

#### **■** Features

- 80186, 80 MHz CPU
- C Language Based and MiniOS7 Inside
- Compact and Rugged PAC
- 64-bit Hardware Serial Number
- 4/8 Slots for High Profile I/O Modules
- Dual 10/100M Ethernet Ports
- 4 Serial Ports (RS-232/485)
- Operating Temperature: -25 ~ +75°C









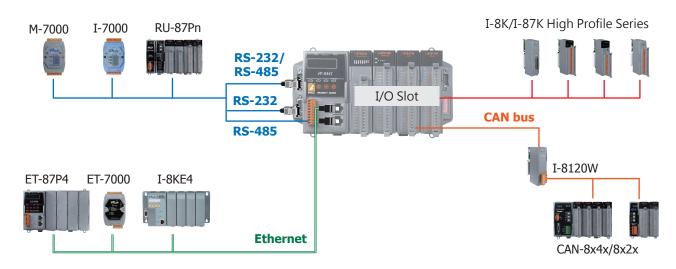
### Introduction

The iPAC-8000 is the compact size PAC(Programmable Automation Controller). It supports a variety of connectivity options including Dual 10/100 Base-TX Ethernet ports, one RS-232/485 port, one RS-485 port and two RS-232 ports, and 4/8 slots for high performance Parallel I/O modules (high profile I-8K series) and Serial I/O modules (high profile I-87K series), etc.

The MiniOS7 can boot up in a very short time (0.4~0.8 second). It has built-in hardware diagnostic function, and supports the full functions to access all 8K and 87K series I/O modules, such as DI, DO, DIO, AI, AO, Counter/Frequency, motion modules etc.

The iPAC-8000 is designed for industrial monitoring, measurement and controlling. It has redundant power inputs with 1 kV isolation from noise and surges, and a wide range of operating temperature (-25 ~ +75°C). It can work in the harsh and rough environment.

## Applications \_



#### Specifications \_

Models	iP-8411	iP-8811	iP-8441	iP-8841
System Software				
OS	MiniOS7 (DOS-like embedded system)			
Program Download Interface	RS-232 (COM1) or Ethernet			
Programmable Language	C Language			
Compilers to create .exe files	TC++ 1.01 \ TC 2.01 \ BC++ 3.1 \ ~ 5.2x \ MSC 6.0 \ MSVC++ (before version 1.5.2)			

# **■** Specifications \_\_\_\_\_

Models	iP-8411	iP-8811	iP-8441	iP-8841	
CPU Module					
CPU	80186 or compatible (16-bit and 80 MHz)				
SRAM	512 KB		768 KB		
Dual Battery Backup SRAM	512 KB; data valid up to 5 years				
Flash	512 KB with write protect switch				
Expansion Flash Memory	microSD socket (can support microSDHC up to 32 GB)				
EEPROM	16 KB				
NVRAM	31 Bytes (battery backup, data valid up to 5 years)				
RTC (Real Time Clock)	Provide second, minute, hour, date, day of week, month, year				
Hardware Serial Number	Yes, 64-bit hardware serial number for software copy protection				
Watchdog Timers	Yes (0.8 second)				
DIP Switch	Yes (8-bits)				
Communicate Interface					
Ethernet	-		RJ-45 x 2, 10/100 Base-TX (Auto negotiating, Auto MDI/MDI-X, LED indicators)		
COM 0	Internal com	munication with the high	n profile I-87K series mo	dules in slots	
COM 1	RS-232 (to update firmware) (RxD, TxD and GND); non-isolated				
COM 2	RS-485 (Data+, Data-) with internal self-tuner ASIC; 3000 VDC isolated				
COM 3	RS-232/RS-485 (RS-232: RxD, TxD, CTS, RTS, GND, RS-485: Data+, Data-); non-isolated				
COM 4	RS-232RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); non-isolated				
SMMI					
LED Display		Yes, 5	5-Digit		
LED Indicators	3 Programmable LED Indicators				
Push Buttons	4				
Buzzer	- Yes			es	
I/O Expansion Slots					
Slot Number	4	8	4	8	
Siot Number	For High Profile I-8K and I-87K Modules Only				
Mechanical					
Dimensions (W x L x H)	231 x 132 x 111 mm	355 x 132 x 111 mm	231 x 132 x 111 mm	355 x 132 x 111 mm	
Installation	DIN-Rail or Wall Mounting				
Environment					
Operating Environment	-25 ~ +75°C				
Storage Temperature	-30 ∼ +80°C				
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 VDC ) for alarm				
Capacity	30 W				
Consumption	6.7 W	7.2 W	6.7 W	7.2 W	

# Ordering Information \_\_\_\_\_\_\_

iP-8411 CR	Standard iPAC-8000 with 4 I/O Slots (RoHS)	
iP-8811 CR	Standard iPAC-8000 with 8 I/O Slots (RoHS)	
iP-8441 CR	Standard iPAC-8000 with 4 I/O Slots and 2 Ethernet Ports (RoHS)	
iP-8841 CR	Standard iPAC-8000 with 8 I/O Slots and 2 Ethernet Ports (RoHS)	

# ■ Accessories \_\_\_\_\_

I-7560U CR	USB to RS-232 Converter (Windows 8/8.1) (RoHS)
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