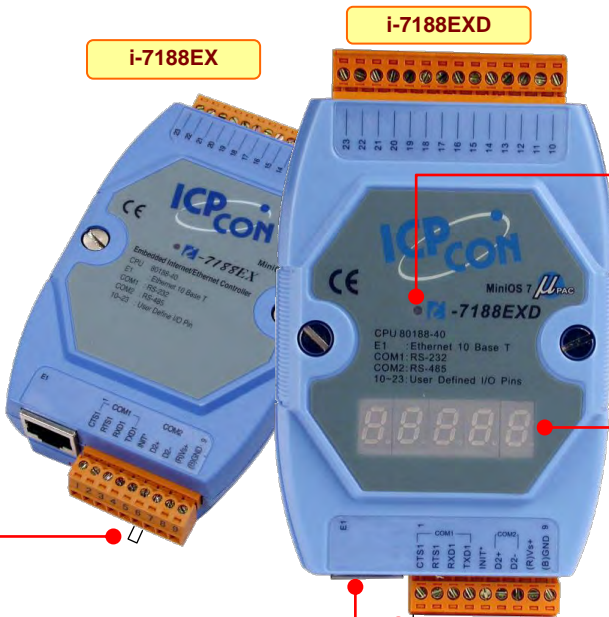


i-7188EX / i-7188EXD

Ethernet PAC – with I/O expansion bus

3

Palm - size PAC - µPAC



Main Features

- 80188-40 embedded CPU
- 10BASE-T NE2000 compatible Ethernet
- OS: MiniOS7
- 512K SRAM, 512K Flash, 2K EEPROM
- Built-in RTC, NVRAM, EEPROM
- COM port : RS-232, RS-485
- Built-in I/O expansion bus to insert an X-Board
- Power / Communication Indicator LED
- 5-digit 7-segment LED Display



Ethernet Port : 10 Base-T

To PC (Program download)
Modbus TCP/RTU/ASCII
TCP, UDP, IP, ICMP, ARP

COM1 : RS-232

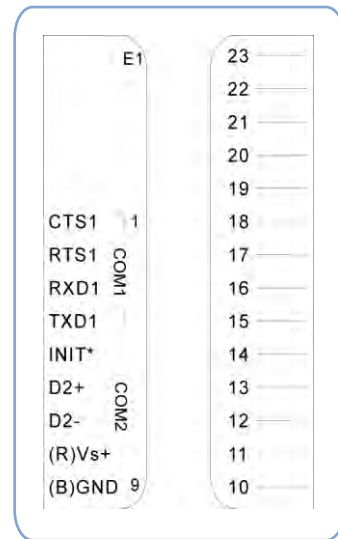
To PC (Program download)
Modbus TCP/RTU/ASCII

COM2 : RS-485

(D/A, A/D, DI/O, Relay, Counter, Frequency)

- Remote I/O module: **I-7000** (DCON Protocol)
M-7000 (Modbus Protocol)
- I/O Expansion Unit: **RU-87Pn + i-87K I/O module** (High profile)
I-87Kn + i-87K I/O module (Low profile)

Pin Assignments



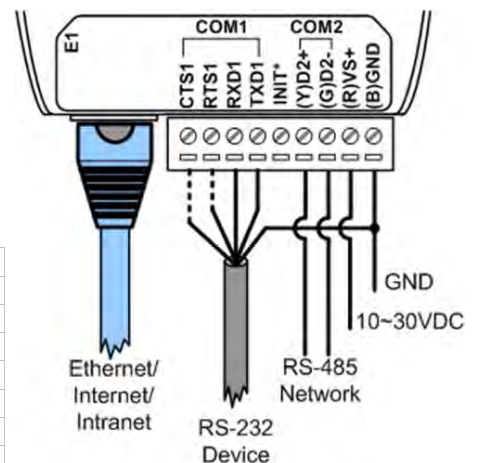
Features / Applications

- Supports a variety of TCP/IP features, including TCP, UDP, IP, ICMP, ARP
- Re-loadable OS, software, application programs
- Remote Configuration / Maintenance
- Diagnostics
- 64-bit hardware unique serial number inside
- COM driver support interrupt & 1K QUEUE Input & Output buffer
- 14 user defined I/O lines via X-board
- Built-in self-tuner ASIC controller on RS-485 port
- Program download port: COM1 or Ethernet Port

Expansion Board Selection Guide

Category:	X-Boards:						
DI/O, photo mos, PWM	X107	X109	X110	X111	X116	X119	
A/D, D/A, DI/O	X202	X203	X303	X304	X305	X308	X310
Prototype, Testing	X002	X004	X005	X006			
RS-232/485	X503	X504	X505	X506	X511		
RS-232/485/422, DI/O	X507	X508	X509	X510	X510-128	X518	
Flash ROM	X600	X601					
Battery Backup SRAM	X607	X608					
Motion Control	X702	X703					

Wiring



Specifications

Series : Palm-size PAC > 1st Generation > i-7188E > i-7188EX/EXD

PACs	i-7188EX	i-7188EXD
■ CPU		
CPU	80188, 40MHz or compatible	
SRAM	512K bytes	
Flash Memory	512K bytes	
EEPROM	2K Bytes	
NVRAM	31 Bytes (battery backup, data valid up to 10 year)	
RTC (Real Time Clock)	Yes	
64-bit Hardware Serial Number	Yes	
Built-in Watchdog Timer	Yes	
■ Communication Interface		
COM1	RS-232 (TXD, RXD, RTS, CTS, GND); Non-isolation	
COM2	RS-485 (D2+, D2-); self-tuner ASIC inside; Non-isolation	
Ethernet Port	10BASE-T NE2000 compatible Ethernet Controller	
■ COM Port Formats		
Baud rate	115200 bps Max.	
Data bit	7, 8	
Parity	Even, Odd, None	
Stop bit	1	
■ LED Display		
5-Digit 7 Segment LED Display	--	Yes
System LED Indicator	Yes	
■ Hardware Expansion		
I/O expansion bus	Yes	
User defined I/O pins	14 pins	
■ Dimensions		
L x H x D	123mm x 72mm x 33mm	
■ Operating Environment		
Operating Temperature	-25°C to +75°C	
Storage Temperature	-40°C to +80°C	
■ 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-7188EX CR	10M Ethernet palm-size PAC, 80188-40 CPU, MiniOS7, 512K SRAM (RoHS)
I-7188EXD CR	10M Ethernet palm-size PAC, 80188-40 CPU, 512K SRAM, LED display (RoHS)

Art. No. 113955 I-7188EX-512-CR

Art. No. 123314 I-7188EXD CR

Optional Accessories	
PWR-24/110	Wall-plug power Adapter / 110VAC, 60Hz, 4.8W
GPSU06U-6	Wall-plug power Adapter / 100-240VAC, 50/60Hz, 6W
DIN-KA52F	1.05 Amp. DIN-Rail Mounting Power supply
X002 / X005 / X006 CR	Add on X-Board, Prototype Board (RoHS)
X600 CR / X601 CR	4 Mega / 8 Mega Bytes NAND Flash memory expansion Board
X607 CR / X608 CR	X-Board SRAM, 128K / 512K battery backup SRAM (RoHS)
I/O Expansion Boards	Other add-on expansion boards refer to expansion board selection guide
RU-87P1 / 2 / 4 / 8	1 / 2 / 4 / 8 slots I/O expansion unit
NS-208 CR / NS-205 CR	Industrial Ethernet Switch, unmanaged 8-Port / 5-port, 10/100 Base-T with Plastic Case (RoHS)