

# e-7188 / e-7188D

## Palm-size PAC



### Main Features

- 80188-40 embedded CPU
- OS: MiniOS7
- 256K SRAM, 512K Flash
- 2048 Bytes EEPROM
- Built-in RTC, 31Bytes NVRAM
- Built-in 4 channels of COM port
- COM : RS-232, RS-485
- Power / Communication Indicator red LED
- 5-digit 7-segement LED Display

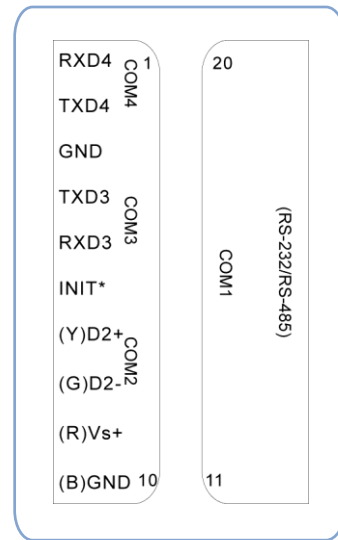
**COM1 : RS-232 / RS-485**  
 RS-232: TXD, RXD, RTS, CTS, DTR, DSR, DCD, RI, GND  
 RS-485: D1+, D1-  
 Default is RS-232, jumper select.  
 16 bytes FIFO

**COM2 : RS-485**  
 RS-485: D2+, D2-  
 16 bytes FIFO

**COM3 : RS-232**  
 RS-232: TXD3, RXD3, GND  
 1 byte FIFO

**COM4 : RS-232**  
 RS-232: TXD4, RXD4, GND  
 Program download port  
 1 byte FIFO

### Pin Assignments



### Features

- Built-in Watch dog timer for harsh environment
- Built-in power protection circuit
- Built-in RS-485 network protection circuit
- Support Modem Control: COM1
- Program language : TC/TC++/BC/MSC/MSVC
- Easy use software development toolkits

### Applications

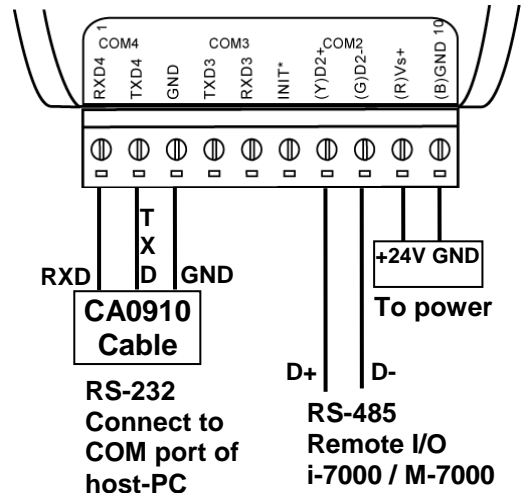
- Factory Automation
- Protocol Converter
- Building Automation



### Expansion Board Selection Guide

Note: i-7188(D) does not support I/O expansion board.

### Wiring



▣ Specifications

Series : Palm-size PAC > 1<sup>st</sup> Generation > i-7188X > i-7188/7188D

PACs	i-7188	i-7188D
<b>■ CPU</b>		
CPU	80188, 40MHz or compatible	
SRAM	256K bytes	
Flash Memory	512K bytes; Erase unit is one sector (64K bytes); 100,000 erase/write cycles.	
EEPROM	2048 Bytes (8 block, each block contains 256byte) Data retention > 100 years; 1,000,000 erase/write cycles	
NVRAM	31 Bytes (battery backup, data valid up to 10 year)	
RTC (Real Time Clock)	Yes; Seconds, minutes, hours, date of the month; month, year, valid up from 1980 to 2079	
64-bit Hardware Serial Number	No	
Built-in Watchdog Timer	Yes	
<b>■ Communication Interface</b>		
COM1	RS-232 or RS-485 ( jumper select(JP1), default is RS-232) RS-232 (TXD, RXD, RTS, CTS, DTR, DSR, DCD, RI, GND) RS-485 (D1+, D1-) 16 bytes FIFO	
COM2	RS-485 (D2+, D2-), 16 bytes FIFO	
COM3	RS-232 (TXD3, RXD3, GND), 1 byte FIFO	
COM4	RS-232 (TXD4, RXD4, GND); Program download port; Can be used as general purpose RS-232 port, 1 byte FIFO	
<b>■ COM Port Formats</b>		
Communication Speed	115200bps max. for all ports	
<b>■ LED Display</b>		
5-Digit 7 Segment LED Display	--	Yes
System LED Indicator	Yes, one red LED	
<b>■ Hardware Expansion</b>		
I/O expansion bus	No	
User defined I/O pins	No	
<b>■ Dimensions</b>		
L x H x D (mm)	119 x 72 x 33	
<b>■ Operating Environment</b>		
Operating Temperature	-25°C to +75°C (-13° F to +167° F)	
Storage Temperature	-40°C to +80°C (-40° F to +176° F)	
Humidity	5% ~ 90%, non-condensing	
<b>■ Power</b>		
Protection	Power reverse polarity protection	
Required Supply Voltage	+10 to +30VDC (non-regulated)	
Power consumption	2W	3W



▣ Ordering Information

Model Number	Description
<b>I-7188/512 CR</b>	Palm-size PAC, 512K flash, MiniOS7 (RoHS)
<b>I-7188D/512 CR</b>	Palm-size PAC, 512K flash, MiniOS7, 5-Digit 7-Segment LED display (RoHS)
<b>OEM Version</b>	
<b>I-7188/DOS/512 CR</b>	OEM Palm-size PAC, 512K flash, ROM-DOS (RoHS)
<b>I-7188D/DOS/512 CR</b>	OEM Palm-size PAC, 512K flash, ROM-DOS, 5-Digit 7 Segment LED display (RoHS)
<b>Optional Accessories</b>	
<b>PWR-24/110</b>	AC 110V input, flat type power adaptor
<b>GPSU06U-6</b>	Wall-plug power Adapter / 100-240VAC, 50/60Hz, 6W
<b>PWR-24/230R</b>	AC 230V input, round type power adaptor
<b>DIN-KA52F</b>	24V/2.5A 5V/0.5A DIN-Rail Mounting Power supply
<b>RU-87P1 / 2 / 4 / 8</b>	1 / 2 / 4 / 8 slots I/O expansion unit

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Palm-size PAC - μPAC

μPAC 7186 EX

μPAC 7186 EG

μPAC 7186 XG

μPAC 7186 XB

i-7188 E

i-7188 G

i-7188 X