# ICP DAS

# I-7188E3/I-7188E3D

Programmable Ethernet to 3x serial ports converter

## Features

- Incorporates any RS-232/422/485 serial device in Ethernet
- Data transmission via Virtual COM or raw TCP connection
- VxComm Utility supports 32/64-bit Windows 7 SP1/10/2012/2016
- Built-in High-Performance MiniOS7 from ICP DAS
- Watchdog Timer suitable for use in harsh environments
- Palm-Sized with multiple Serial Ports
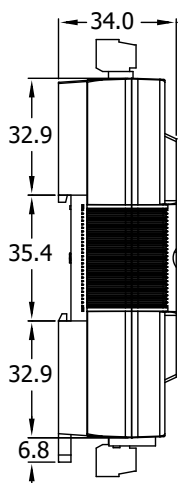- Power Reverse Polarity Protection

## Introduction

The I-7188EN series is a family of Programmable Device Servers, also known as "Serial-to-Ethernet gateway", that are designed for linking RS-232/422/485 devices to an Ethernet network. The user-friendly VxComm Driver/ Utility allows users to easily turn the built-in COM ports of the I-7188EN series into standard COM ports on a computer. By virtue of its protocol independence, a small-core OS and high flexibility, the I-7188EN series is able to meet the demands of every network-enabled application.
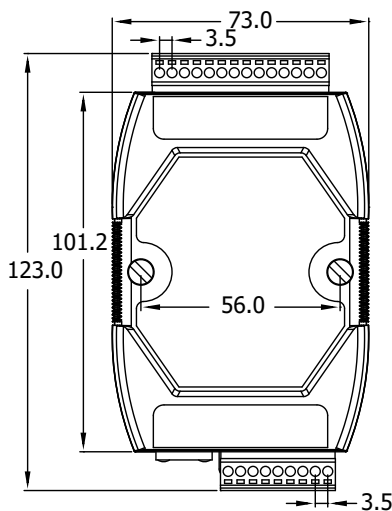
The I-7188EN series includes a powerful and reliable Xserver programming structure that allows you to design your robust Ethernet applications in one day. The built-in high-performance MiniOS7 boots the I-7188EN up in just one second and gives you the fastest responses.

The I-7188E3(D) is equipped with 1 RS-232 port, 1 RS-422 port and 1 RS-485 port. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.
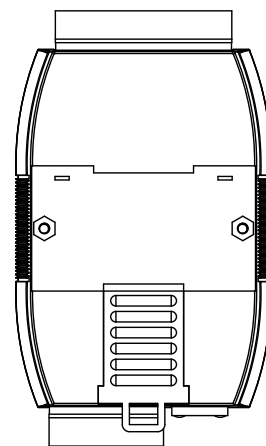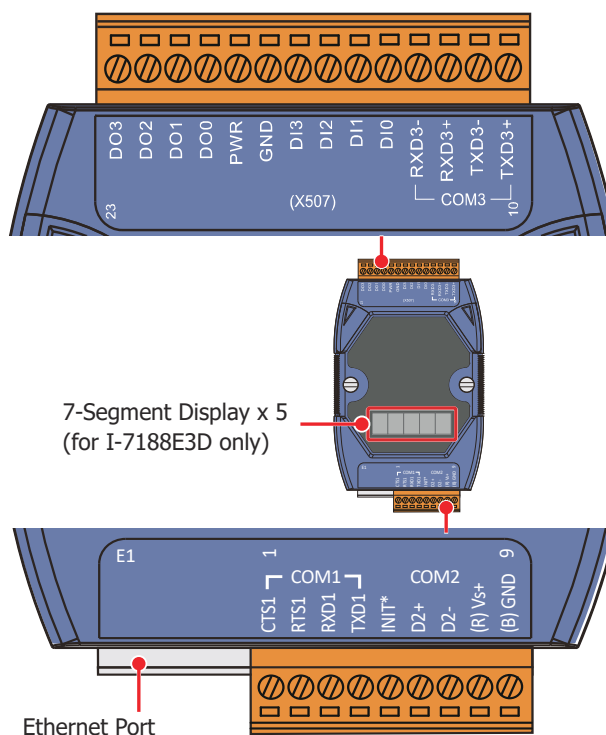
## Apparances



7-Segment Display x 5 (for I-7188E3D only)

Ethernet Port

## Dimensions (Units: mm)



Left Side View

Front View

Rear View

## ■ Specifications

| Models | I-7188E3 | I-7188E3D |
|---|---|---|
| **CPU Module** | | |
| CPU | 80188, 40MHz or compatible | |
| SRAM | 384 KB | |
| Flash | 512 KB | |
| EEPROM | 2 KB | |
| Watchdog Timer | 0.8 second | |
| **Communication Interface** | | |
| COM1 | RS-232 (TXD, RXD, RTS, CTS, GND) | |
| COM2 | RS-485 (D+, D-) | |
| COM3 | RS-422 (TXD+, TXD-, RXD+, RXD-) | |
| Ethernet Port | 10BASE-T NE2000 compatible Ethernet Controller | |
| **COM Port Format** | | |
| Data Bit | 7, 8 | |
| Parity | Even, Odd, None | |
| Stop Bit | 1 | |
| Baud Rate | 115200 bps Max. | |
| **LED Indicator** | | |
| 7-Segment Display | - | Yes |
| System LED Indicator | Yes | |
| **Digital Input** | | |
| Input Channels | 4 | |
| On Voltage Level | Wet: +3.5 $V_{DC}$ ~ +30 $V_{DC}$ <br> Dry: Close to GND | |
| Off Voltage Level | Wet: +1 $V_{DC}$ Max. <br> Dry: Open | |
| **Digital Output** | | |
| Output Channels | 4 | |
| Output Type | Open-collector | |
| Max Load Current | 100 mA | |
| Load Voltage | +30 $V_{DC}$ Max. | |
| **Mechanical** | | |
| Dimensions (W x L x H) | 123 mm x 73 mm x 34 mm | |
| **Operating Environment** | | |
| Operating Temperature | -25 °C ~ +75 °C | |
| Storage Temperature | -40 °C ~ +80 °C | |
| Humidity | 5 ~ 95% RH, non-condensing | |
| **Power** | | |
| Protection | Power reverse polarity protection | |
| Power requirement | 10 ~ 30 $V_{DC}$ | |
| Power consumption | 2 W | 3 W |

## ■ Ordering Information

| | |
|---|---|
| I-7188E3 CR | Programmable Ethernet to 3x serial ports converter (1x RS-232, 1x RS-422 and 1x RS-485) (RoHS) |
| I-7188E3D CR | Programmable Ethernet to 3x serial ports converter (1x RS-232, 1x RS-422 and 1x RS-485) with LED display (RoHS) |

## ■ Accessories

| | |
|---|---|
| MDR-20-24 CR | Power Supply, 85~264 $V_{AC}$ to 24 $V_{DC}$/1 A, 24 W, DIN-rail mounting (RoHS) |
| GPSU06U-6 CR | Power Supply, 110~240 $V_{AC}$ to 24 $V_{DC}$/0.25 A, 6 W, two pins USA plug (RoHS) |