

Features

- ✧ 24VDC powered.
- ✧ Transmission distance extends 25 km at most.
- ✧ High isolation voltage.
- ✧ Preventing against electromagnetic interference.
- ✧ Preventing against lightening.

Description

CAN100F CAN-Fibre Converter (the convertor) is powered by 24VDC, converting CAN bus network signals from the control panel and communicating through the fiber. The longest extended communication distance is 25km.

The convertor is applicable to

- ✧ Signal transmission path existing strong electromagnetic interference can't be avoided.
- ✧ Twisted pair can't meet the transmission requirements because the distance between nodes is very long.

Installation

Warning: Please switch off power before installation.

- 1) Please check the enclosure and markings and make sure they are complete.
- 2) Dimension of the convertor is shown in Fig.2. Install the convertor into the module or linear board of the control panel, fixed and secured by M4 crews.

Appearance of the relay is shown in Fig. 1.

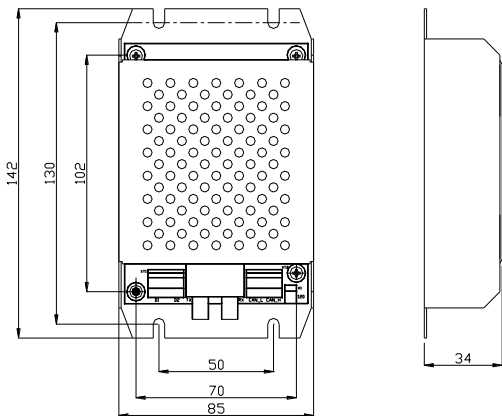


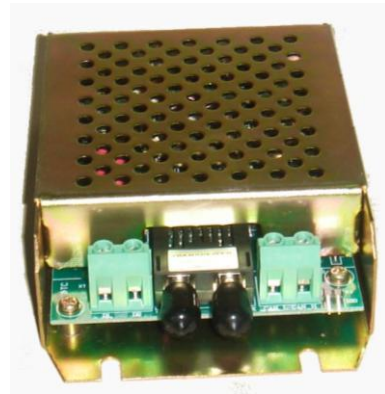
Fig. 1

Connection and Cabling

External terminals are shown in Fig. 2.



Fig. 2



D1, D2: 24VDC input terminal, polarity-insensitive. Input voltage is 19.2VDC to 28.8VDC.

TX, RX: for fiber connection. ST connector is to connect with single mode fiber. TX, RX are connected with RX, TX of another converter respectively.

CAN-L, CAN-H: connecting with the CAN loop of control panel. A single CAN loop should be less than 3000m and the number of nodes is not over 112. At the end of CAN loop, the jumper should be connected to short X1 pin.

Wiring: 1.0 mm² or above RVS twisted pair or fire cable for polarity-insensitive signal loop 1.5mm² or above BV cable or fire cable for 24VDC power line.

Troubleshooting

Problem	Reason	Solution
None of LEDs lit when powered.	24VDC power fault	Fix the power supply
	Internal power circuit damaged	Return for repair
The convertor can not transmit signal or can only communicate in one direction.	Optical path connection fault	Check optical path
	CAN circuit shorted	Search and remove the short circuit
	Internal circuit damaged	Return for repair
Unstable Communication	End of line resistor not connected	Add end of line resistor to two ends of each loop
	Loop length or nodes quantity exceed limits	Add the CAN relay to the appropriate position

Specification

Operating Voltage	24VDC(19.2VDC~28.8VDC)
Standby Current	≤60mA
Max. Operating Current	≤120mA
Each Photoelectrical Isolated CAN Port	Transmission Distance Less than 3000m; Integrated 120Ω end of line resistor on the board can be set by jumper
Type	ST connector (TX and RX ports)
Transmission Medium:	Single mode fiber
Optical Wavelength	1310nm
Communication Distance	≤25km
CAN Comm LED	It flashes red when CAN loop communicates normally.
Receive LED	It flashes green when receiving effective signals through optical path.
Send LED	It flashes green when sending signals through optical path.
Pin X1 Setting	Shorting Pin X1, connect to 120Ω end of line resistor.
Environmental Temperature	0℃~+40℃
Relative Humidity	≤95%, non-condensing
Dimension	85mm X 142mm X 34mm
IP Rating	IP30

Limited Warranty

GST warrants that the product will be free from defects in design, materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

Application

The convertor is used to extend communication distance, application for topology. System connection is shown in Fig. 3.

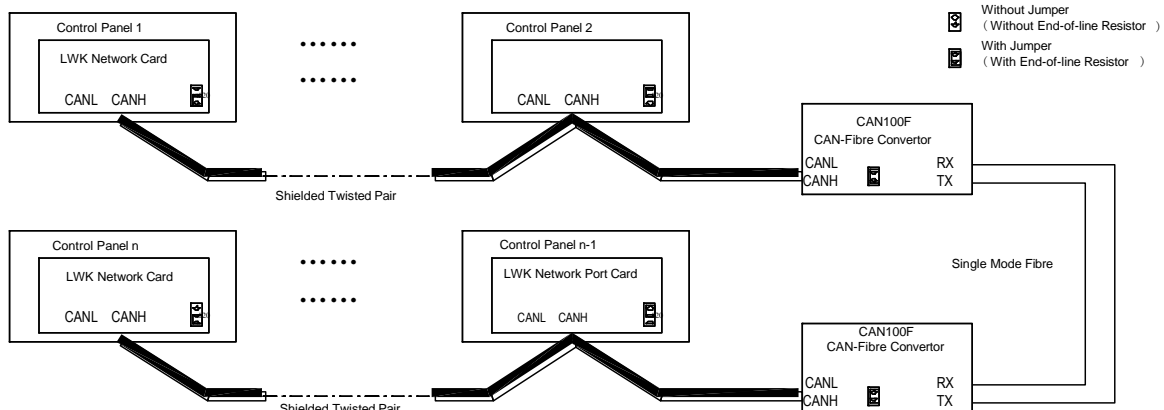


Fig. 3

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