## **CAN Series Products** KHS CE FC CAN to Fiber Converter 77.5 Π n 0 Nr 99

I-2533 is a local CAN bridge used to establish a connection between two CAN bus system via fiber optic transmission medium. By using I-2533, the transmission distance limitation of the CAN bus system will not reduced because of CAN baud rate. It means that the total network distance can be extended. Moreover, the bus error on one CAN network will not affect the operation of another CAN network. Besides, the two CAN network can communication with each other by using different CAN baud rate for highly flexibility. These features help users' applications more powerful and flexible.

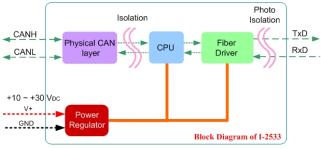
#### **Features**

- Fiber Port: ST (Multi-mode)
- Maximum transmission distance up to 2 km at any CAN baud rate

I-2533

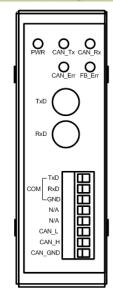
- 82C250 CAN transceiver
- 2500 Vrms iCoupler isolation on the CAN side
- Support both CAN 2.0A and CAN 2.0B
- Fully compatible with the ISO 11898-2 standard
- Build-in switch for  $120 \Omega$  terminator resistor
- Up to 100 CAN nodes on each channel
- Removable terminal block
- Mount easily on DIN-Rail
- Rotary switch for CAN baud rate configuration
- Allow user-defined baud rate
- Fiber broken line detection
- Utility tool for message filter configuration





#### **Pin Assignments**

15.0 32.3



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

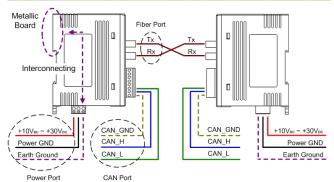
107.0

Unit: mm

П

**Dimensions** 

## Wire Connection

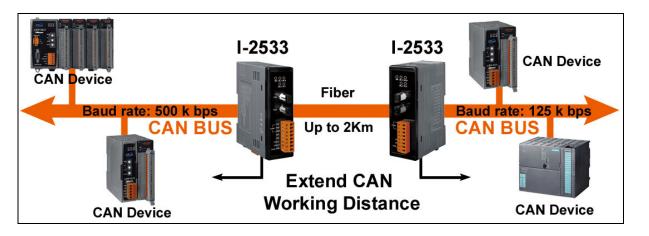




# Hardware Specifications

CAN Interface	
Connector	Screwed terminal block (CAN_GND, CAN_L, CAN_H)
Baud Rate (bps)	10 k ~ 1 M
Transmission Distance (m)	Depend on baud rate
Terminator Resistor	Switch for 120Ω terminator resistor
Isolation	2500 V <sub>rms</sub>
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 $\sim$ 25 m)
Transmission Distance (m)	2 km max (in 62.5 / 125 μm fiber cable)
LED	
Round LED	PWR LED, CAN_Tx LED, CAN_Rx LED, CAN_Err LED, FB_Err LED
Power	
Power supply	Unregulated $+10 \sim +30 V_{DC}$
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	3 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.	$-40 \sim 80$ °C
Humidity	$5 \sim 95\%$ RH, non-condensing

### **Application**



#### Ordering Information

I-2533 CR

CAN to fiber bridge (RoHS)