

CAN Series Products

Industrial CAN to Fiber Converter

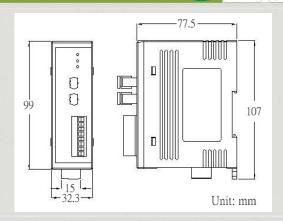








I-2532



Dimensions

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.

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

Block Diagram

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

CAN_H CAN_L 120	Ω Physical CAN layer	Fiber Driver	TxD RxD
		Photo Isolation	
	Power Regulator		
	A A	Block Diagram of I-2532	
	+10V _{DC} ~ +30V _{DC}		

Maximum Fiber Length

Baud rate	Maximum Fiber Length. [m]		
[bps]	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	

Pin Assignments



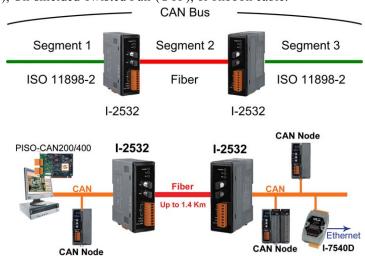


Hardware Specifications

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	62.5 / 125 μm
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 $+10 \sim +30 \text{ V}_{DC}$
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 ℃
Storage Temp.	-30 ~ 80 °C
Humidity	10 ~ 90% RH, non-condensing

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)