

## I-8430/I-8830

4/8-slot Ethernet I/O Expansion Unit with 80188-40 CPU,  
2 Serial Ports and 1 Ethernet Port (DCON Protocol)

### Features

- 80188 or compatible, 8-bit and 40 MHz
- MiniOS7 Embedded Operating System (DOS-like)
- Slave I/O unit with DCON protocol (ASCII-based protocol )
- I/O configuration with DCON Utility via Ethernet (VxComm Port)
- Simultaneous access by a maximum of 6 host PCs
- Built-in Watchdog
- 4/8 Slots for I-8K and I-87K Modules
- Operating Temperature: -25 ~ +75 °C



### Introduction

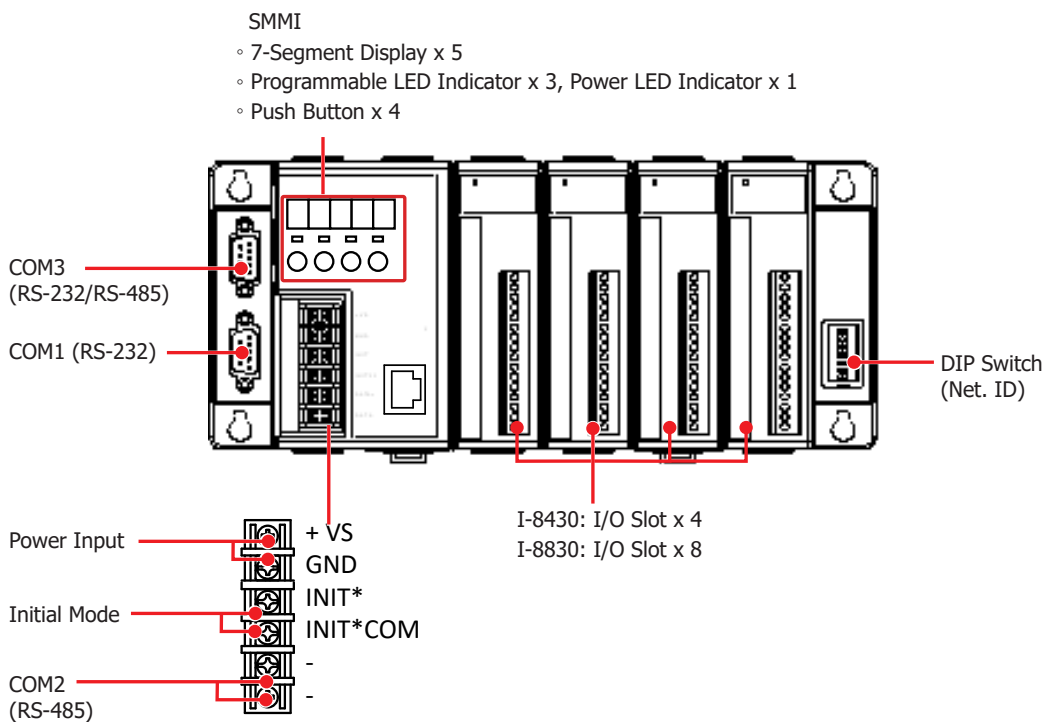
The I-8430/I-8830 is an embedded Ethernet I/O units using DCON Protocol Firmware. ICPDAS provides various I/O modules, such as analog input/output, digital input/output and counter/frequency modules, which can be used in remote data acquisition and control applications for environment monitoring, power management and factory automation, etc via Ethernet Port or RS-232 Port.

The CPU is a 8-bit 80188 (40 MHz). Apart from the original functions (input, output, power on value, safe value, high limit value, low limit value) of the I/O module, the firmware provides additional functions to allow I/O modules in different slots to be combined together. For example, if the channel value of an AI module is above a predefined high limit value, or below a predefined low limit value, the information can be immediately passed to another DO module to trigger alarm or light.

Various software development kits (SDK) and demos are provided, such as DLL, ActiveX, Labview driver, Indusoft driver, Linux driver, OPC server, etc.

Although all the SDK drivers support only COM Port interface, users can also use there SDK by installing the VxComm Utility . VxComm Utility can create Virtual COM Port to map the Ethernet Port, then the I/O modules can be easily added to the I-8430/I-8830 and can be quickly integrated into an existing system.

### Apparances

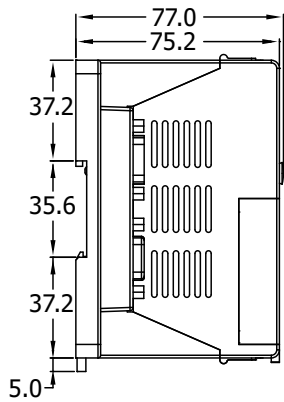


## Specifications

Models	I-8430	I-8830
<b>CPU Module</b>		
CPU	80188 or compatible, 8-bit and 40 MHz	
SRAM	512 KB	
Flash	512 KB	
EEPROM	2 KB	
64-bit Hardware Serial Number	Yes	
Watchdog Timer	Yes	
DIP Switch	8-bit for address	
<b>Communicate Interface</b>		
Ethernet	1 x RJ-45, 10Base NE2000 compatible	
COM 0	Internal communication with the 87K modules	
COM1	RS-232 (RxD, TxD, GND; to update firmware)	
COM2	-	
COM3	RS-232/RS-485 (RS-232: RxD, TxD, CTS, RTS, GND; RS-485: Data+, Data)	
<b>SMMI</b>		
7-Segment Display	5	
LED Indicator	1 x Power, 3 x Programmable	
Push Button	4	
<b>I/O Expansion</b>		
I/O Type	I-8K, I-87K series	
Slots	4	8
<b>Mechanical</b>		
Dimension (W x L x H)	231 mm x 110 mm x 77 mm	355 mm x 110 mm x 77 mm
Installation	DIN-Rail, Wall mounting	
<b>Environmental</b>		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-30 ~ +85 °C	
Humidity	5 ~ 95 % RH, Non-condensing	
<b>Power</b>		
Protection	Power reverse polarity protection	
Input Range	+10 ~ 30 VDC (3 kV Isolated )	
Power Supply	20 W	
Consumption	3.9 W	5.1 W

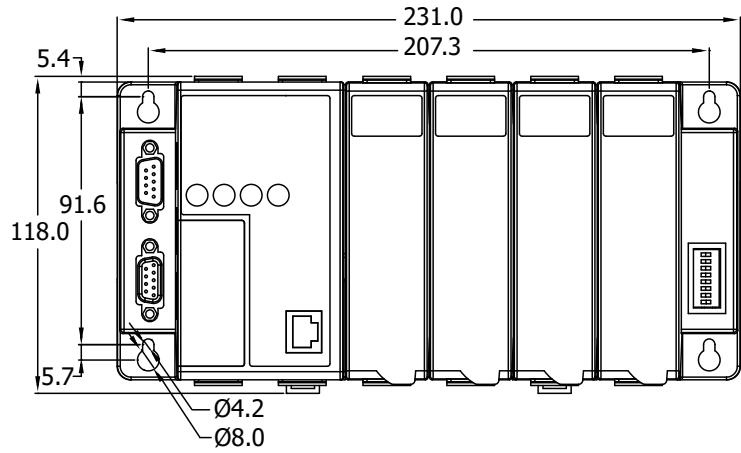
## ■ Dimensions (Units: mm)

I-8430/I-8830



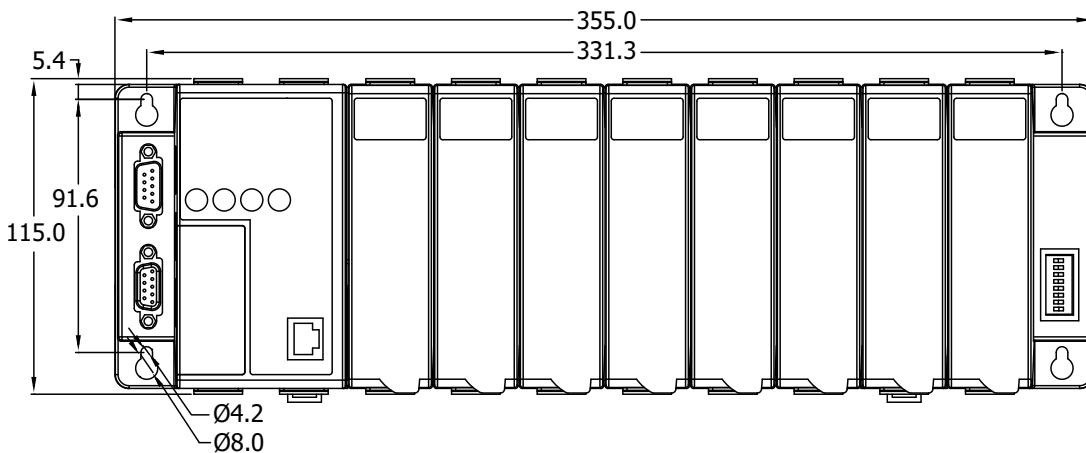
Left Side View

I-8430



Front View

I-8830



Front View

## ■ Ordering Information

I-8430 CR	4-slot Ethernet I/O Expansion Unit with 80188-40 CPU, 2 Serial Ports and 1 Ethernet Port (DCON Protocol) (Blue Cover) (RoHS)
I-8830 CR	8-slot Ethernet I/O Expansion Unit with 80188-40 CPU, 2 Serial Ports and 1 Ethernet Port (DCON Protocol) (Blue Cover) (RoHS)
I-8430-G CR	4-slot Ethernet I/O Expansion Unit with 80188-40 CPU, 2 Serial Ports and 1 Ethernet Port (DCON Protocol) (Gray Cover) (RoHS)
I-8830-G CR	8-slot Ethernet I/O Expansion Unit with 80188-40 CPU, 2 Serial Ports and 1 Ethernet Port (DCON Protocol) (Gray Cover) (RoHS)

## ■ Accessories

S256	256 K battery backup SRAM module
S512	512 K battery backup SRAM module