



## I-7188XA(D)

Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7, 512 KB SRAM, 2 DI, 2 DO and 1 I/O Bus (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 (RS-232/RS485)
- Built-in Digital Input/Output
  - 2-ch Digital Input
  - 2-ch Digital Output
- Built-in Watchdog Timer

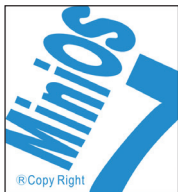


### Introduction

The I-7188XA(D) is for industry applications and can be used to replace PC or PLC devices in harsh environments. The I-7188XA(D) controller is designed for palm-size embedded systems that require high reliability, PC-compatibility, and compactness at a reasonable price. The controllers can be integrated into an OEM product as a processor core component. By building your product around I-7188XA(D) controller, you reduce the time from design to market introduction, cut development costs, minimize technical risks, and deliver a more reliable product.

Depending on the type of embedded firmware programs that are being developed, and which I/O Expansion Board, the I-7188XA(D) can be used as a single versatile controller.

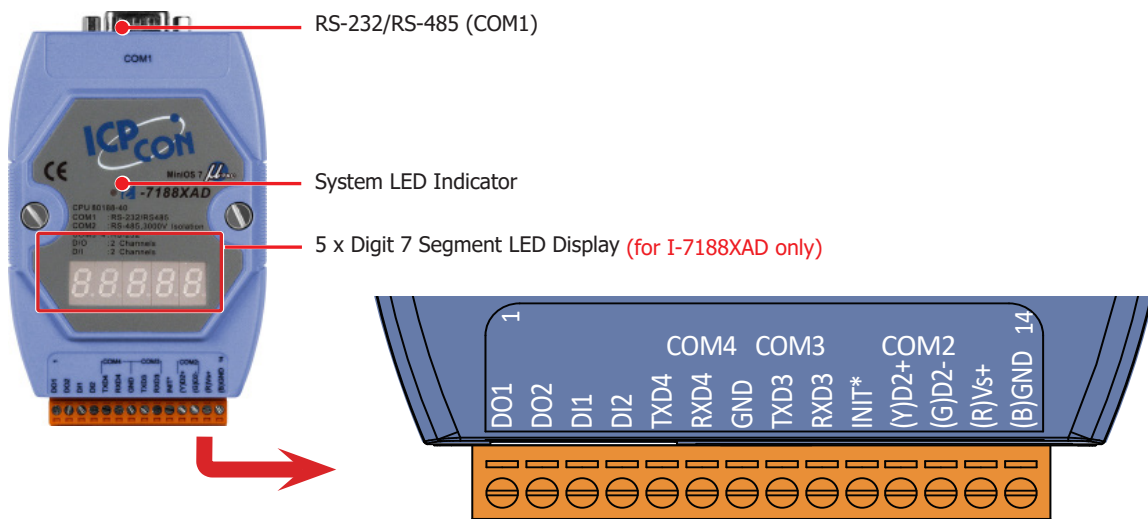
### Powerful Embedded OS — MiniOS7



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 period (<1 Second)
- Less memory resource required
- Faster watchdog response time

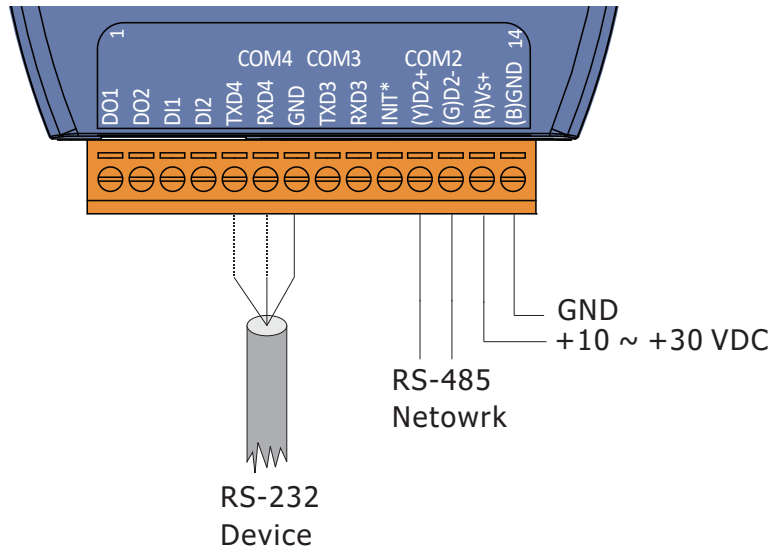
### Appearances



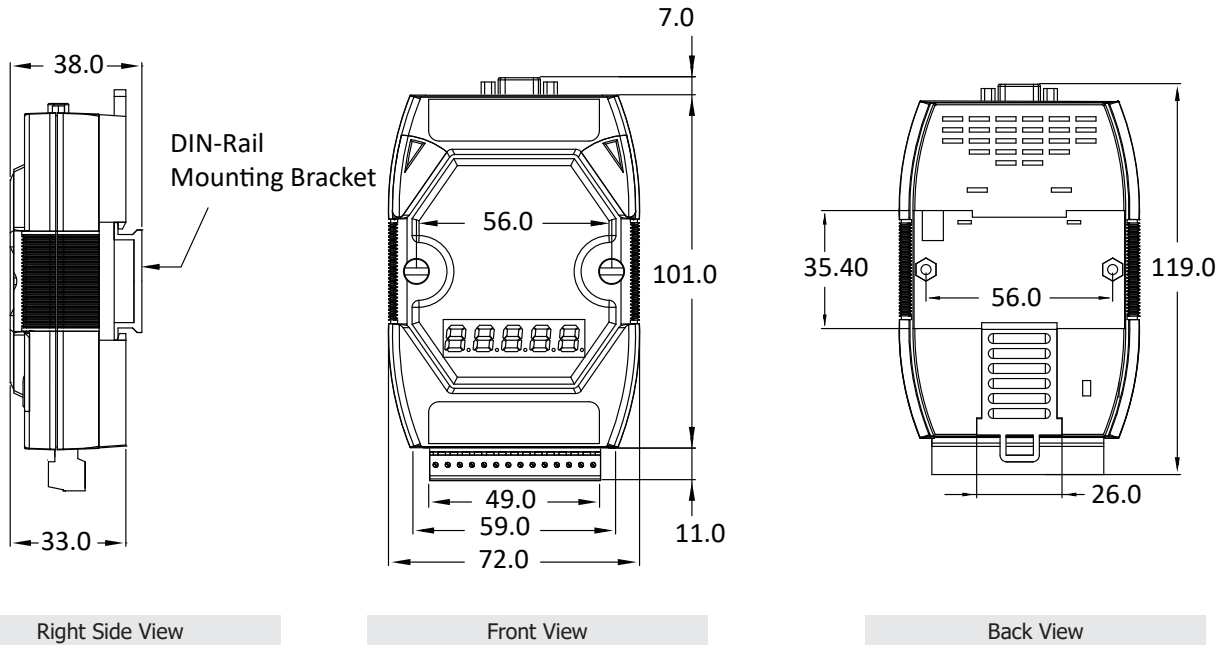
## Specifications

| Model                          | I-7188XA   | I-7188XAD                       |
|--------------------------------|--|---------------------------------|
| <b>Software</b>                |  |                                 |
| OS                             | MiniOS7  |                                 |
| Development                    | C Language   |                                 |
| <b>CPU Module</b>              |  |                                 |
| CPU                            | 80188, 40 MHz or compatible                                      |                                 |
| 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  |                                 |
| <b>Display</b>                 |  |                                 |
| Type                           | -  | 5 x Digit 7 Segment LED Display |
| <b>LED Indicator</b>           |  |                                 |
| Status                         | 1 x System   |                                 |
| <b>Communication Port</b>      |  |                                 |
| Baud Rate                      | 115200 bps Max.  |                                 |
| COM1                           | RS-232 (TXD, RXD, RTS, CTS, GND)                                 |                                 |
| COM2                           | RS-485 (Data+, Data-) with internal self-tuner ASIC              |                                 |
| COM3                           | RS-232 (TXD, RXD, GND)   |                                 |
| COM4                           | RS-232 (TXD, RXD, GND)   |                                 |
| <b>I/O Expansion</b>           |  |                                 |
| I/O Type                       | X-board  |                                 |
| <b>Digital Input</b>           |  |                                 |
| Channels                       | 2  |                                 |
| Dry Contact, ON Voltage Level  | Close to GND   |                                 |
| Dry Contact, OFF Voltage Level | Open   |                                 |
| <b>Digital Output</b>          |  |                                 |
| Channels                       | 2  |                                 |
| Type                           | Open Collector   |                                 |
| Load Voltage                   | +30 VDC Max.   |                                 |
| Max. Load Current              | 100 mA   |                                 |
| <b>Mechanical</b>              |  |                                 |
| Dimension (W x H x D)          | 72 mm x 119 mm x 33 mm   |                                 |
| Installation                   | DIN-Rail Mounting  |                                 |
| <b>Environmental</b>           |  |                                 |
| Operating Temperature          | -25 ~ +75 °C   |                                 |
| Storage Temperature            | -40 ~ +80 °C   |                                 |
| Humidity                       | 5 ~ 90 % RH, Non-condensing                                      |                                 |
| <b>Power</b>                   |  |                                 |
| Input Range                    | +10 ~ +30 VDC  |                                 |
| Consumption                    | 2.0 W  | 3.0 W                           |

## Wiring Connections



## Dimensions (Units: mm)



## Ordering Information

|                       |  |
|-----------------------|--|
| <b>I-7188XA CR</b>    | Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7, 512 KB SRAM, 4 Serial Ports, 2 DI, 2 DO and 1 I/O Bus (Blue Cover) (RoHS)                           |
| <b>I-7188XA-G CR</b>  | Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7, 512 KB SRAM, 4 Serial Ports, 2 DI, 2 DO and 1 I/O Bus (Gray Cover) (RoHS)                           |
| <b>I-7188XAD CR</b>   | Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7, 512 KB SRAM, 4 Serial Ports, 2 DI, 2 DO and 1 I/O Bus and 7-Segment LED Display (Blue Cover) (RoHS) |
| <b>I-7188XAD-G CR</b> | Standard Palm-sized Ethernet PAC with 80188-40 CPU, MiniOS7, 512 KB SRAM, 4 Serial Ports, 2 DI, 2 DO and 1 I/O Bus and 7-Segment LED Display (Gray Cover) (RoHS) |

## Accessories

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