



I-2532

Industrial CAN to Fiber Converter

Features

- Compatible with CAN specification 2.0A and 2.0B
- Fully compatible with the ISO 11898-2 standard
- Support baud rate up to 500 kbps
- Jumper for 120 Ω terminal resistor of the CAN bus
- Fiber Port: ST (Multi-mode)
- Wave Length: 850 nm
- Detect baud rate automatically
- up to 100 nodes on CAN port
- Removable terminal block
- Mount easily on DIN-rail



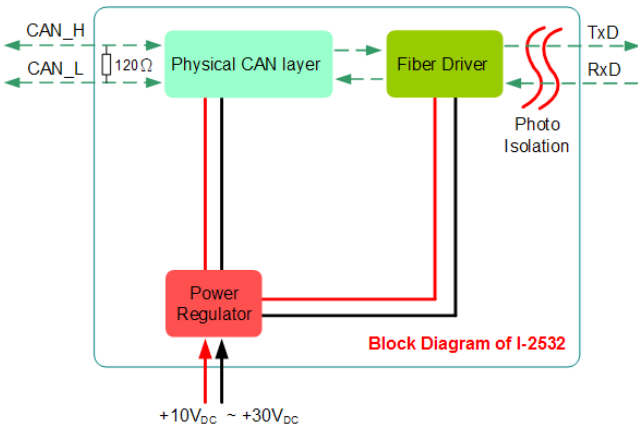
Introduction

The I-2532 is a CAN to fiber optic converter which secures CAN data transmission via fiber optic for providing immunity from EMI/RFI interference. It is used in CAN applications for transferring CAN bus signal from wire to fiber optic and vice versa, and is the perfect solution for applications where transmission must be protected from electrical exposure, surges, lightning or chemical corrosion.

Hardware Specifications

CAN Interface	
Connector	8-pin screwed terminal block (CAN_GND, CAN_L, CAN_H, N/A for others)
Baud Rate (bps)	10 k ~ 500 k
Transmission Distance (m)	Depend on baud rate
Terminal Resistor	Switch for 120Ω terminal resistor
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B
Fiber Interface	
Connector	ST (Multi-mode)
Wave Length	850 nm
Fiber Cable	50/125 μm , 62.5/125 μm, 100/140 μm (62.5/125μm is recommended)
Propagation Delay	125ns max (125ns delay shortens bus line length by ~ 25 m)
Transmission Distance (m)	1.4 km max (in 62.5/125 μm fiber cable)
LED	
Round LED	PWR LED, TD LED, RD LED
Power	
Power supply	Unregulated +10 ~ +30 V _{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	0.5 W
Mechanism	
Installation	DIN-Rail
Dimensions	32.3mm x 77.5mm x 99.0mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 °C
Storage Temp.	-30 ~ 80 °C
Humidity	10 ~ 90% RH, non-condensing

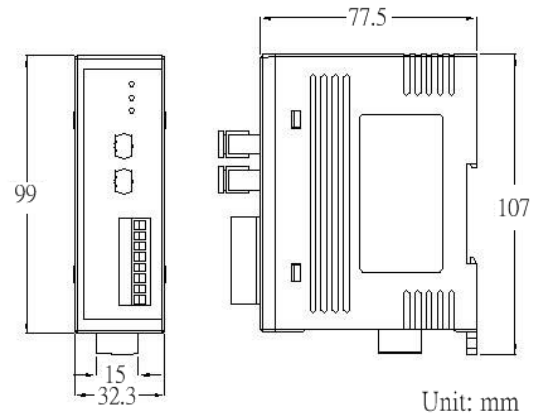
Block Diagram



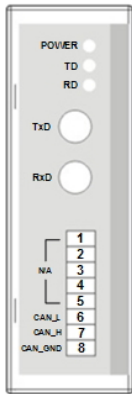
Maximum Fiber Length

Baud rate [bps]	Maximum Fiber Length. [m]	
	Attenuation < 2.8 dB/km	Attenuation < 4 dB/km
500 k	50	50
250 k	200	200
125 k	450	400
50 k	950	400
10 k, 20 k	1400	400

Dimensions (Units: mm)



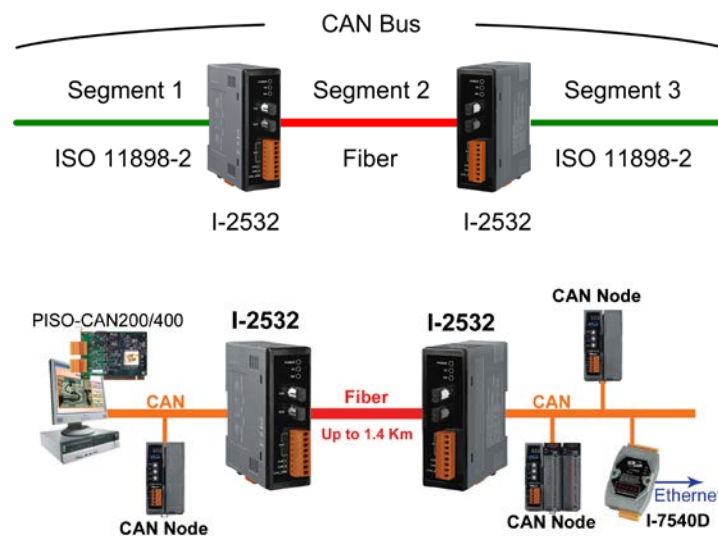
Pin Assignments



NO.	Pin name
TxD	FiberTxD
RxD	FiberRxD
1	N/A
2	N/A
3	N/A
4	N/A
5	N/A
6	CAN_L
7	CAN_H
8	CAN_GND

Application

The definition of segment in a CAN bus system are shown as following figure. The segment 2 is fiber cable. Generally, the segment 1 and segment 3 are copper cable. The copper cable is a balanced (differential) 2-wire interface. It may be a Shielded Twisted Pair (STP), Un-shielded Twisted Pair (UTP), or Ribbon cable.



Ordering Information

I-2532 CR	CAN to Fiber Converter (RoHS)
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