

I-8431-80/I-8831-80 I-8431-80-G/I-8831-80-G

Ethernet Embedded Controller

Features

- 80186 or compatible (16-bit and 80 MHz)
- MiniOS7 Inside (DOS like OS)
- 64-bit Hardware Serial Number
- Watchdog Timer
- 4 Serial Ports and an Ethernet Port
- Input Protection Circuitry
- Operating Temperature: -25 to +75 °C



Introduction

The I-8431-80/I-8831-80 are ethernet embedded controller with 4/8 I/O slots. Both are equipped with MiniOS7, an embedded OS similar to DOS that is developed by ICPDAS Co., LTD. 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.

To simplify the TCP/IP program developing process, we designed a XServer architecture. It is a reliable, opened, expandable, all purposed, and easily to be used library. The Xserver implements 90% functionalities of Ethernet communication. Refer the rich demo programs we provided, software engineer can easily finish the 10% remaining functionalities and greatly shorten the developing time.

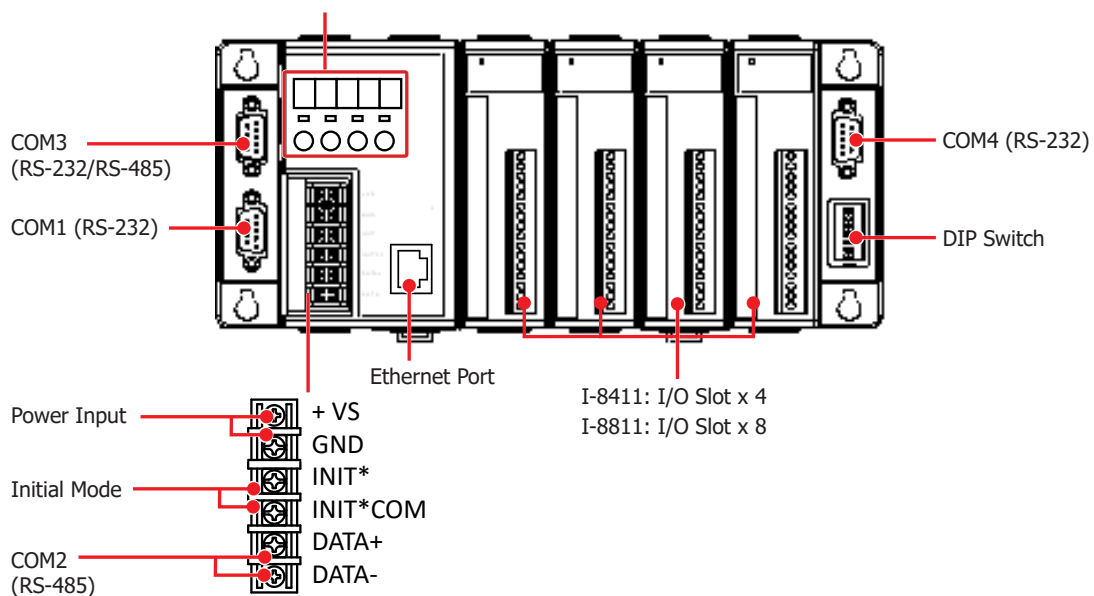
The I-8431-80/I-8831-80 are equipped an ethernet port and their back planes are equipped three serial COM Port, they include RS-232 and RS-485 ports and can be used in remote data acquisition and control applications, including environment monitoring, power management and factory automation.

By using S-256 (256 KBytes) or S-512 (512 KBytes) battery backup SRAM, they provide data logger storage function.

Apparances

SMMI

- 7-Segment Display x 5
- Programmable LED Indicator x 4
- Push Button x 4

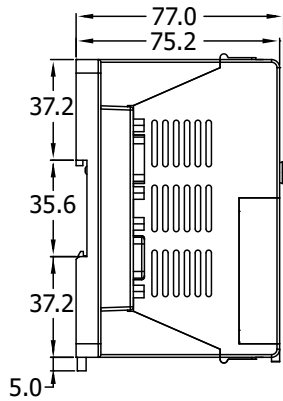


Specifications

Models	I-8431-80	I-8831-80
CPU Module		
CPU	80186 or compatible (16-bit and 80 MHz)	
SRAM	512 KB	
Flash	512 KB	
EEPROM	2 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	
64-bit Hardware Serial Number	Yes	
Watchdog Timer	0.8 second	
DIP Switch	8-bits	
Communicate Interface		
COM 0	Internal communication with the 87K modules	
COM 1	RS-232 (Rx/D, Tx/D, GND)	
COM 2	RS-485 (Data+, Data-)	
COM 3	RS-232/RS-485 (RS-232: Rx/D, Tx/D, CTS, RTS, GND; RS-485: Data+, Data)	
COM 4	RS-232 (Rx/D, Tx/D, CTS, RTS, DSR, DTR, CD, RI, GND)	
Ethernet Port	10 Base NE2000 compatible	
SMMI		
7-Segment Display	5	
Programmable LED Indicator	4	
Push Button	4	
I/O Expansion Slot		
Slot Number	4	8
Mechanical		
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 or Wall Mounting	
Environmental		
Operating Temperature	-25 °C to +75 °C	
Storage Temperature	-30 °C to +85 °C	
Humidity	10 to 95%,non-condensing	
Power		
Protection	Power reverse polarity protection	
Power requirement	10 to 30 VDC	
Power supply	20 W	
Power consumption	3.9 W	5.1 W

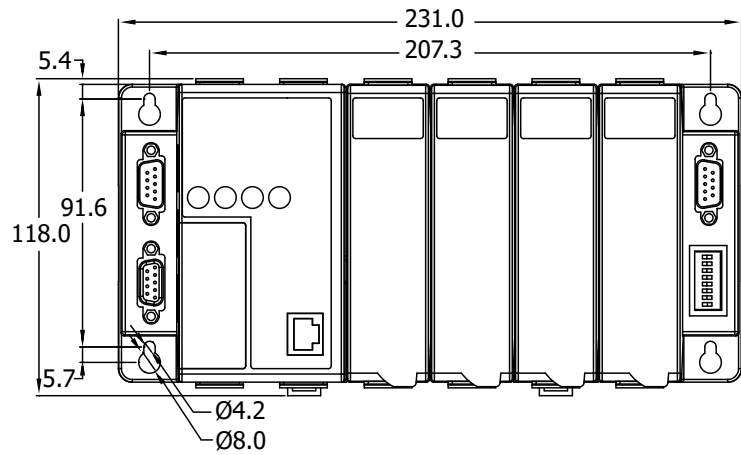
■ Dimensions (Units: mm)

I-8431-80/I-8831-80



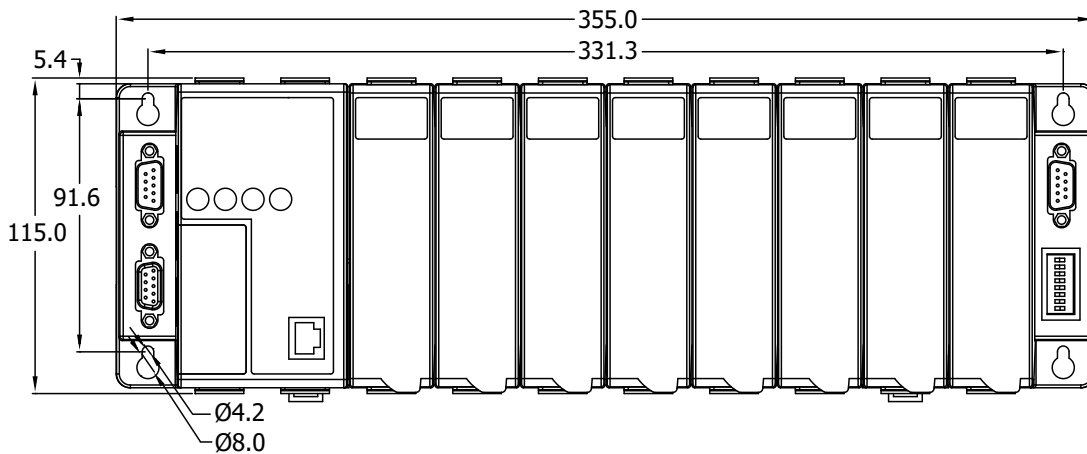
Left Side View

I-8431-80



Front View

I-8831-80



Front View

■ Ordering Information

I-8431-80	4-Slot Ethernet Embedded Controller
I-8831-80	8-Slot Ethernet Embedded Controller
I-8431-80-G	4-Slot Ethernet Embedded Controller with Gray Color
I-8831-80-G	8-Slot Ethernet Embedded Controller with Gray Color

■ Accessories

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