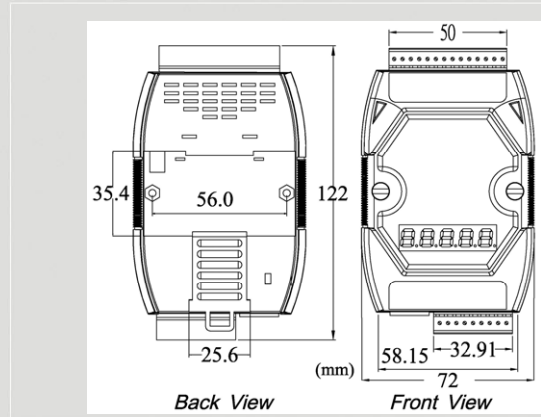# ICP DAS

CAN Series Products

CAN bus series Programmable Automation Controller

RoHS CE FC

µPAC-7186EXD-CAN

Dimensions

The µPAC-7186EXD-CAN PACs (programmable Automation controller) are powered by 80188-80 processor with 512K bytes of static RAM, and 512K bytes of Flash memory. All of them provide several communication interfaces to adapt to various applications, such as CAN port, RS-232 port, RS-485 port and Ethernet interface. Uses can program their application program flexibly with C/C++ language because of the built-in MiniOS7 operation system. It is useful for transfer the command from differential communication interface. Therefore, the µPAC-7186EXD-CAN series PACs are economic and convenient solution for diversification CAN application.

Features

- High reliability in harsh environment
- Embedded MiniOS7, anti-virus
- Supports a variety of TCP/IP features, including TCP, UDP, IP, ICMP, ARP
- 10/100BASE-T NE2000 compatible Ethernet Controller Support both CAN 2.0A and CAN 2.0B
- Remote Configuration
- Support for Virtual COM configuration
- 1000 VDC voltage protection on CAN side.
- Compatible with CAN specification 2.0 parts A and B.
- Programmable transfer rate up to 1 Mbps.
- Jumper for 120Ω terminator resistor for CAN channel
- 64-bit hardware unique serial number inside
- COM driver support interrupt & 1K QUEUE Input & Output buffer
- COM port: COM1, COM2
- Built-in RTC, NVRAM, EEPROM
- Built-in self-tuner ASIC controller on RS-485 port
- 7-segment LED display.
- Program download port: COM1 or Ethernet Port (Available soon)
- Free easy-to-use software development toolkits
- Support the CAN bus instead of the X-bus, so it can not be add-on any X-board

Wiring and Pin Assignments
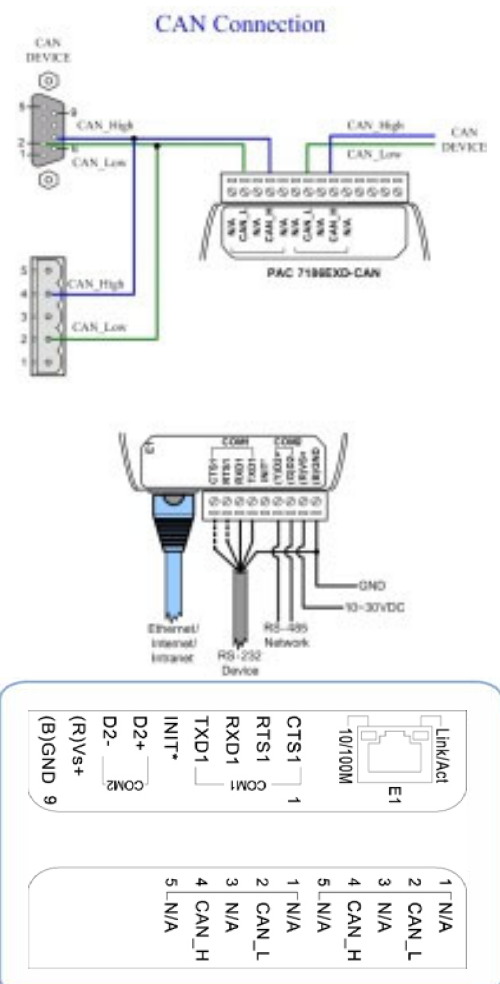
Hardware Specifications

PACs	µPAC-7186EXD-CAN
Core specification (64 bit hardware serial number, built-in Watchdog Timer)	
CPU	Am188™ES: 80M Hz or compatible
FLASH	512K bytes, Erase unit is one sector (64K bytes); 100,000 erase/write cycles
SRAM	512K bytes
EEPROM	16K bytes (64 blocks, each block has 256 bytes); Data retention > 100 years; 1,000,000 erase/write cycles.
NVSRAM	31 bytes, battery backup, data valid up to 10 years
Real Time Clock	Year-2000 compliance; seconds, minutes, hours, date of the month, year, valid up from 1980 to 2079
CAN Interface	
CAN Signal Support	CAN_H, CAN_L
CAN Controller	Philips SJA1000T CAN Controller
CAN Transceiver	Philips 82C250 CAN Transceiver
Protection	1000 VDC power protection on CAN side, 2500Vrms photo-couple isolation on CAN bus
Clock Frequency	16MHz (Transmission Speed : 1 M bps)
Ethernet	**10/100M Base-TX (Auto-negotiating, Auto MDIX, LED indicator)**
Serial COM Interface	
COM1	RS-485: D1+, D1-, self-tuner ASIC inside
COM2	RS-485: D2+, D2-, Self-tuner inside RS-232: TXD, RXD, RTS, CTS, GND
Communication Speed	115200 max
LED Display	
Program LED	L1, L2, L3
System LED	Power/Communication indicator
LED Directors	L1, L2, L3
Display	7-segment LED: 5digit
Operating Environment	
Operating Temp.	-25C to 75C
Storage Temp.	-30C to 85C
Humidity	5 ~ 95%
General	
Protection	Power reverse polarity protection
Frame Ground	Yes (4KV ESD)
Required Power Voltage	+10VDC to +30VDC (non-regulated)
Power Consumption	3W
Dimensions	122mm x 72mm x 33 mm (H x W x D)
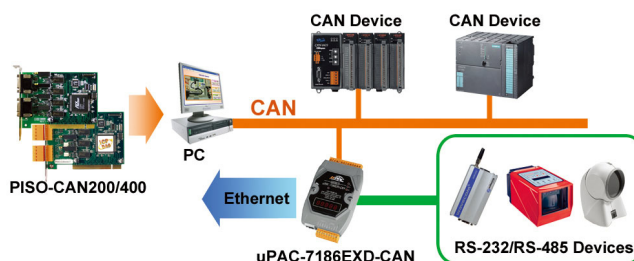
Ordering Information

µPAC-7186EXD-CAN	Programmable automation controller with two series communication port (RS-232/RS-485), one CAN port, one Ethernet port, 7-segment Display, 4 programmable LEDs, 512K flash ,512K SRAM, developing tool kit, Minios7.
µPAC-7186EXD-CAN CR	Programmable automation controller with two series communication port (RS-232/RS-485), one CAN port, one Ethernet port, 7-segment Display, 4 programmable LEDs, 512K flash ,512K SRAM, developing tool kit, Minios7. (RoHS)