



## I-7188EX(D)

Standard Palm-sized Ethernet PAC with 80188-40 CPU,  
MiniOS7, 6 DI, 7 DO (7-Segment LED Display)

### Features

- Built-in High Performance MiniOS7 from ICP DAS
- Easy-to-use Software Development Tool Kits (Using C language)
- Various Storage Media
  - 512 KB Flash
  - 2 KB EEPROM
- Various Communication Interfaces
  - 10 BASE-T NE2000 compatible Ethernet
  - RS-232/RS-485
- I/O Expansion Bus Interface
- Build-in Watchdog Timer



### Introduction

The I-7188EX(D) is a palm-size programmable automation controller with RS-232/485 and Ethernet communication interfaces. ICP DAS provides easy-to-use software development tool kits (MiniOS7 framework, 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, ISaGARS, DasyLab, Trace Mode, Citect, iFix, etc.).

For hardware expansion, the I-7188EX(D) also supports an I/O expansion bus. A cost-effective I/O expansion board with A/D, D/A, D/I, D/O and serial ports is available. 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 50 boards available for I-7188EX(D), you can choose one of them to expand hardware features.

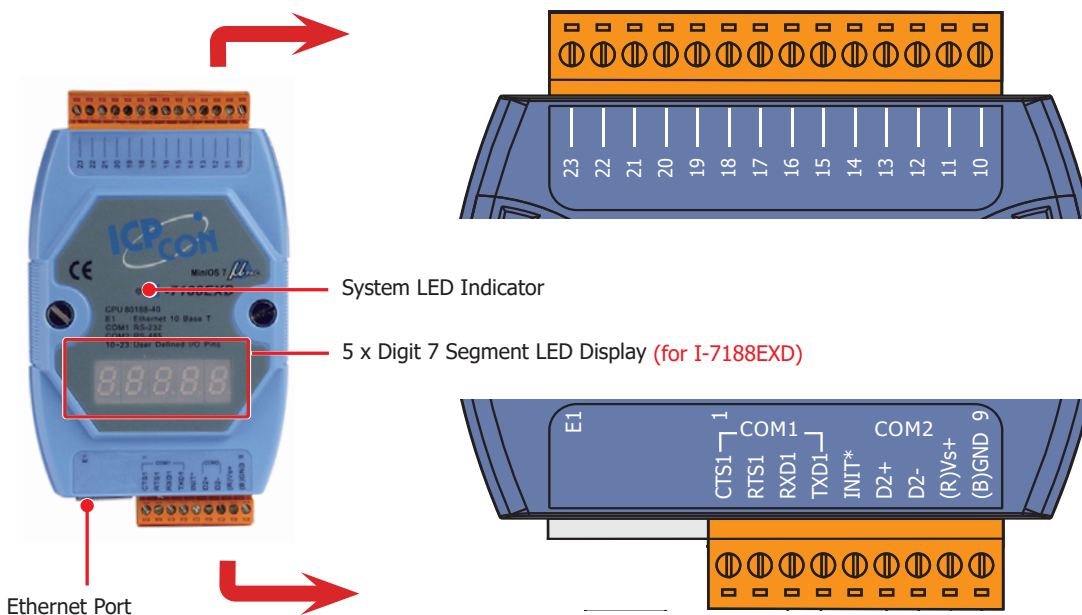
### Powerful Embedded OS — MiniOS7



MiniOS7 is the most stable OS used in the last decade. Up to now, several hundred thousand copies with our PACs have been distributed worldwide.

- DOS-like embedded OS
- Antivirus ability
- Internet connectivity
- Libraries & demo programs for various peripherals, devices and remote I/O modules
- Short boot time period (<1 Second)
- Less memory resource required
- Faster watchdog response time

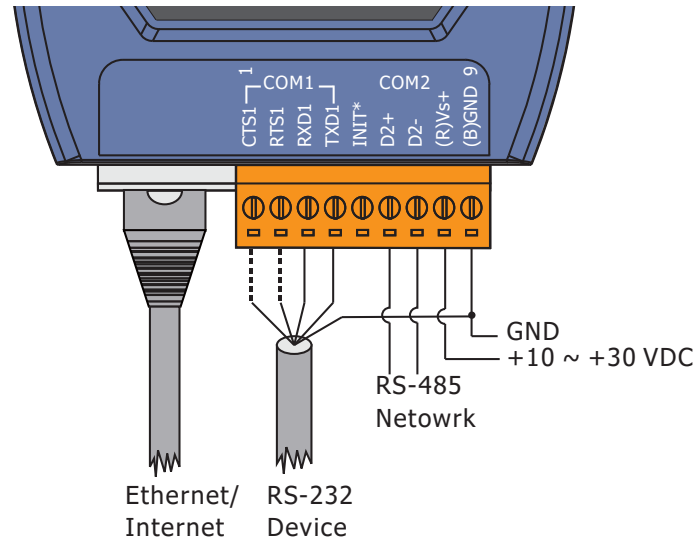
### Appearances



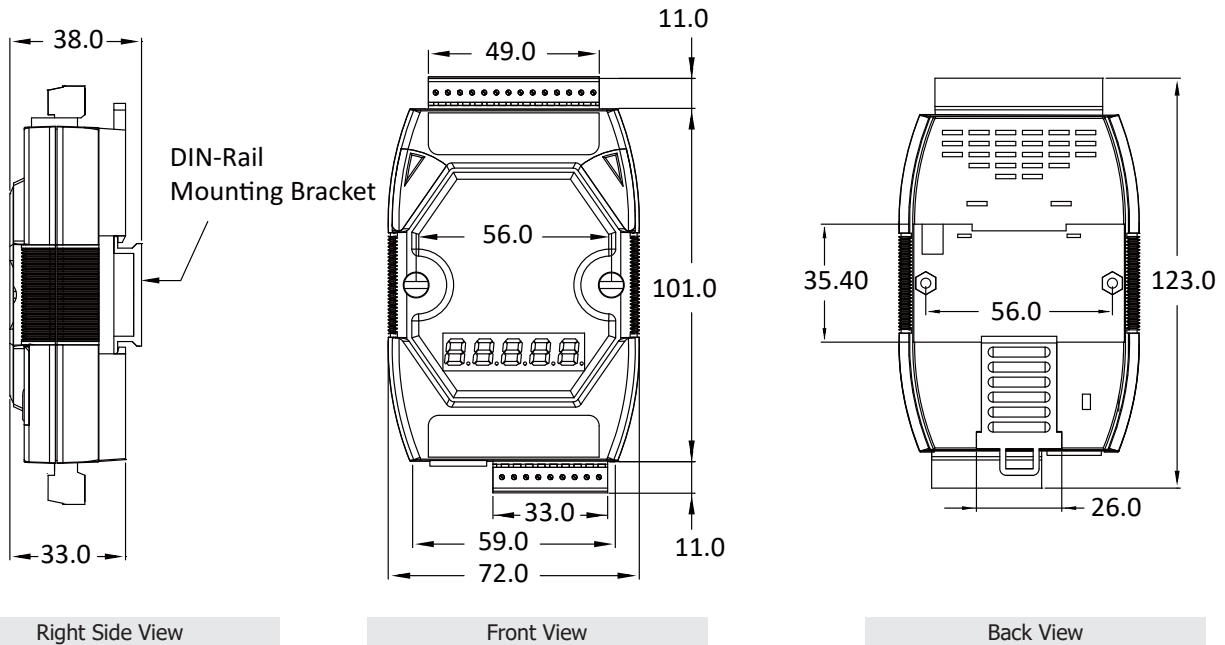
## Specifications

Model	I-7188EX	I-7188EXD
Software		
OS	MiniOS7	
Development	C Language	
CPU Module		
CPU	80186 or compatible, 16-bit and 80 MHz	
SRAM	512 KB	
Flash	512 KB	
EEPROM	2 KB	
NVRAM	31 Bytes	
RTC (Real Time Clock)	Provide seconds, minutes, hours, dates, day of week, month, year	
64-bit Hardware Serial Number	Yes	
Watchdog Timer	Yes	
Display		
Type	-	5 x Digit 7 Segment LED Display
LED Indicators		
Status	1 x System	
Communication Ports		
Ethernet	1 x RJ-45, 10 BASE-T NE2000 compatible Ethernet	
COM1	RS-232 (TXD, RXD, RTS, CTS, GND), Non-isolated, Speed: 115200 bps Max.	
COM2	RS-485 (Data+, Data-) with internal self-tuner ASIC; Non-isolated, Speed: 115200 bps Max.	
I/O Expansion		
I/O Type	X-board	
User Defined I/O PINs	14	
Mechanical		
Dimension (W x H x D)	72 mm x 123 mm x 33 mm	
Installation	DIN-Rail Mounting	
Environmental		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-40 ~ +80 °C	
Humidity	5 ~ 90 % RH, Non-condensing	
Power		
Input Range	+10 ~ +30 VDC	
Consumption	2.0 W	3.0 W

## Wiring Connections



## Dimensions (Units: mm)



## Ordering Information

<b>I-7188EX CR</b>	Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7 and 1 I/O Bus (Blue Cover) (RoHS)
<b>I-7188EX-G CR</b>	Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7 and 1 I/O Bus (Gray Cover) (RoHS)
<b>I-7188EX-G CR</b>	Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7, 1 I/O Bus and 7-Segment LED Display (Blue Cover) (RoHS)
<b>I-7188EXD-G CR</b>	Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7, 1 I/O Bus and 7-Segment LED Display (Gray Cover) (RoHS)

## Accessories

<b>X-Board</b>	Add-on I/O Expansion Board
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