ethernet Ports
- Dual USB Ports
- Redundant Power Input
- DIN-Rail or Wall Mounting
- Operating Temperature: -25 ~ +75 °C



WP-8xx9 Total Solution

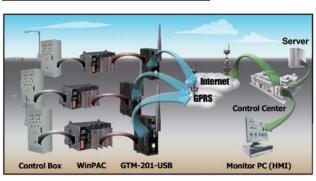


WP-8439 + I-87K I/O Modules

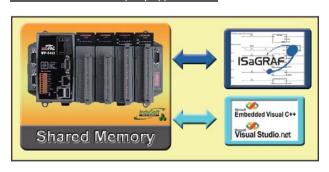


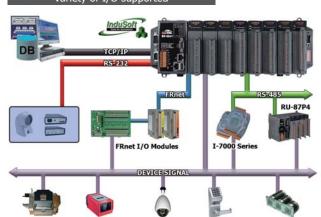
Backup when primary down

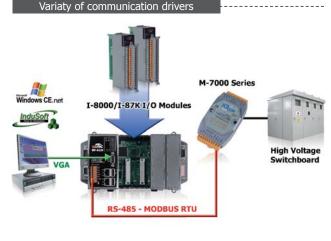
Street lamp monitor and control system



Share data with 3rd. party application







☑ Specifications _

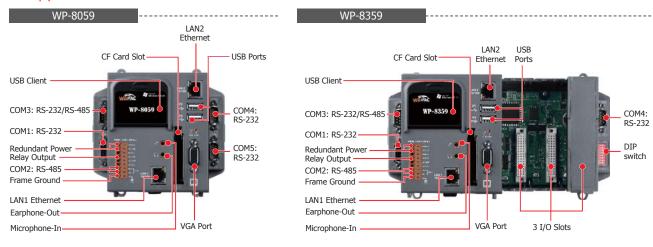
| Models | | WP-8059 | WP-8359 | WP-8759 | | |
|--|---|--|--|---|--|--|
| System Softw | vare | | | | | |
| OS | | Windows CE 5.0 | | | | |
| .Net Compact Framework | | 2.0 | | | | |
| Embedded Service | | FTP server, Web server (supports VB script, JAVA script), Embedded SQL server | | | | |
| Multilanguag | e Support | English, German, French, Spanish, Russian | , Italian, Simplified Chinese, Traditional Chinese | | | |
| Development | : Software | | | | | |
| InduSoft Soft | tware | InduSoft Web Studio v6.1 Service Pack 6 | | | | |
| Others | | Options: Microsoft EVC++4.0 or VS .NET 2 | 2005/2008 (VB .NET 2005/2008, C# .NET 2005/ | 2008) | | |
| Web Service | | | | | | |
| \A/= - | | Support Web HMI function, PC running Int | ernet Explorer can access to the WP-8x39 via Lo | ocal Ethernet or Internet or dial Modem, | | |
| Web HMI | | monitoring and control. | | | | |
| Security | | Web HMI supports three levels user name | and password protection | | | |
| CPU Module | | | | | | |
| CPU | | PXA270 or compatible (32-bit and 520 MH: | z) | | | |
| SDRAM | | 128 MB | | | | |
| Dual Battery | Backup SRAM | 512 KB (for 5 years data retain while power | er off) | | | |
| | Total size | 128 MB | | | | |
| | OS image | 64 MB | | | | |
| Flash | Built-in Flash disk | 63 MB | | | | |
| | Registry | 1 MB | | | | |
| | . tegioti j | 16 KB | | | | |
| EEPROM | | | /write cycles | | | |
| C | -1- | Data Retention: 40 years; 1,000,000 erase | /Write Cycles | | | |
| Compact Flas | | 4 GB CF card (support up to 32 GB) | | | | |
| RTC (Real Tir | • | Provide second, minute, hour, date, day of | week, month, year | | | |
| 64-bit Hardw | are Serial Number | Yes, for Software Copy Protection | | | | |
| Dual Watchdo | og Timers | Yes | | | | |
| Programmab | le LED Indicator | 1 | | | | |
| Rotary Switch | h | Yes (0 ~ 9) | | | | |
| DIP Switch | | - Yes (8 bits) | | | | |
| LED, NET ID | | 1 programmable LED indicator. NET ID: From | om 1 ~ 255, set by software | | | |
| Audio | | Microphone-In and Earphone-Out | | | | |
| VGA & Comm | nunication Ports | | | | | |
| Extra GPU | | Yes | | | | |
| VGA | Resolution | 1024 x 768, 800 x 600, 640 x 480 | | | | |
| Ethernet | | RJ-45 x 2, 10/100 Base-TX (Auto-negotiati | ng, LED indicators) | | | |
| USB 1.1 (hos | :t) | 2 | 3, | | | |
| USB 1.1 (clie | | - 1 | | | | |
| COM 0 | 111.) | Internal communication with the high profile I-87K series modules in slots | | | | |
| | | * - | | | | |
| COM 1 | | RS-232 (to update firmware) (RxD, TxD and GND); non-isolated | | | | |
| COM 2 | | RS-485 (D2+, D2-); 3000 Vpc isolated | | | | |
| COM 3 | | RS-232/RS-485 (RxD, TxD, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); non-isolated | | | | |
| COM 4 | | RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated | | | | |
| COM 5 | | RS-232 (RxD, TxD, and GND); non-isolated | i - | | | |
| I/O Expansio | n Slots | | | | | |
| Clot Number | | 0 | 3 | 7 | | |
| Slot Number | | (For High Profile I-8K and I-87K Modules C | Only) | | | |
| | Will be available | For High Profile I-87K Modules Only | | | | |
| Hot Swap * \ | | | | | | |
| | | | | | | |
| Mechanical | (W x L x H) | 137 mm x 132 mm x 111 mm | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (| (W x L x H) | 137 mm x 132 mm x 111 mm DIN-Rail or Wall Mounting | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation | , | | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation Environmenta | al | DIN-Rail or Wall Mounting | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation Environmenta Operating Te | al mperature | DIN-Rail or Wall Mounting | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation Environmenta Operating Te Storage Temp | al mperature perature | DIN-Rail or Wall Mounting -25 ~ +75 °C -30 ~ +80 °C | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation Environmenta Operating Te Storage Temp Ambient Rela | al mperature | DIN-Rail or Wall Mounting | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation Environmenta Operating Te Storage Temp Ambient Rela Power | al mperature perature | DIN-Rail or Wall Mounting -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-condensing) | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation Environmenta Operating Te Storage Temp Ambient Rela Power Input Range | al mperature perature | DIN-Rail or Wall Mounting -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-condensing) +10 ~ +30 Voc | 231 mm x 132 mm x 111 mm | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation Environmenta Operating Te Storage Temp Ambient Rela Power Input Range | al mperature perature | DIN-Rail or Wall Mounting -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-condensing) +10 ~ +30 Vbc 1 kV | | 355 mm x 132 mm x 111 mm | | |
| Mechanical Dimensions (Installation Environmenta Operating Te Storage Temp | al mperature perature stive Humidity | DIN-Rail or Wall Mounting -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-condensing) +10 ~ +30 Voc 1 kV Yes, with one power relay (1 A @ 24 Voc) | for alarm | | | |
| Mechanical Dimensions (Installation Environmenta Operating Te Storage Temp Ambient Rela Power Input Range Isolation | al mperature perature stive Humidity | DIN-Rail or Wall Mounting -25 ~ +75 °C -30 ~ +80 °C 10 ~ 90% RH (non-condensing) +10 ~ +30 Vbc 1 kV | | 355 mm x 132 mm x 111 mm 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 | | |



InduSoft Features

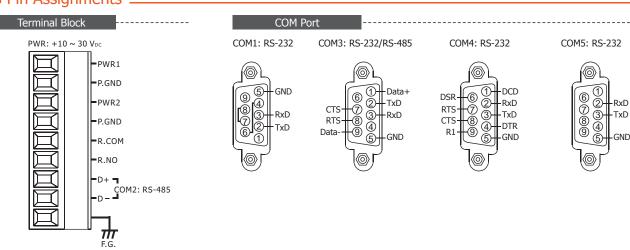
- Elegant Graphics
- Multi-Language
- Database (Access, Excel, SQL, Oracle...)
- Recipes and Reports
- Online and History Alarm / Event / Trend
- Various Communication Driver (DCON, Modbus, OPC, DDE, TCP/IP...)
- Remote Web Client Control & Security
- ActiveX (GSM / SHM / COM /WEB provided by ICP DAS)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

Appearance

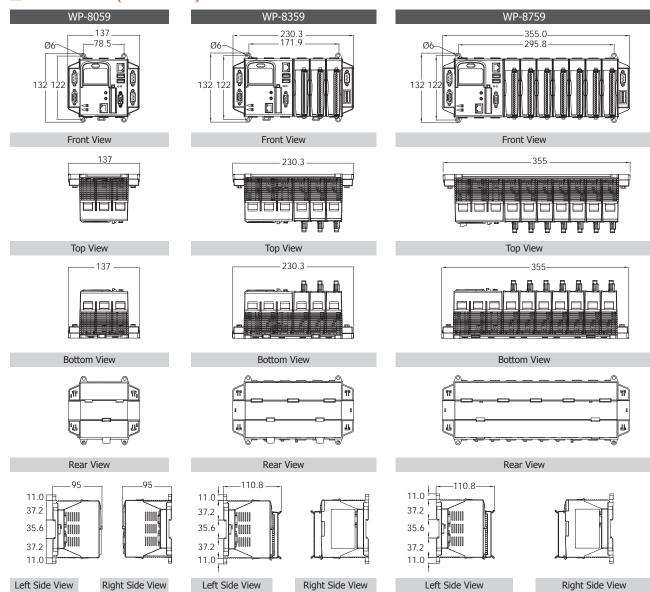


WP-8759 CF Card Slot LAN2 Dual Battery Backup SRAM USB Ethernet **USB** Client COM3: RS-232/RS-485 COM4: RS-232 COM1: RS-232 Redundant Power Relay Output — DIP switch COM2: RS-485 Frame Ground LAN1 Ethernet Earphone-Out VGA Port 7 I/O Slots Microphone-In

Pin Assignments



☑ Dimensions (Units: mm) -



Ordering Information -

| WP-8059 | InduSoft based WinPAC-8000 without I/O Slot (Multilanguage Version of OS) | |
|--|---|--|
| WP-8359 | InduSoft based WinPAC-8000 with 3 I/O Slots (Multilanguage Version of OS) | |
| WP-8759 | InduSoft based inPAC-8000 with 7 I/O Slots (Multilanguage 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 Voc/2.5 A, 60 W and 5 Voc/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting | |
| DP-1200 CR | 24 Vpc/5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS) | |
| MDR-60-24 CR | 24 Vpc/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) | |