

2008 New Products Highlight



Intelligent Remote I/O Unit

Palm Size PAC

Programmable Device Server

RS-485/RS232/Ethernet to ZigBee Converter

Industrial Ethernet Switch

- Building/Factory Automation
- ITS ■ Remote Monitoring
- Environment Monitoring





Intelligent Remote I/O Unit

RU-87Pn series

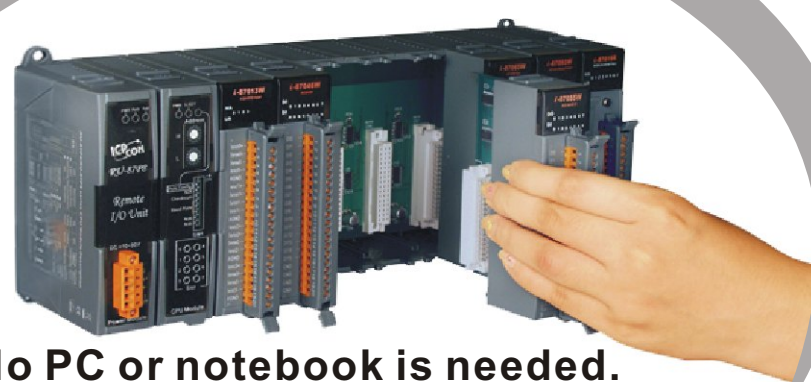
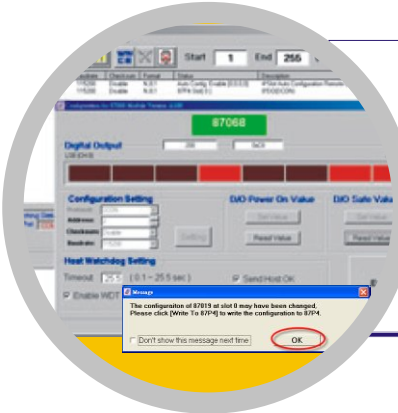
USB-87Pn series



Hot Swap, Auto-Configuration

Fully Software Support

DCON Utility, OPC server
EZ Data Logger, DLL,
ActiveX, Labview driver
Indusoft driver,
DasyLab driver,
Linux driver



No PC or notebook is needed.

If one i-87K module is damaged, the operator just need to get one good i-87K module with the same item number to replace the damaged one.



Easy Setting

The basic configurations (includes station number, baudrate) can easily be set by the rotary and DIP switch.



Support ICP DAS's high profile I/O modules

There are more than 30 kinds of high-profile i-87K I/O modules supported with the unit, including analog input/output, digital input/output, counter/frequency I/O modules.



Application:

- Building/Factory Automation
- ITS ■ Remote Monitoring
- Environment Monitoring

RU-87Pn / USB-87Pn series is a remote intelligent I/O expansion unit that used to expand I-87K series I/O modules over the RS-485 for industrial monitoring and controlling applications. RU-87Pn / USB-87Pn is designed to be used in harsh and noisy environment, so the hardware is manufactured with wide power input range (10~30VDC), isolated power and operating temperature (-25°C ~ +75°C). It simplifies installation and maintenance of I/O modules with hot swap and auto configuration, fault and error detection, dual watchdog, programmable power on and safe values.

Various software development kits (SDK) and demos are provided, such as DLL, ActiveX, Labview driver, Indusoft driver, Linux driver, OPC server, etc. The high profile I-87K series I/O modules plugged in the RU-87Pn / USB-87Pn can be easily integrated into variant software system.



RU-87P4 4 slots RS-485 I/O expansion unit

USB-87P4 4 slots USB I/O expansion unit



RU-87P8 8 slots RS-485 I/O expansion unit

USB-87P8 8 slots USB expansion unit

μPAC-7186-EGD 
ISaGRAF Embedded Controller

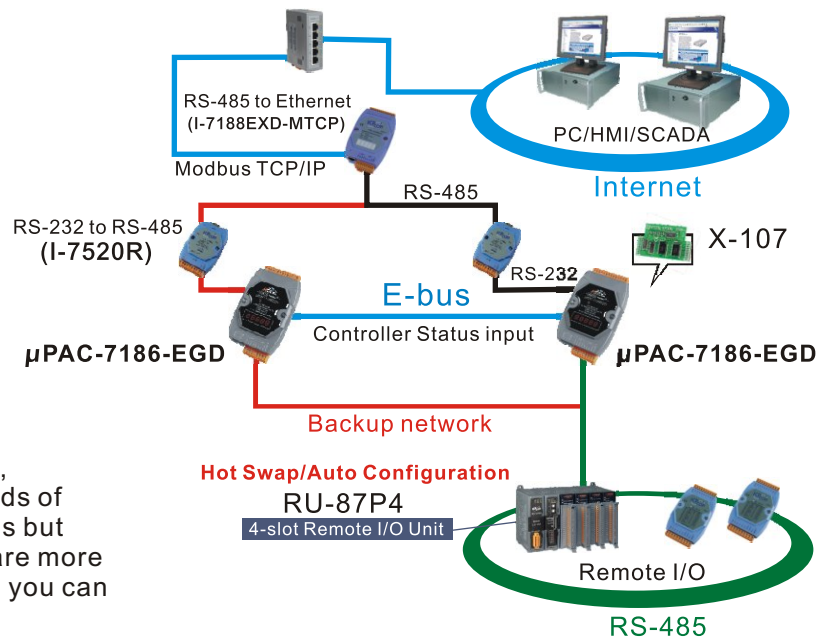


Do you want
Double Insurance
For your Equipment?

The μPAC-7186EX is a palm size programmable automation controller that with Ethernet, RS-232, RS-485 communication. ICPDAS provide easy-to-use software development tool kits (Xserver, VxComm, Modbus libraries). Users can use them to easily integrate serial devices to have Ethernet/Internet communication ability and through the standard Modbus protocol to communicate with SCADA software (Indusoft, ISaGRAF, DasyLab, Trace Mode, Citect, iFix, etc.).

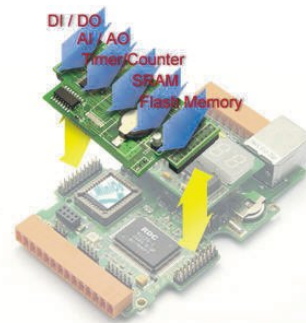
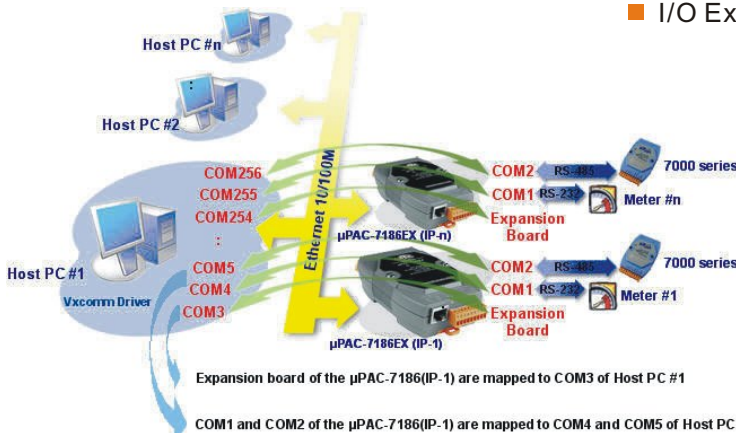
For the hardware, it also supports an I/O expansion bus. The I/O expansion bus can be used to implement various I/O functions such as D/I, D/O, A/D, D/A, Timer/Counter, UART, flash memory, battery backup SRAM, AsicKey & other I/O functions. Nearly all kinds of I/O functions can be implemented by this bus but the bus can support only one board. There are more than 30 boards available for μPAC-7186EX, you can one of them to expand hardware features.

Cost Effective Redundancy System



Features:

- Support Modbus Protocol
- Easy-to-use software development tool kits (using C language)
- Support for Virtual COM technology
- Ethernet Protocols (TCP, UDP, IP, ICMP, ARP)
- Support Web Configuration
- Remote Configuration/Maintenance
- Built-in watchdog timer (WDT)
- I/O Expansion Bus Interface





PDS-700 series

Programmable Device Server



Introduction

PDS-700 series is a palm-size form factor design for space critical environment. Compared to our I-7188EN, the performance of PDS-700 series is two times better.

PDS-700 equips one 10/100M Base TX Ethernet port for high bandwidth network communication and equips 1~8 serial ports for connecting devices. It can drive 4 serial ports in 115200bps or 8 serial ports at 19200bps with full-duplex communication simultaneously.

Virtual I/O

Some PDS-700 products provide several digital I/O lines. Users can use these digital I/O to control relay, actuator, switch... etc. The built-in firmware of PDS supports virtual I/O feature for accessing digital I/O lines.

VxComm Driver creates a special virtual COM port for those DI/DO lines. User's program can controls the DI/DO by DCON protocol through the virtual COM port. The user doesn't have to write any TCP/IP socket program for it. The virtual I/O technology provides the easiest way for controlling the PDS DI/DO lines.

Easy Configuration

The user can use Web Browser, telnet, serial console or ICP DAS utilities, such as 7188XW.exe, MiniOS7 Utility, to configuration the PDS.

Features

- Supports TCP, UDP, IP, ICMP, ARP.
- Easy configuration with Web, Telnet, Utilities, Console.
- Supports VxComm Driver for Windows NT 4.0
- Supports VxComm Driver for Windows 2K/XP/2003.
- Supports Virtual I/O
- Provides SDK and sample programs.
- Built-in MiniOS7 Operating System

Specifications

CPU	80186-80MHz
Ethernet	10/100M Base TX
SRAM/Flash	512KB/512KB
COM1	5-wire RS-232 (RXD, TXD, CTS, RTS, GND)
UART	16c550 or compatible
Baud rate	115200bps Max.
D/I	Sink, Common Ground, L: 0~1V, H: 3.5~30V
D/O	Open Collector, Sink/NPN, 30V/100mA Max.
Display	7-segment LED display for D version
Frame GND.	Yes.
Mounting	DIN-Rail Mounting

VxCOMM Technology

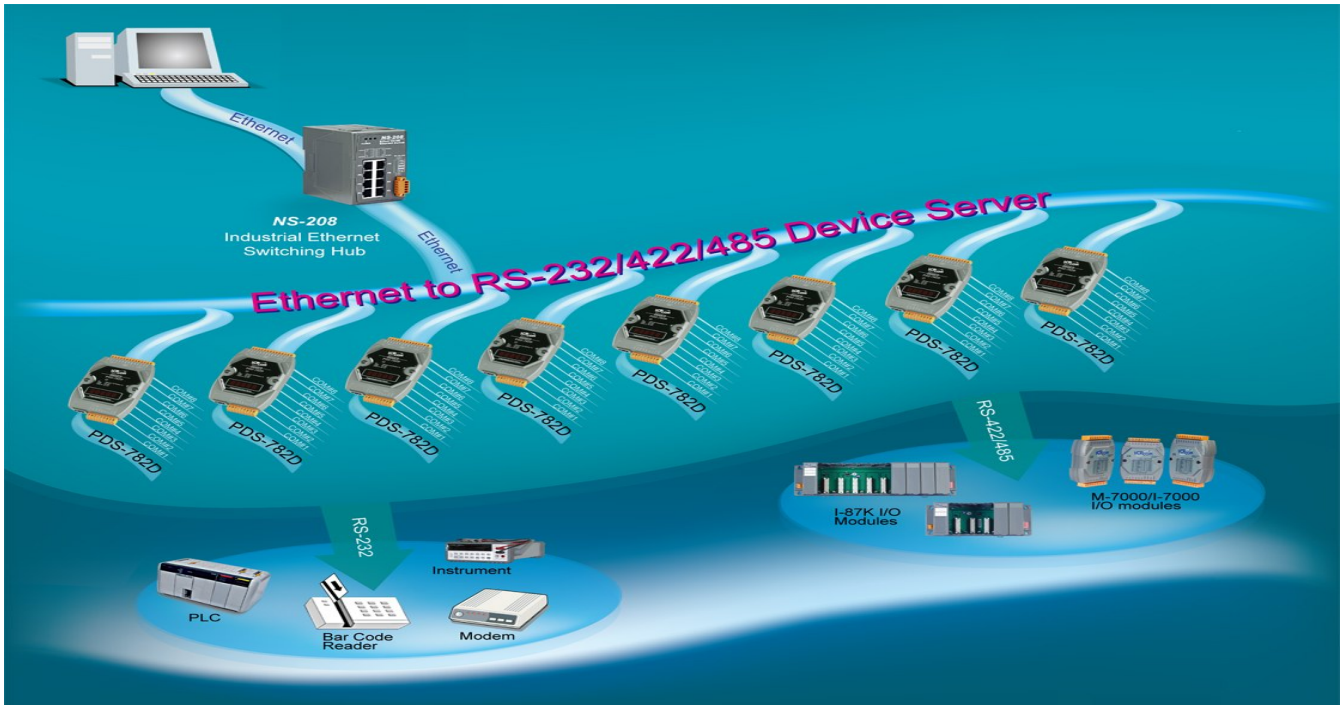
Most SCADA and HMI can access serial devices on computers through OPC servers. But users have to setup many computers on factory for these serial devices. PDS can replace these computers and makes these serial devices accessible via virtual COM ports.

The VxComm Driver creates virtual COM port(s) on MS Windows and maps them to the Ethernet port(s) of the ICP DAS PDS. User's RS-232 client programs need only to change to the virtual COM port to access serial device that are allocated in the Internet or Ethernet network via PDS.

Programmable with SDK

PDS-700 and PDS-8000 have built-in Serial-to-Ethernet converter functions of a traditional device server. They also have programmable ability and SDK for users to customize their own advanced device servers for special applications, such as data filter, data logger, protocol converter, I/O controls, encryption, decryption, data acquisitions and compression... Etc.

PDS can collect data from serial devices and forward fewer packets in the network, and controls external devices via I/O lines. It can reduce the network traffic loading effectively by sending out important information, alarms, events, computed or filtered



Ordering Information:



PDS-720 2-port PDS
PDS-720D 2-port PDS with LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485



PDS-732 3-port PDS with DI/DO
PDS-732D 3-port PDS with DI/DO & LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 COM3: RS-232
 D/O: 4 Channels, Sink/NPN, 30V/100mA Max.
 D/I: 4 Channels, Common GND, L: 0~1V, H: 3.5~30V



PDS-742 4-port PDS
PDS-742D 4-port PDS with LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 COM3~4: RS-232



PDS-752 5-port PDS
PDS-752D 5-port PDS with LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 COM3~5: RS-232



PDS-762 6-port PDS with DI/DO
PDS-762D 6-port PDS with DI/DO & LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 COM3~6: RS-232
 D/O: 2 Channels, Sink/NPN, 30V/100mA Max.
 D/I: 1 Channel, Common GND, L: 0~1V, H: 3.5~30V



PDS-721 2-port PDS with DI/DO
PDS-721D 2-port PDS with DI/DO & LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 D/O: 7 Channels, Sink/NPN, 30V/100mA Max.
 D/I: 6 Channels, Common GND, L: 0~1V, H: 3.5~30V



PDS-734 3-port PDS with DI/DO
PDS-734D 3-port PDS with DI/DO & LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 COM3: RS-422
 D/O: 4 Channels, Sink/NPN, 30V/100mA Max.
 D/I: 4 Channels, Common GND, L: 0~1V, H: 3.5~30V



PDS-743 4-port PDS with DI/DO
PDS-743D 4-port PDS with DI/DO & LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 COM3~4: RS-232
 D/O: 4 Channels, Sink/NPN, 30V/100mA Max.
 D/I: 4 Channels, Common GND, L: 0~1V, H: 3.5~30V



PDS-755 5-port PDS
PDS-755D 5-port PDS with Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 COM3~5: RS-485



PDS-782 8-port PDS
PDS-782D 8-port PDS with LED Display
 Ethernet: 10/100M Base TX
 COM1: RS-232
 COM2: RS-485
 COM3~8: RS-232



i-7570



RS-485/RS232/Ethernet to ZigBee Converter



Introduction

i-7570 is a RS-485/RS232/Ethernet to ZigBee Network converter enabling RS232/485 devices to be wirelessly and easily connected to a new or existing system using the ICPDAS i-7570. The industrial design features a wide range of power inputs, DIN-rail mount support, 3-way isolation and internal surge protection. It also supports various data formats and Baud Rates that can be configured via a Windows-based GUI utility. The i-7570 can be set as either a coordinator, a repeater or a client and can operate using an ad-hoc, star or mesh network topology.

In some existing systems that use an RS-232/RS-485/Ethernet network, it is sometimes difficult to extend the new devices due to building structure issues, wiring problems or other reasons. The i-7570 can be easily added to an existing system in order to extend your network.

Using i-7570 to implement a Mesh Network

The mesh feature is the most important function for wireless transmission. Wireless transmission is greatly affected by humidity, temperature, weather, and obstacles, etc. A mesh network topology is needed to overcome such interference, especially in an industrial environment. The benefits of using a mesh topology are shown figure 1:

Features

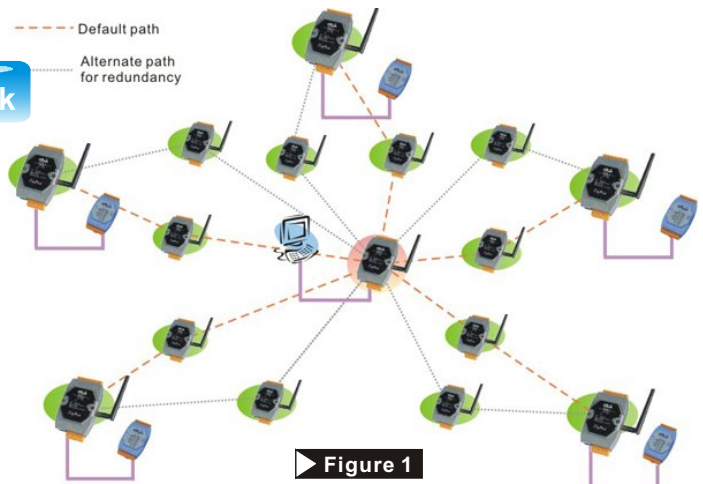
- ISM 2.4 GHz operating frequency
- Fully compliant 2.4G IEEE802.15.4/ZigBee specification.
- Wireless transmission range up to 1KM.
- Self-tuner in Rs485.
- Support all common baud rate from 4800 bps to 115200 bps
- GUI configuration software (Windows version).
- Coordinator/Repeater/Client connection mode selectable. Surge protection on RS-485.
- Wide input range DC power supply(10-30VDC).
- DIN rail and panel mount support.

Specifications

CPU	Am188TMES, 40M Hz or compatible
Ethernet	10M Base TX
SRAM/Flash	512KB/512KB
COM1	5-wire RS-232 (RXD, TXD, CTS, RTS, GND)
COM2	RS-485: D1+, D1-, self-tuner ASIC inside
Baud rate	115200bps Max.
D/I, D/O	14 I/O pins for User define
RF channels	16
Receive sensitivity	-94dBm
Network Topology	Support Ad-hoc, Star, Mesh
Transmit power	-24 to 0dBm
Data encryption	128-bit AES

Using i-7570 as a Repeater

For advanced wireless applications, repeaters and a mesh are required in order to build a more flexible and reliable network. The repeater function can be used to avoid an obstacle that may be located between two wireless devices or to extend the wireless transmission range.



▶ Figure 1

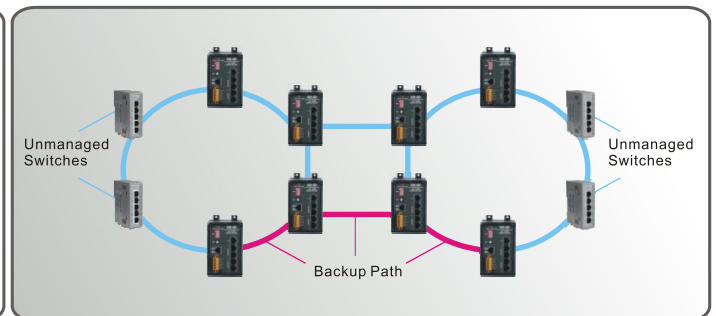
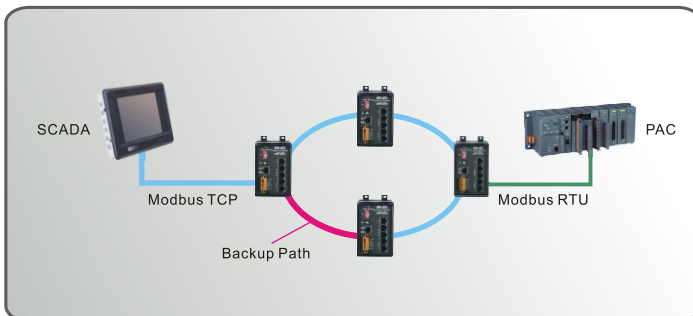
Real-time Redundant Ring Switches

Features

- Provide redundant path to Ethernet LAN
- Support various ring Topologies
- Certified for harsh industrial environments
- Support Modbus/TCP to read port status
- Relay output for link lose alarm
- Support redundant power input

RSM-405 *With metal case*

- 5 ports 10/100BaseT(x)
- Auto-negotiating
- Auto-mdi/mdix
- F/H duplex operation
- Compliant with IEEE 802.3, IEEE 802.3u, IEEE802.3x
- Ethernet isolation:1500 VRMS 1 minute
- Power input isolation:1KV
- Operating temperature:-30 ~ +75° C
- Storage temperature:-40 ~ +85° C



Ordering Information:



RSM-405FC
Multi-mode Fiber
Redundant Ring Switch



RSM-405FCS
Single-mode Fiber
Redundant Ring Switch



RSM-405FT
Multi-mode Fiber
Redundant Ring Switch



RSM-408
8-Port Ethernet
Redundant Ring Switch



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