V1.0 Sep, 2016



## ISC-1310FB

### Industrial 1-port RS-232/422/485 to Fiber serial media converter

#### **Features**

- > Supports multiple baud rate and multiple data format
- Support Full-Duplex transmission for RS-232/RS-422
- ➤ Auto switching baud rate from 50~921.6 Kbps
- Power requirement from +12 ~48 VDC
- Provided DIP-Switch to setting function
- > IP-30 housing design
- DIN-Rail and wall mounting enabled









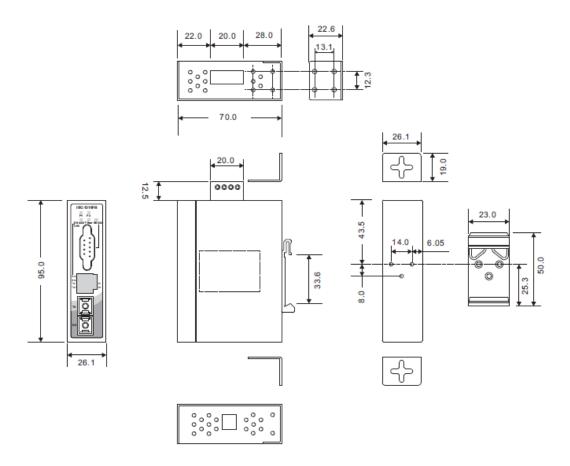




### Introduction

ISC-1310FB is a cost-effective solution for the conversion between RS-232/422/485 and 100Base-FX interface, it allows you to extend the serial communication distance by optical fiber. ISC-1310FB series with wide operating temperature range from  $-40 \sim 700$ C and accepts a wide voltage range from  $12\sim48$  VDC power inputs, so it is suitable for harsh operating environments

# Dimension (Unit =mm)

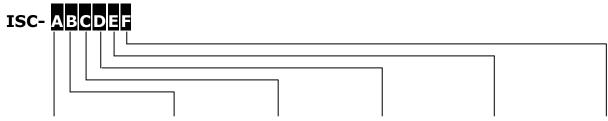


# Specifications

ORing Media Converter Model	ISC-1310FB-MM	ISC-1310FB-SS	
Fiber Port			
Fiber Port Number	1		
Fiber Port Speed	100Base-FX		
Fiber Optical Connector	SC		
Fiber Mode	Multi-mode Single-mode		

Typical Distance (km)	2 Km	30 Km		
Wavelength (nm)	1310 nm 1310 nm			
TX Output	>-23.5 dbm	>-15 dbm		
RX sensitivity	-31 dbm	-34 dbm		
Point-to-point transmission	Full-	Duplex		
Serial Port				
Connector	DB9(male) x 1, terminal block x 1			
Operation Mode	RS-232 / RS-422 / 4(2)-Wire RS-485. Which RS-422/ RS-485 can be configured by DIP switch			
Serial Baud Rate	50 bps to 921.6 Kbps			
Data Bits	5, 6, 7, 8			
Parity	odd, even, none, mark, space			
Stop Bits	1, 1.5, 2			
RS-232	TxD, RxD, GND			
RS-422	Tx+,Tx-, Rx+, Rx-,GND			
RS-485 (4-wire)	Tx+,Tx-, Rx+, Rx-,GND			
LED Indicator	,,,			
Power indicator	2 x LEDs, Green On: Power is on and functioning Nor	mal		
1x 100Base-FX with SC connector	1 x LED, Green for port Link/Act at 100Mbps			
Serial RS-232	1 x LED, Green for port Link/Act			
Serial RS-422/485				
Power	1 x LED, Green for port Link/Act			
Input Power	Dual DC inputs. 12~48VDC on 4-pin terminal block			
Power Consumption (Typ.)	1.8 Watts			
Overload current protection	Present			
Physical Characteristic				
Enclosure	IP-30			
Dimension (W x D x H)	26.1 (W) x 70 (D) x 95 (H)mm (1.03 x 2.76 x 3.74 inch)			
Weight (g)	192 g			
Environmental				
Storage Temperature	-40 to 85°C (-40 to 185°F)			
Operating Temperature	-40 to 70°C (-40 to 158°F)			
Operating Humidity	5% to 95% Non-condensing			
Regulatory approvals				
EMC	EN 55022, EN 55024(CE EMC), EN 50121-4,EN 60945	5, FCC ,EN 61000-6-2, IEC 61000-3-2 ,IEC 61000-3-3		
EMI	CISPR 22, EN 55011, FCC Part 15B Class A			
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS),			
	EN61000-4-8 (PFMF), EN61000-4-11 (DIP)			
Shock	IEC60068-2-27			
Free Fall	IEC 60068-2-31 (IEC 60068-2-32)			
Vibration	IEC60068-2-6			
Safety	EN60950-1			
MTBF Warranty	5 years	5 years		

## Ordering Information



Code Definition	Serial port number	Serial Type	Converter port number	Converter Type	Other type	Additional function
Option	-1:1 port	- 1: RS-232 - 2: RS-422/485 - 3: RS-232/422/485	-1:1 port	- 0 : other type - 1 : RS-232 - 2 : RS-422/485 - 3 : RS-232/422/485	- F: 100Base-FX Fiber - U: USB	- B : Compact Size

	Model Name	Description
Available Model	ISC-1310FB-MM	Industrial 1-port RS-232/422/485 to Fiber serial media converter, multi-mode, 2Km/1310nm
	ISC-1310FB-SS	Industrial 1-port RS-232/422/485 to Fiber serial media converter, single-mode, 30Km/1310nm

# Packing List

- ISC-1310FB x 1
- Quick Installation Guide x 1
- Wall-mount Kit x 1

DIN-Rail Kit x 1