

MOXA® ICF-1150i RS-485 TO FIBER CONVERTERS



General

The MOXA ICF-1150 series fiber converters are used to extend the transmission distance of the RS-485 serial communication circuits used on Fike's CyberCat® and Cheetah® Xi control systems (including 50 point panels), using multi-mode or single-mode fiber optic cable. The compatible panel circuits include the RS-485 panel network bus, panel peripheral bus, and voice audio peripheral bus.

The converter module accepts the proprietary signals issued by the panel's RS-485 circuit and converts the data from serial to fiber and transmits it to the receiving converter module where it is converted back to RS-485 and transmitted to the receiving panel.

Approvals

- Underwriters Laboratories (UL)
- Federal Communications Commission (FCC)
- Conformité Européenne (CE)

For exact certification listings, please reference the respective agency web site.

Ordering Information

Each fiber segment requires two converter modules, one at the beginning and one at the end. Each of these modules can be installed in one of the three available enclosures.

Part Number	Description
02-14784	Converter, RS-485 to Multi-mode Fiber, ST Port (ICF – 1150i – M – ST)
02-14849	Converter, RS-485 to Multi-mode Fiber, SC Port (ICF – 1150i – M – SC)
02-14850	Converter, RS-485 to Single-mode Fiber, SC Port (ICF – 1150i – S – SC)
02-14851	Converter, RS-485 to Single-mode Fiber, ST Port (ICF – 1150i – S – ST)
10-3049	Enclosure Kit*

*Refer to data sheet P.1.251.01 for Enclosure Kit details.

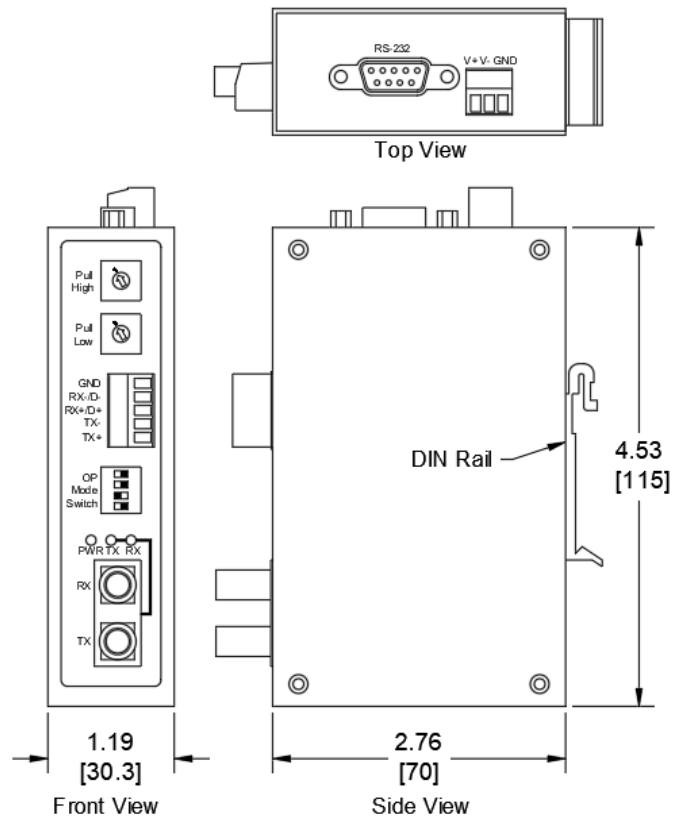
This document is only intended to be a guideline and is not applicable to all situations. Information is subject to Fike's full disclaimer at <http://www.fike.com/disclaimer>.

Specifications

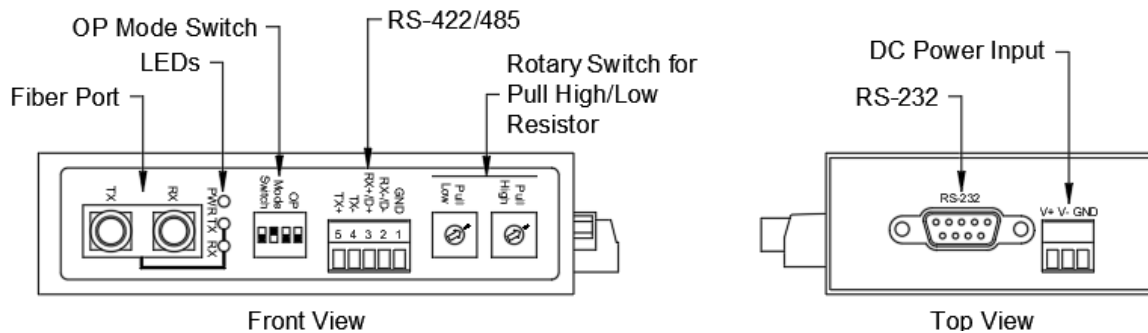
Serial Communication		
Signals for 2-wire RS-485:	Data+ (pin 3), Data- (pin 2), SGND (pin 1)	
Baudrate:	50 bps to 921.6 Kbps	
ESD Protection:	15 kV ESD	
Fiber Connection		
Connector Type:	ST or SC	
Distance:	Single-mode fiber for 40 km (24.8 miles) Multi-mode fiber for 5 km (3.1 miles)	
Support Cable:	Single-mode: 8.3/125, 8.7/125, 9/125, or 10/125 μm Multi-mode: 50/125, 62.5/125, or 100/140 μm	
Wavelength:	Single-mode: 1310 nm Multi-mode: 850 nm	
Tx Output:	Single-mode: > -8 dBm Multi-mode: > -8 dBm	
Rx Sensitivity:	Single-mode: -16 dBm Multi-mode: -16 dBm	
Point-to-Point Transmission:	Half or Full duplex	
Multi-drop Transmission:	Half duplex, fiber ring	
Environmental		
Operating Temperature:	0 to 49 °C (32 to 120 °F), 93% relative humidity, non-condensing	
Power		
Supply:	24 VDC regulated, power-limited power supply listed for fire protective signaling	
Input Power Voltage:	15 to 30 VDC	
Power Consumption:	101 mA	
Physical Characteristics		
Dimensions (W x D x H):	1.2 x 2.8 x 4.5 inches (30.3 x 70 x 115 mm)	
Gross Weight:	0.3lbs. (135 g)	
LED Indicators		
LED	Color	Function
PWR	Green	Steady ON: Power is ON
Fiber Tx	Green	When sending serial data from the fiber port
Fiber Rx	Yellow	When receiving data from the fiber port

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Product Diagram/Dimensions



DATA CONNECTORS



1. GND (shield)
2. RX-/D- USE for RS-485- connection
3. RX+/D+ USE for RS-485+ connection
4. TX- Not Connection
5. TX+ Not Connected

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