



**I-87120-G**

## **I-87120 (I-87KCAN)** 1 Port Programmable CAN Interface Module

### **Introduction**

CAN (Controller Area Network) is a serial bus control protocol especially suited to construct intelligent industry devices networks and build smart automatic control systems. It is popularly applied in the industrial automation, building automation, vehicle, marine, and embedded control network. In order to expand the CAN functions of ICPDAS products, I-87120 module is developed for this purpose. It is a kind of module, and need to be plugged into a host unit, such as I-8000 series MCU (Main Control Unit), WinCon-8000 and LinCon-8000. I-87120 give a way to connect these ICPDAS host unit with CAN network. Owing to the features of I-8000 series MCU, WinCon-8000 and LinCon-8000, these host units can be arranged to be a CAN converter, CAN slave device and CAN master device in a CAN network.

### **Applications**

- DeviceNet, CANopen, CAN J1939, SDS (System Wide Network) protocol application
- CAN bus communication application
- Industry automation
- Industrial Machinery
- Building Automation
- Food & Beverage
- Semiconductor Fabrication
- Control system

### **Features**

#### **Common Features:**

- One CAN port expansion for I-8000 series MCU (main control unit), WinCon-8000 and LinCon-8000
- 4096 records CAN message receive-buffer size.
- 4096 records buffer size for the command from I-8000 series MCU/ WinCon-8000/LinCon-8000 to I-87120
- Provide C/C++ function libraries to send and receive CAN messages.
- Demos and utility are provided.
- 3 indication LEDs (Rx, Tx and Err LEDs)

#### **CAN Port Features:**

- Support user-defined baud
- 2500 Vrms isolation
- Baud : 5Kbps, 10Kbps, 20Kbps, 25Kbps, 50Kbps, 100Kbps, 125Kbps, 200Kbps, 250Kbps, 500Kbps, 800Kbps, 1Mbps.

### **Hardware Specifications**

<b>Microcontroller</b>	80186, 80MHz
<b>CAN Controller</b>	Philip SJA1000 CAN controller
<b>CAN Transceiver</b>	Philip 82C250 CAN transceiver
<b>SRAM</b>	512K bytes
<b>Flash Memory</b>	512K bytes

<b>EERROM</b>	2K bytes
<b>Transmission Speed</b>	1 MBPS Max.
<b>External Clock</b>	16MHz
<b>Terminal Resister</b>	120Ω terminal resister selected by jumper ♣
<b>CAN bus interface</b>	ISO/IS 11898-2, 5-pin screw terminal with on-board optical isolators protection.
<b>Power Supply</b>	2W, Unregulated +10VDC to +30VDC
<b>Operating Temp</b>	-25C to 75C
<b>Storage Temp</b>	-30C to 85C
<b>Humidity</b>	5 ~ 95%
<b>Dimensions</b>	123 mm x 64.5 mm x 19.6 mm

## Ordering information

<b>I-87120 (I-87KCAN)</b>	Module with one programmable CAN port, I-8000/Wincon/Lincon CAN port library, 80186 80MHz CPU, 512K flash, 512K SRAM, 120Ω terminal resister selected by jumper.
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