



**Model: I-7188E8**



**Model: I-7188E8D**

## I-7188E8/I-7188E8D

Internet Embedded Controller



Certification

### Introduction

The I-7188EX, Embedded Internet/Ethernet Controller, focuses in Embedded Control applications while the I-7188EN, Internet Communication Controller, focuses in communication applications. According to different embedded firmware and application program, the Internet Communication Controller can be used as Device Server or Addressable Ethernet to RS-232/485/422 Converter or Embedded Internet/Ethernet Controller. The user should refer to comparison table to choose optimal product. Now we offer wide range Internet Communication Controllers, such as I-7188E1 / E2 / E3 / E4 / E5 / E8. Except the RTC circuitry, the basic hardware of I-7188EN is similar to I-7188EX. Since there are too many configurations for I-7188EN series product, OEM or ODM version is welcomed. Can be used as Addressable Ethernet to RS-232/485/422 Converter.

Most RS-232/485/422 devices don't support device address. The I-7188EN series can assign a unique address to any RS-232 device installed in the Ethernet network. Host-PC can send command with device address to Ethernet network, the destination I-7188EN will remove the address field & pass the other fields of command to its local RS-232 device. The response of this local RS-232 device will be passed to host-PC via this destination I-7188EN.

The i-7188EN series can be used as Ethernet to RS-232/485/422 Device Server. The Device Server is an appliance that network enables any device with a serial communication port. By virtue of its independent operating system, protocol independence, small size and flexibility, Device servers are able to meet the demand of virtually any network-enable application. Most devices don't have network ports. Our Internet Communication Controllers allow those devices to become connected to the network.

The hardware and software of i-7188EN is similar to i-7188EX, the i-7188EN also can be used as Embedded Internet/Ethernet Controller except the RTC (Real Time Clock). The user can use well-developed libraries and demo programs to implement an Embedded Internet/Ethernet Controller.

### Features

- AMD 80188-40 Embedded CPU, or compatible
- Supports a variety of TCP/IP features, including TCP, UDP, IP, ICMP, ARP
- 10BASE-T NE2000 compatible Ethernet Controller
- Reloadable Operating Software
- Remote Configuration
- Diagnostics
- COM driver support interrupt & 1K QUEUE Input & Output buffer
- Support serial port
- Built-in EEPROM

- Built-in self-tuner ASIC controller on RS-485 port
- support seven RS-232 ports and one RS-485 port
- 7-segment LED display for I-7188E8D
- Built-in MiniOS7
- Program download port: COM1 or Ethernet Port

## Applications

- Factory Automation
- Building Automation
- Home Automation

## Specifications

### CPU

CPU	80188, 40MHz or compatible
SRAM	384K bytes
Flash Memory	512K bytes
EEPROM	2K Bytes
Built-in Watchdog Timer	Yes

### Communication Interface

COM1	RS-232 (TXD, RXD, RTS, CTS, GND)
COM2	RS-485 (D2+, D2-)
COM3	RS-232 (TXD, RXD, GND)
COM4	RS-232 (TXD, RXD, GND)
COM5	RS-232 (TXD, RXD, GND)
COM6	RS-232 (TXD, RXD, GND)
COM7	RS-232 (TXD, RXD, GND)
COM8	RS-232 (TXD, RXD, GND)
Ethernet Port	10BASE-T NE2000 compatible Ethernet Controller

### COM Port Formats

Data bit	7, 8
Parity	Even, Odd, None
Stop bit	1
Baud Rate	115200 bps Max.

### LED Display

5-Digit 7 Segment LED Display	Yes (for I-7188E8 only)
System LED Indicator	Yes

### Dimensions

I-7188E8(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 for I-7188E8 3W for I-7188E8D

## Ordering information

I-7188E8	I-7188E8D without LED display
I-7188E8D	Internet communication controller with seven RS-232, one RS-485 and one Ethernet

I-7188E8 CR I-7188E8D without LED display (RoHS)

I-7188E8D CR Internet communication controller with seven RS-232, one RS-485 and one Ethernet (RoHS)