



## I-7522A(D)/I-7524(D)/I-7527(D)

Addressable RS-485 to RS-232/RS-422/RS-485 Converter

### Features

- Built-in "Addressable RS-232 Converter" Firmware
- Responses from RS-232 devices can be addressable
- Supports Dual-Watchdog Commands
- Supports Power-up Value and Safe Value for DO
- Supports Real-time Monitoring/Control for the Onboard DI/DO
- Includes a 1KB Queue Buffer for Each RS-232 Interface
- Watchdog Timer Provides Fault Tolerance and Recovery
- Low Power Consumption
- R.O.C. Invention Patent No. 086674, No.103060, No. 132457



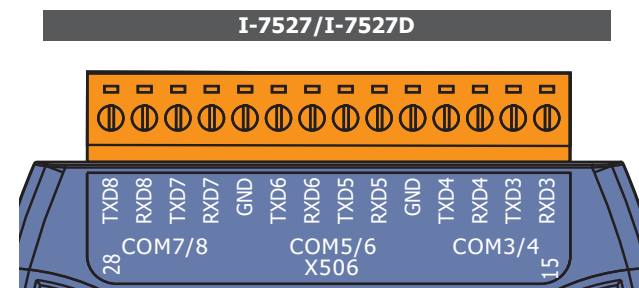
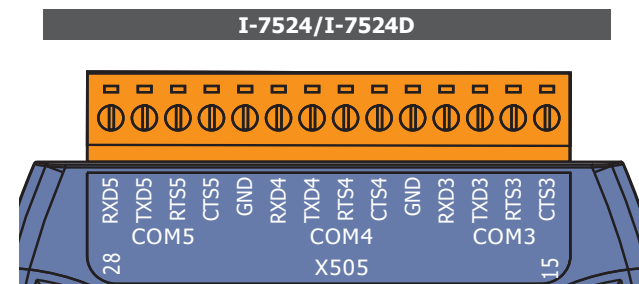
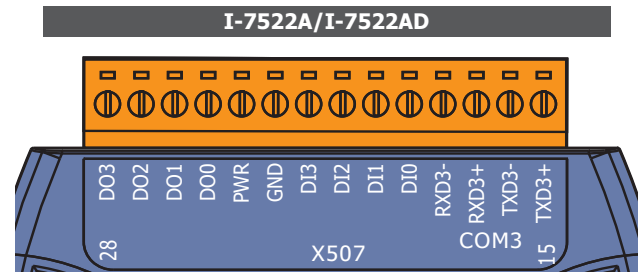
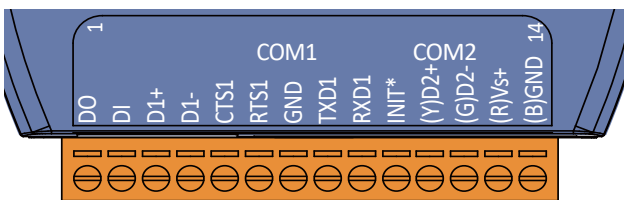
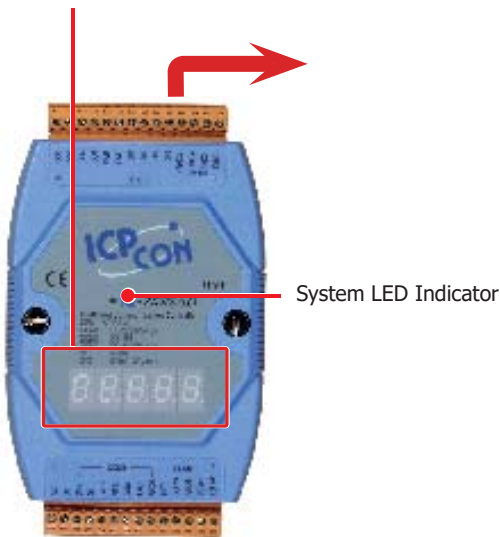
### Introduction

Most RS-232 devices don't support device addressing. The ICPDAS I-752n series assigns a unique address to any RS-232 device installed on an RS-485 network. When the Host PC sends a command with a device address to the RS-485 network, the destination I-752n module will remove the address field, and then pass the other commands to its local RS-232 devices. The response from the local RS-232 devices will be returned to the Host PC via the I-752n module.

ICP DAS I-752n products are unique in that they are a Master-type converter that use our R.O.C. Patent 086674, while most other converters are a Slave-type, which cannot operate without a Host PC. In real industrial applications, many users are not satisfied with Slave-type converters as they cannot be adapted to individual requirements.

### Appearances

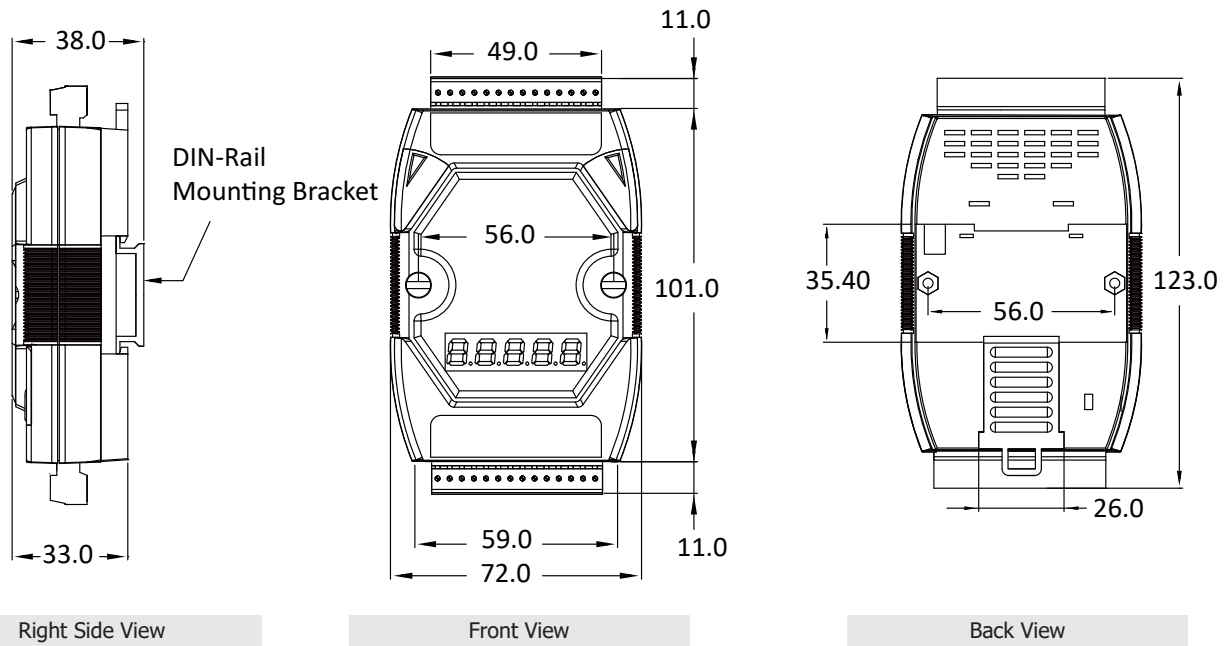
5 x Digit 7 Segment LED Display  
(for I-7522AD, I-7524D and I-7527D only)



## Specifications

| Model                          | I-7522A  | I-7522AD                            | I-7524 | I-7524D                | I-7527 | I-7527D |  |
|--------------------------------|--|-------------------------------------|--------|------------------------|--------|---------|--|
| <b>Software</b>                |  |                                     |        |                        |        |         |  |
| OS                             | MiniOS7  |                                     |        |                        |        |         |  |
| <b>CPU Module</b>              |  |                                     |        |                        |        |         |  |
| CPU                            | 80188 or compatible, 40 MHz  |                                     |        |                        |        |         |  |
| SRAM                           | 256 KB   |                                     |        |                        |        |         |  |
| Flash                          | 512 KB   |                                     |        |                        |        |         |  |
| EEPROM                         | 2 KB   |                                     |        |                        |        |         |  |
| Watchdog Timer                 | Yes  |                                     |        |                        |        |         |  |
| <b>Display</b>                 |  |                                     |        |                        |        |         |  |
| Digit 7 Segment LED Display    | -  | 5                                   | -      | 5                      | -      | 5       |  |
| <b>LED Indicator</b>           |  |                                     |        |                        |        |         |  |
| Status                         | 1 x System   |                                     |        |                        |        |         |  |
| <b>Communication Port</b>      |  |                                     |        |                        |        |         |  |
| Baud Rate                      | 115200 bps Max.  |                                     |        |                        |        |         |  |
| COM1                           | RS-232/RS-485 (RXD, TXD, RTS, CTS, GND for RS-232, Data+, Data- for RS-485 with self-tuner ASIC) |                                     |        |                        |        |         |  |
| COM2                           | RS-485 (Data+, Data-) with internal self-tuner ASIC  |                                     |        |                        |        |         |  |
| COM3                           | RS-422/RS-485 (TXD-, RXD-, TXD+, RXD+)   | RS-232<br>(RXD, TXD, RTS, CTS, GND) |        | RS-232 (RXD, TXD, GND) |        |         |  |
| COM4                           |  |                                     |        |                        |        |         |  |
| COM5                           |  |                                     |        |                        |        |         |  |
| COM6                           |  | -                                   | -      |                        |        |         |  |
| COM7                           |  |                                     |        |                        |        |         |  |
| COM8                           |  |                                     |        |                        |        |         |  |
| <b>Digital Input</b>           |  |                                     |        |                        |        |         |  |
| Channels                       | 5  |                                     | 1      |                        |        |         |  |
| Type                           | Non-isolated   |                                     |        |                        |        |         |  |
| Dry Contact, ON Voltage Level  | Close to GND   |                                     |        |                        |        |         |  |
| Dry Contact, OFF Voltage Level | Open   |                                     |        |                        |        |         |  |
| <b>Digital Output</b>          |  |                                     |        |                        |        |         |  |
| Channels                       | 5  |                                     | 1      |                        |        |         |  |
| Type                           | Open Collector   |                                     |        |                        |        |         |  |
| Load Voltage                   | +30 VDC Max.   |                                     |        |                        |        |         |  |
| Max. Load Current              | 100 mA   |                                     |        |                        |        |         |  |
| <b>Mechanical</b>              |  |                                     |        |                        |        |         |  |
| Dimension (W x H x D)          | 72 mm x 123 mm x 33 mm   |                                     |        |                        |        |         |  |
| Installation                   | DIN-Rail Mounting  |                                     |        |                        |        |         |  |
| <b>Environmental</b>           |  |                                     |        |                        |        |         |  |
| Operating Temperature          | -25 ~ +75 °C   |                                     |        |                        |        |         |  |
| Storage Temperature            | -40 ~ +80 °C   |                                     |        |                        |        |         |  |
| Humidity                       | 5 ~ 90 % RH, Non-condensing  |                                     |        |                        |        |         |  |
| <b>Power</b>                   |  |                                     |        |                        |        |         |  |
| Input Range                    | +10 ~ +30 VDC  |                                     |        |                        |        |         |  |
| Consumption                    | 2.0 W  | 3.0 W                               | 2.0 W  | 3.0 W                  | 2.0 W  | 3.0 W   |  |

## ■ Dimensions (Units: mm)



## ■ Ordering Information

|                    |  |
|--------------------|--|
| <b>I-7522A CR</b>  | Addressable RS-485 to 2 x RS-232/RS-422/RS-485 Converter with 5 DI and 5 DO (Blue Cover) (RoHS)                        |
| <b>I-7522AD CR</b> | Addressable RS-485 to 2 x RS-232/RS-422/RS-485 Converter with 5 DI, 5 DO and 7-Segment LED Display (Blue Cover) (RoHS) |
| <b>I-7524 CR</b>   | Addressable RS-485 to 4 x RS-232/RS-485 Converter with 1 DI and 1 DO (Blue Cover) (RoHS)                               |
| <b>I-7524-G CR</b> | Addressable RS-485 to 4 x RS-232/RS-485 Converter with 1 DI and 1 DO (Gray Cover) (RoHS)                               |
| <b>I-7524D CR</b>  | Addressable RS-485 to 4 x RS-232/RS-485 Converter with 1 DI, 1 DO and 7-Segment LED Display (Blue Cover) (RoHS)        |
| <b>I-7527 CR</b>   | Addressable RS-485 to 7 x RS-232/RS-485 Converter with 1 DI and 1 DO (Blue Cover) (RoHS)                               |
| <b>I-7527D CR</b>  | Addressable RS-485 to 7 x RS-232/RS-485 Converter with 1 DI, 1 DO and 7-Segment LED Display (Blue Cover) (RoHS)        |