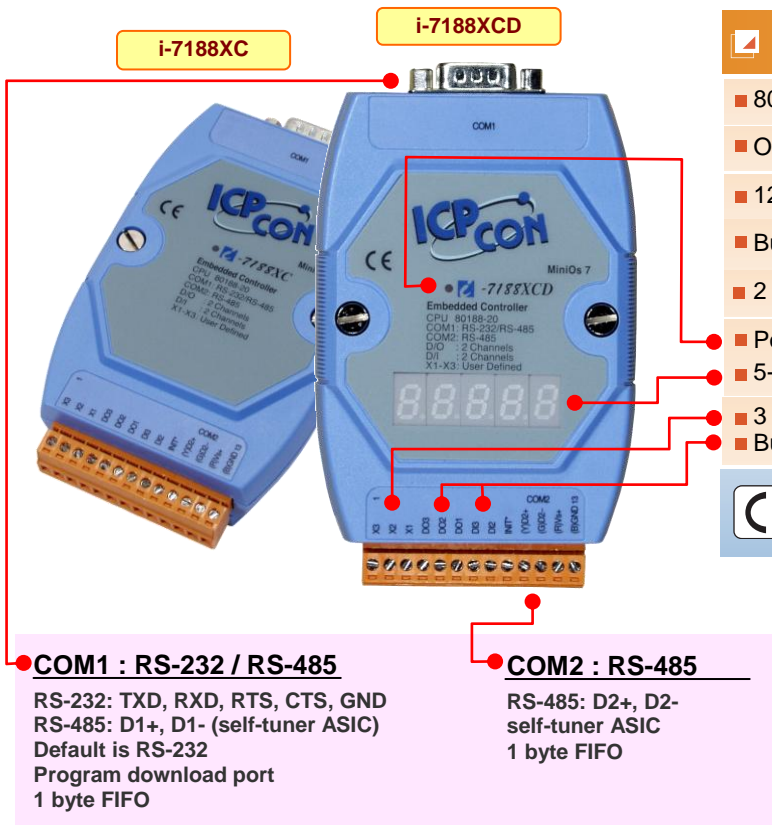


i-7188XC / i-7188XCD

Palm-size PAC – with 2 DI / 3 DO



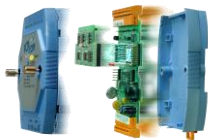
- ### Main Features
- 80188-20 embedded CPU
 - OS: MiniOS7
 - 128K SRAM, 512K Flash
 - Built-in RTC, 31B NVRAM, 2048B EEPROM
 - 2 COM ports : RS-232/RS-485, RS-485
 - Power / Communication Indicator red LED
 - 5-digit 7-segment LED Display
 - 3 user defined Pins via X-board
 - Built-in 2 DI & 3 DO channels



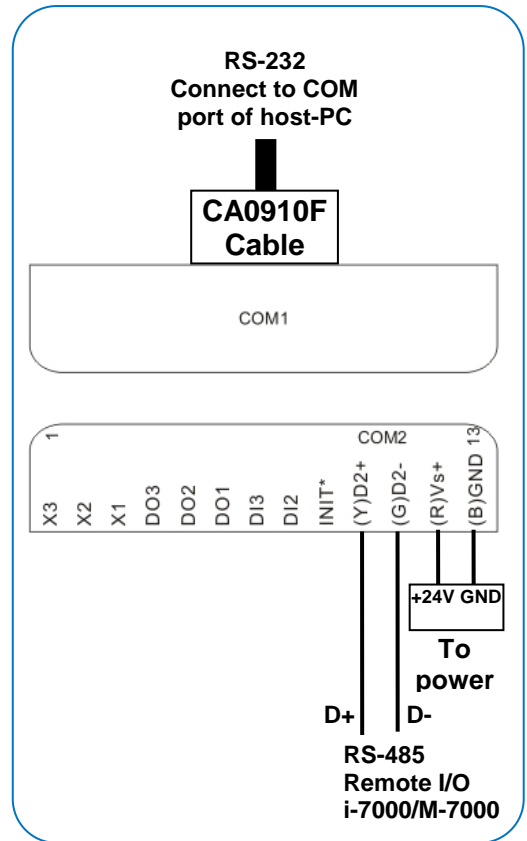
- COM1 : RS-232 / RS-485**
RS-232: TXD, RXD, RTS, CTS, GND
RS-485: D1+, D1- (self-tuner ASIC)
Default is RS-232
Program download port
1 byte FIFO
- COM2 : RS-485**
RS-485: D2+, D2- self-tuner ASIC
1 byte FIFO

Features

- Built-in Watch dog timer
- Built-in power protection circuit
- Built-in internal self-tuner ASIC controller on RS-485 port
- Easy use software development toolkits
- COM driver support interrupt & 1K QUEUE Input / Output buffer
- Built-in 2 digital input channels & 3 open-collector output channels
- Program language : TC/ TC++/BC/MSC/MSVC
- Program download port: COM1
- Re-loadable OS, software & programs
- Support remote telephone line or radio modem applications
- built-in one expansion bus to add-on an expansion board



Pin Assignments & Wiring



Expansion Board Selection Guide

Category:	X-Boards:									
Prototype, Testing	X000	X001	X002	X003						
DI/O, photo mos, PWM, Timer/Counter.	X100	X101	X102	X103	X104	X105	X106	X119	X400	
A/D, D/A, DI/O	X200	X300	X301	X302						
RS-232/485	X500	X501	X502							
Flash ROM	X600	X601								
Battery Backup SRAM	X607	X608								

Specifications Series : Palm-size PAC > 1st Generation > i-7188X > i-7188XC/7188XCD

PACs	i-7188XC	i-7188XCD
■ CPU		
CPU	80188, 20MHz or compatible	
SRAM	128K 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	
■ Communication Interface		
COM1	RS-232 or RS-485 (default is RS-232) RS-232 (TXD, RXD, RTS, CTS, GND) RS-485 (D1+, D1-, self-tuner ASIC inside) 1 byte FIFO	
COM2	RS-485 (D2+, D2-, self-tuner ASIC inside), 1 byte FIFO	
■ COM Port Formats		
Communication Speed	115200bps max. for all ports	
■ LED Display		
5-Digit 7 Segment LED Display	--	Yes
System LED Indicator	Yes, one red LED	
■ Hardware Expansion		
I/O expansion bus	Yes	
User defined I/O Pins	3 Pins, user defined through X-board	
■ Dimensions		
L x H x D (mm)	119 x 72 x 33	
■ Operating Environment		
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	
■ Power		
Protection	Power reverse polarity protection	
Required Supply Voltage	+10 to +30V/DC (non-regulated)	
Power consumption	2W	3W



Ordering Information

Model Number	Description
I-7188XC-512 CR	Palm-size PAC, 80188-20 CPU, 512K Flash, 128K SRAM, MiniOS7 (RoHS)
I-7188DXCD-512 CR	Palm-size PAC, 80188-20 CPU, 512K Flash, 128K SRAM, MiniOS7, LED display (RoHS)
OEM Version	
I-7188XC/512/RTC CR	Same as i-7188XC-512 CR, but with RTC and NVRAM (RoHS)
I-7188XCD/512/RTC CR	Same as i-7188XC-512 CR, but with RTC and NVRAM, 5-Digit 7 Segment LED display (RoHS)
Options & Accessories	
DIN-540A/DIN-KA52F	Power supply; DIN-540A: 42Amp / DIN-KA52F: 1.05Amp
GPSU06U-6	Wall-plug power Adapter / 100-240VAC, 50/60Hz, 6W
PWR-24/110	AC 110V input, flat type power adaptor
GPSU06U-6	Wall-plug power Adapter / 100-240VAC, 50/60Hz, 6W
RU-87P1 / 2 / 4 / 8	1 / 2 / 4 / 8 slots I/O expansion unit
X10x ~ X30x / X400	X-board for D/I, D/O, A/D, D/A, PWM expansion: X10x~X30x; for Timer/Counter: X400
X50x	X-board for RS-232/ RS-485
X600 / X601	X-board for NAND Flash memory expansion: X600(4M), X601(8M)
X607 / X608	X-board for battery backup SRAM memory expansion: X607(Wide 128K), X608(512K)
X-Board	Detail information for add-on expansion boards refer to expansion board selection guide

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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