



I-7531-FD-G I-7531-FD-UTA-G

Two-channel Isolated CAN / CAN FD Signal Repeater

Features

- Supported CAN specification 2.0A/B and CAN FD
- Fully compatible with the ISO 11898-2 standard
- Detected CAN bus baud rate automatically, maximum support 8000 kbps
- Wide Operating Temperature Range:
 - Standrd Series: -25 ~ +75°C
 - UTA Series: -40 ~ +75°C

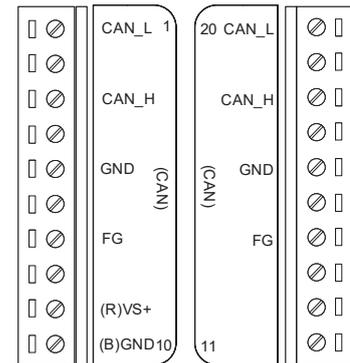


Introduction

The I-7531-FD is a CAN/CAN FD signal repeater, which can connect two or more CAN networks with the same baud rate. Based on the signal repeat function of I-7531-FD, users can use different numbers of I-7531-FD to combine tree-shaped and star-shaped CAN network topology, and when there are too many devices on the CAN network, using I-7531-FD can increase the driving force of the CAN signal to drive more CAN devices. In addition, the CAN side of the I-7531-FD has a digital isolation of 2500 Vrms, and the CAN side and the power side also provide 3000 V DC-DC isolation protection, which can effectively isolate the noise interference between CAN networks, and achieve protection the purpose of a specific CAN network.

Pin Assignments

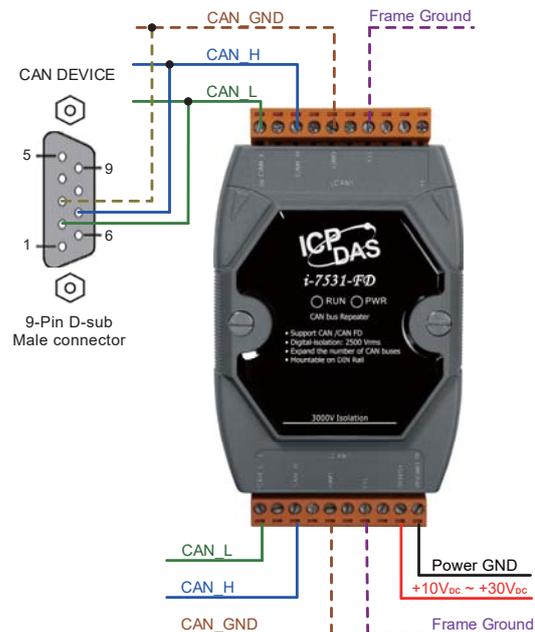
Pin	Name	Description
1	CAN_L	CAN_Low. Signal Line of CAN port 1.
3	CAN_H	CAN_High. Signal Line of CAN port 1.
5	GND	CAN_Ground (or CAN_GND), voltage level of ground of CAN_L and CAN_H in CAN port 1.
7	FG	Frame Groud.
9	(R)VS+	Power input +10VDC ~ +30VDC.
10	(B)GND	
14	FG	Frame Groud.
16	GND	CAN_Ground (or CAN_GND), Voltage level of ground of CAN_L and CAN_H in CAN port 2.
18	CAN_H	CAN_High. Signal Line of CAN port 2.
20	CAN_L	CAN_Low. Signal Line of CAN port 2.



Specifications

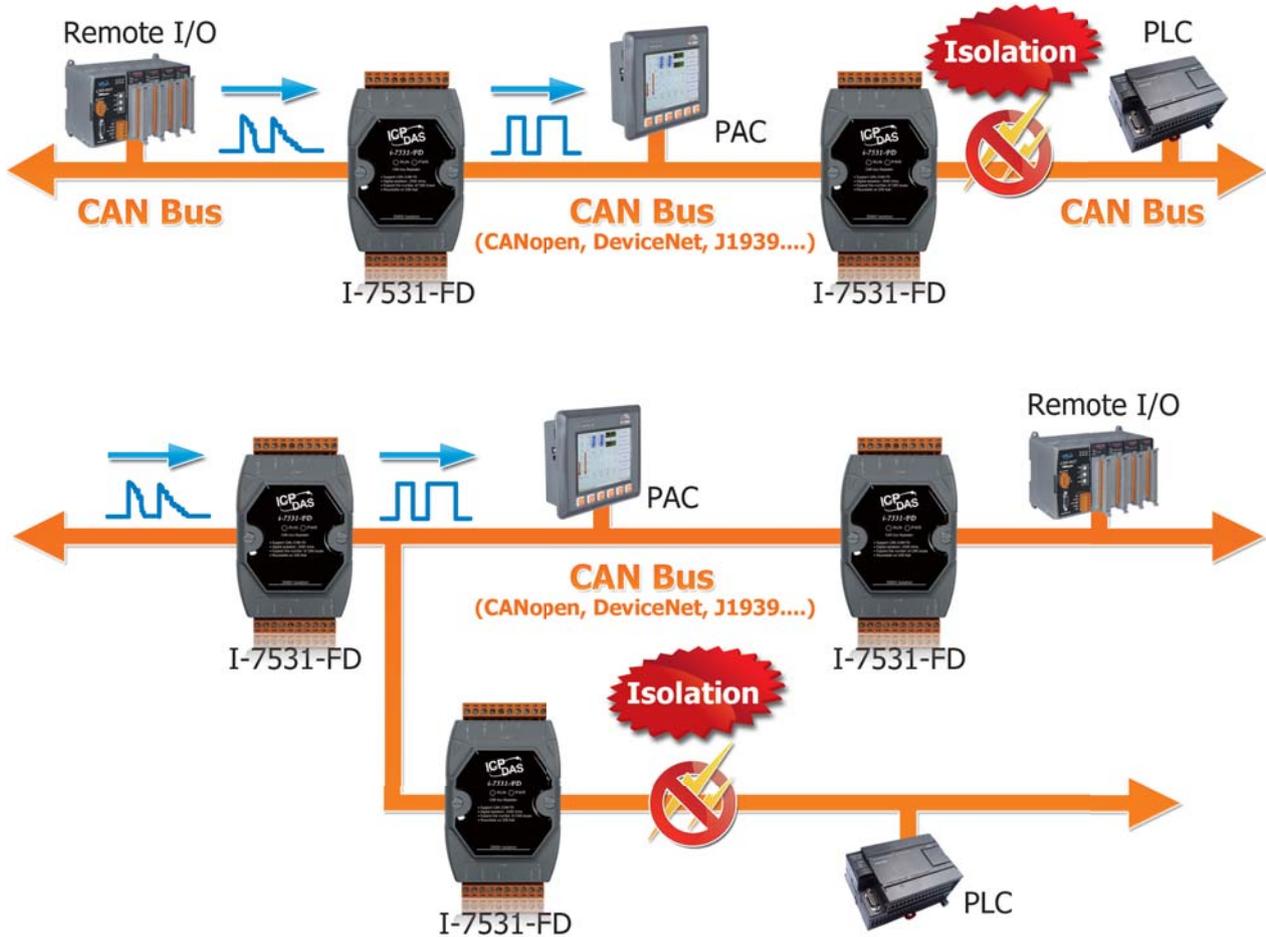
Model Name	I-7531-FD-G	I-7531-FD-UTA-G
CAN Ports	2	
Baud Rate	CAN bus: 5 k ~ 800 kbps CAN FD: Arbitration rate up to 1000 kbps, data rate up to 8000 kbps (Note) The data rates are verified by tests, but user-defined baud rates are possible, so the maximum data rate will depend on the concrete operating conditions (cable length, remote stations, etc.).	
Isolation	2500 Vrms for digital isolation, and 3000 V for DC-DC	
Terminal Resistor	Build in 120 Ω terminal resistor and support jumper to select	
Specification	ISO-11898-2, CAN 2.0A/B and CAN FD (CAN FD support ISO and Non-ISO standards)	
Time Delay	Typ. 175ns (corresponds to ~35m CAN bus length)	
Power		
Input Range	+10 VDC ~ +30 VDC	
Consumption	1 W	
Mechanical		
Casing	Plastic	
Dimensions (mm)	72 x 118 x 33 (W x L x H)	
Installation	DIN-Rail	
Environmental		
Operating Temperature	-25 ~ +75 °C	-40 ~ +75 °C
Storage Temperature	-30 ~ +80 °C	-40 ~ +80 °C
Humidity	10 ~ 90% RH, Non-condensing	

Wire Connections

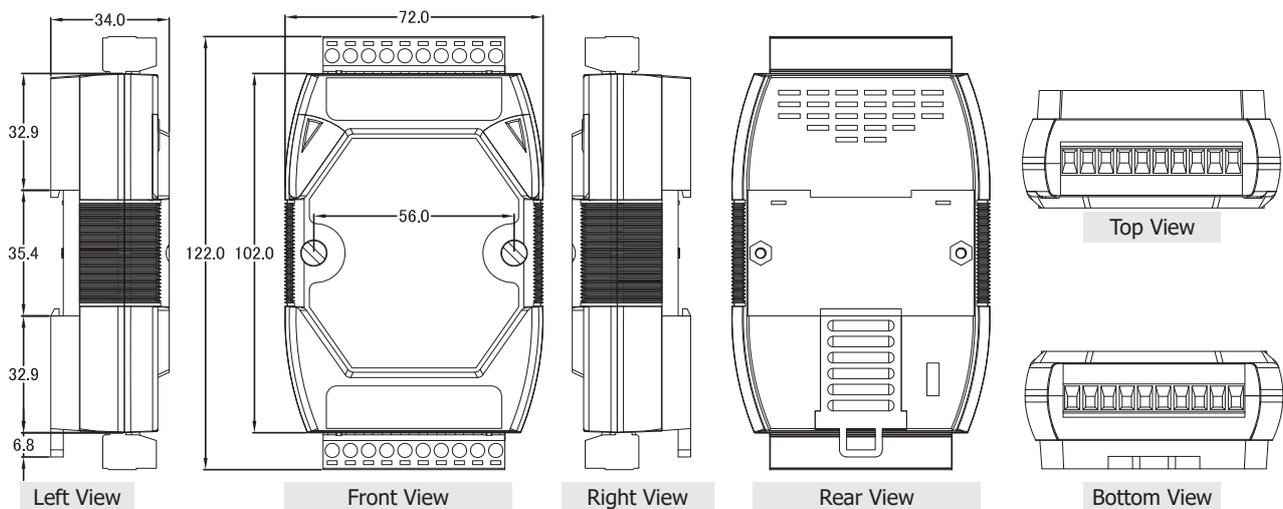


Applications

Single CAN Network



Dimensions (Units: mm)



Ordering Information

I-7531-FD-G CR	Two-channel Isolated CAN / CAN FD Signal Repeater (RoHS) (-25 to 75°C Operating Temperature)
I-7531-FD-UTA-G CR	Two-channel Isolated CAN / CAN FD Signal Repeater (RoHS) (-40 to 75°C Operating Temperature)