



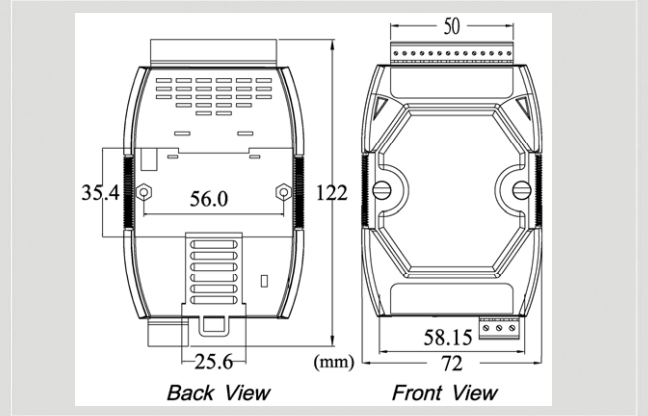
# CAN Series Products



## Two-channel CAN Bus Isolated Bridge



I-7532



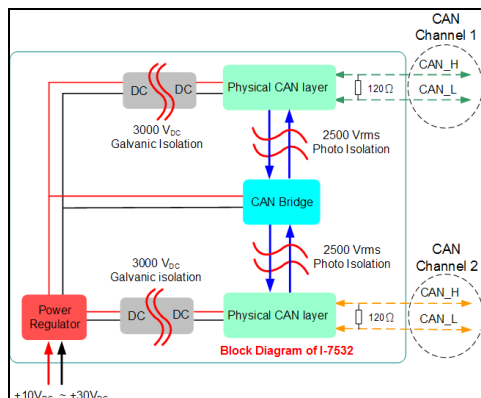
Dimensions

I-7532 is a CAN bridge used to establish a connection between two CAN bus systems in a CAN network and more functions are equipped than I-7531 (CAN Repeater). Three powerful features are provided by I-7532. First, the transmission distance limitation of the CAN bus system on each side of I-7532 are independent, which means the total CAN network distance can be extended. Second, when some errors (e.g. bit error) happened on one side of I-7532 of the CAN bus system; the other side can still work correctly. Last one, the baud rate and filter setting of these two CAN channels on I-7532 can be different for highly flexibility and efficiency.

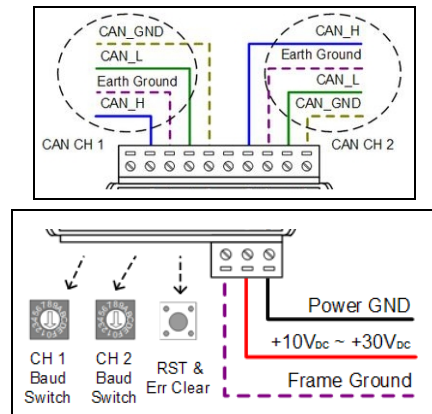
### Features

- 82C250 CAN transceiver
- 2500 Vrms photo coupler isolation on CAN side
- 3 kV galvanic isolation among the power supply and 2 CAN channels
- Support both CAN 2.0A and CAN 2.0B
- Fully compatible with the ISO 11898-2 standard
- Built-in jumper to select 120Ω terminal resistor
- Watchdog inside
- Up to 100 CAN nodes on each channel
- 768-frame buffer for each CAN channel
- Adjustable CAN bus baud rate from 5K bps to 1M bps or programmable user-defined baud rate
- Support CAN bus acceptance filter configuration

### Block Diagram



### Pin Assignments



### Baud Rate Selection

|              |             |                             |      |      |
|--------------|-------------|-----------------------------|------|------|
| Switch Value | 0           | 1                           | 2    | 3    |
| Baud [bps]   | Config Mode | 5k or User-defined CAN baud | 10k  | 20k  |
| Switch Value | 4           | 5                           | 6    | 7    |
| Baud [bps]   | 40k         | 50k                         | 80k  | 100k |
| Switch Value | 8           | 9                           | A    | B    |
| Baud [bps]   | 125k        | 200k                        | 250k | 400k |
| Switch Value | C           | D                           | E    | F    |
| Baud [bps]   | 500k        | 600k                        | 800k | 1M   |



## Hardware Specifications

| CAN Interface       |   |
|---------------------|---|
| Controller          | Microprocessor inside with 72MHz  |
| Transceiver         | NXP 82C250  |
| Channel number      | 2   |
| Connector           | 4-pin screwed terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H)                          |
| Baud Rate (bps)     | Adjustable CAN bus baud rate from 5Kbps to 1Mbps or programmable user-defined baud rate |
| Isolation           | 3000 V <sub>DC</sub> for DC-to-DC, 2500 V <sub>rms</sub> for photo-couple               |
| Terminator Resistor | Jumper for 120 Ω terminator resistor  |
| Specification       | ISO-11898-2, CAN 2.0A and CAN 2.0B  |
| Power               |   |
| Power supply        | Unregulated +10 ~ +30 V <sub>DC</sub>   |
| Protection          | Power reverse polarity protection, Over-voltage brown-out protection                    |
| Power Consumption   | 2 W   |
| Mechanism           |   |
| Installation        | DIN-Rail  |
| Dimensions          | 72mm x 122mm x 33mm (W x L x H)   |
| Environment         |   |
| Operating Temp.     | -25 ~ 75 °C   |
| Storage Temp.       | -30 ~ 80 °C   |
| Humidity            | 10 ~ 90% RH, non-condensing   |

## LED Indication



| PWR LED |              |
|---------|--------------|
| ON      | Comm. Mode   |
| FLASH   | Config. Mode |
| OFF     | Power off    |

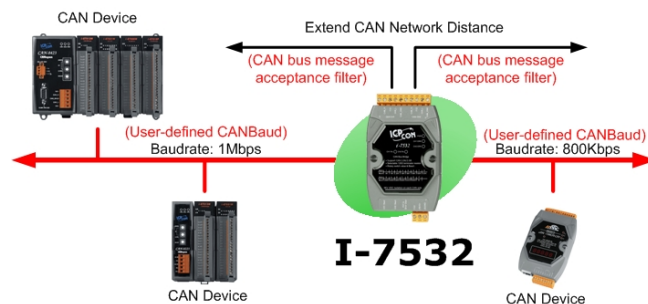
| ERR LED          |                   |
|------------------|-------------------|
| Flashing (100ms) | Transmission Fail |
| Flashing (1sec)  | Buffer Overflow   |
| ON               | Bus off           |
| OFF              | No error          |

| Rx LED            |                                |
|-------------------|--------------------------------|
| Flashing          | Transmission                   |
| ON (config. mode) | Configuration via this CAN Ch. |
| OFF               | Bus idle                       |

## RST & Err Clear Button

| Reset & Error Clear button |              |
|----------------------------|--------------|
| Click                      | Error clear  |
| Push (3sec)                | Module reset |

## Application



## Ordering Information

|           |  |
|-----------|--|
| I-7532 CR | Two-channel CAN Bus Isolated Bridge (RoHS) |
|-----------|--|