I-7188XC(D)-512/RTC

Standard Palm-sized Ethernet PAC with 80188-20 CPU, MiniOS7, 128 KB SRAM, 2 DI, 3 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
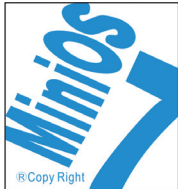 - ● 3-ch Digital Output
- ■ Build-in Watchdog Timer

CE FC RoHS

📂 Introduction

The I-7188XC(D)-512 and I-7188XC(D)-512/RTC are for industry applications and can be used to replace PC or PLC devices in harsh environments. The I-7188XC(D)-512 and I-7188XC(D)-512/RTC controller are designed for palm-size embedded systems that require high reliability, PC-compatibility, and compactnes at a reasonable price.

The controllers can be integrated into an OEM product as a processor core component. By building your product around I-7188XC(D)-512 and I-7188XC(D)/RTC 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-7188XC(D)-512 and I-7188XC(D)-512/RTC can be used as a single versatile controller.
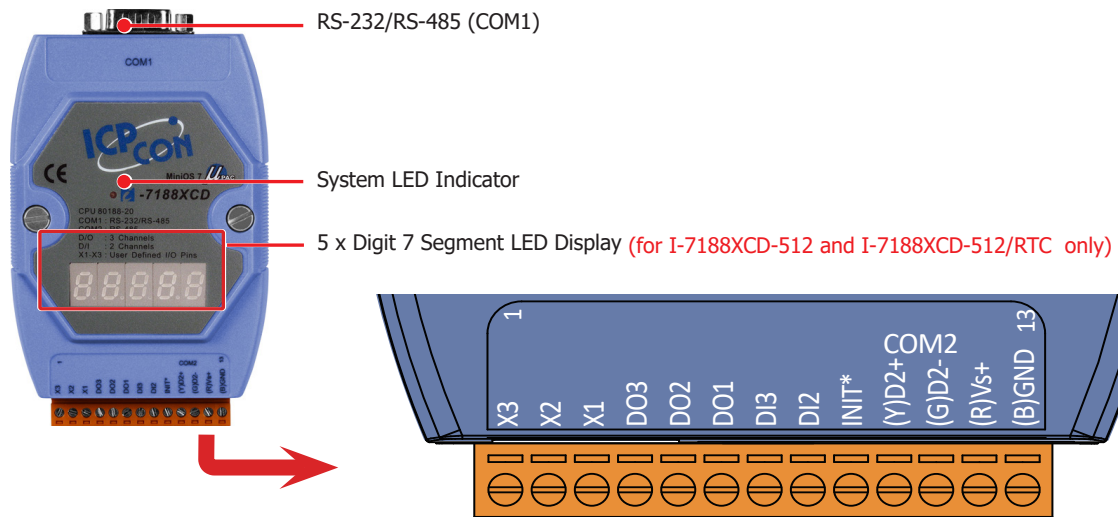
📂 Powerful Embedded OS — MiniOS7

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
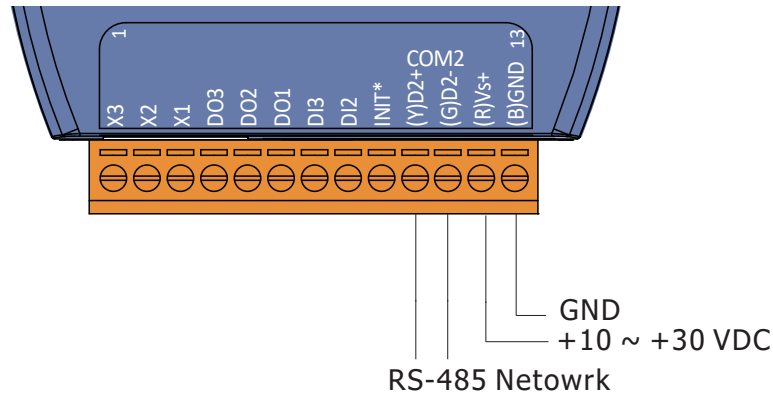- Faster watchdog response time
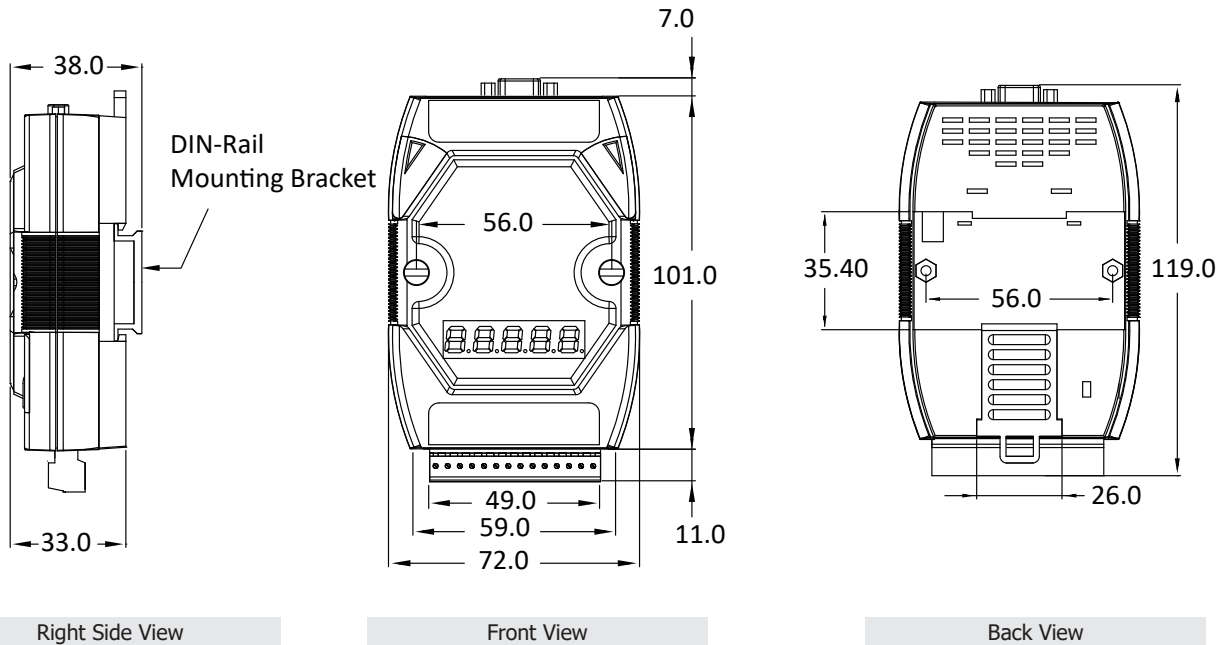
📂 Appearances

RS-232/RS-485 (COM1)

System LED Indicator

5 x Digit 7 Segment LED Display (for I-7188XCD-512 and I-7188XCD-512/RTC only)

◼ Specifications

Model	I-7188XC-512	I-7188XCD-512	I-7188XC-512/RTC	I-7188XCD-512/RTC
Software				
OS	MiniOS7			
Development	C Language			
CPU Module				
CPU	80188, 20 MHz or compatible			
SRAM	128 KB			
Flash	512 KB			
EEPROM	2 KB			
NVRAM	31 Bytes			
RTC (Real Time Clock)	-		Provide seconds, minutes, hours, dates, day of week, month, year	
Watchdog Timer	Yes			
Display				
Type	-	5 x Digit 7 Segment LED Display	-	5 x Digit 7 Segment LED Display
LED Indicator				
Status	1 x System			
Communication Port				
Baud Rate	115200 bps Max.			
COM1	RS-232/RS-485 (RXD, TXD, RTS, CTS, GND for RS-232, Data+, Data- for RS-485 with self-tuner ASIC)			
COM2	RS-485 (Data+, Data-) with internal self-tuner ASIC			
I/O Expansion				
I/O Type	X-board			
Digital Input				
Channels	2			
Dry Contact, ON Voltage Level	Close to GND			
Dry Contact, OFF Voltage Level	Open			
Digital Output				
Channels	3			
Type	Open Collector			
Load Voltage	+30 VDC Max.			
Max. Load Current	100 mA			
Mechanical				
Dimension (W x H x D)	72 mm x 119 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

GND	
+10 ~ +30 VDC	

RS-485 Netowrk

▣ Dimensions (Units: mm)

Right Side View

Front View

Back View

▣ Ordering Information

I-7188XC-512 CR	Standard Palm-sized Ethernet PAC with 80188-20 CPU, MiniOS7, 128 KB SRAM, 2 Serial Ports, 2 DI, 3 DO and 1 I/O Bus (Blue Cover) (RoHS)
I-7188XC-512/RTC CR	Standard Palm-sized Ethernet PAC with 80188-20 CPU, MiniOS7, 128 KB SRAM, RTC, 2 Serial Ports, 2 DI, 3 DO and 1 I/O Bus (Blue Cover) (RoHS)
I-7188XCD-512 CR	Standard Palm-sized Ethernet PAC with 80188-20 CPU, MiniOS7, 128 KB SRAM, 2 Serial Ports, 2 DI, 3 DO and 1 I/O Bus and 7-Segment LED Display (Blue Cover) (RoHS)
I-7188XCD-512/RTC CR	Standard Palm-sized Ethernet PAC with 80188-20 CPU, MiniOS7, 128 KB SRAM, RTC, 2 Serial Ports, 2 DI, 3 DO and 1 I/O Bus and 7-Segment LED Display (Gray Cover) (RoHS)

▣ Accessories

X-Board	Add-on I/O Expansion Board