ISC-1310FW-SS

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

Features

- Supports multiple baud rate and multiple data format
- Support Full-Duplex transmission for RS-232/422/485
- Auto switching baud rate from 50~921.6 Kbps
- WDM(Wave Division Modulation) Bi-Directional Fiber
- Power requirement from +12 ~ 48 VDC
- IP-30 housing design
- DIN-Rail and wall mounting enabled

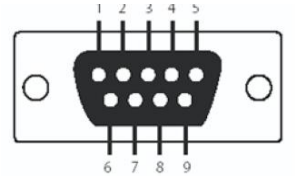




Introduction

ISC-1310FW is a cost-effective solution for the conversion between RS-232/422/485 and fiber interface, it allows you to extend the serial communication distance by optical fiber. ISC-1310FW supports WDM(Wave Division Modulation) Bi-Directional Fiber. ISC-1310FW can work with wide operating temperature range from -40 ~ 75℃ and accepts a wide voltage range from 12~48 VDC power inputs, so it is suitable for harsh operating environments

Pin Definition

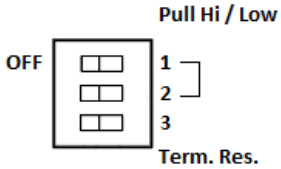


DB9 connector

Pin #	RS-232	RS-422	RS-485 (4 wire)	RS-485 (2 wire)
1		TX-	TX-	
2	RXD	TX+	TX+	
3	TXD	RX+	RX+	DATA+
4		RX-	RX-	DATA-
5	GND	GND	GND	GND
6				
7				
8				

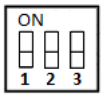
Dip Switch Definition

Resistor Setting



SW No.	Description
#1	150K/1K ohm Pull Hi/Lo resistors
#2	
#3	Enable/Disable terminal resistor

Serial mode Setting



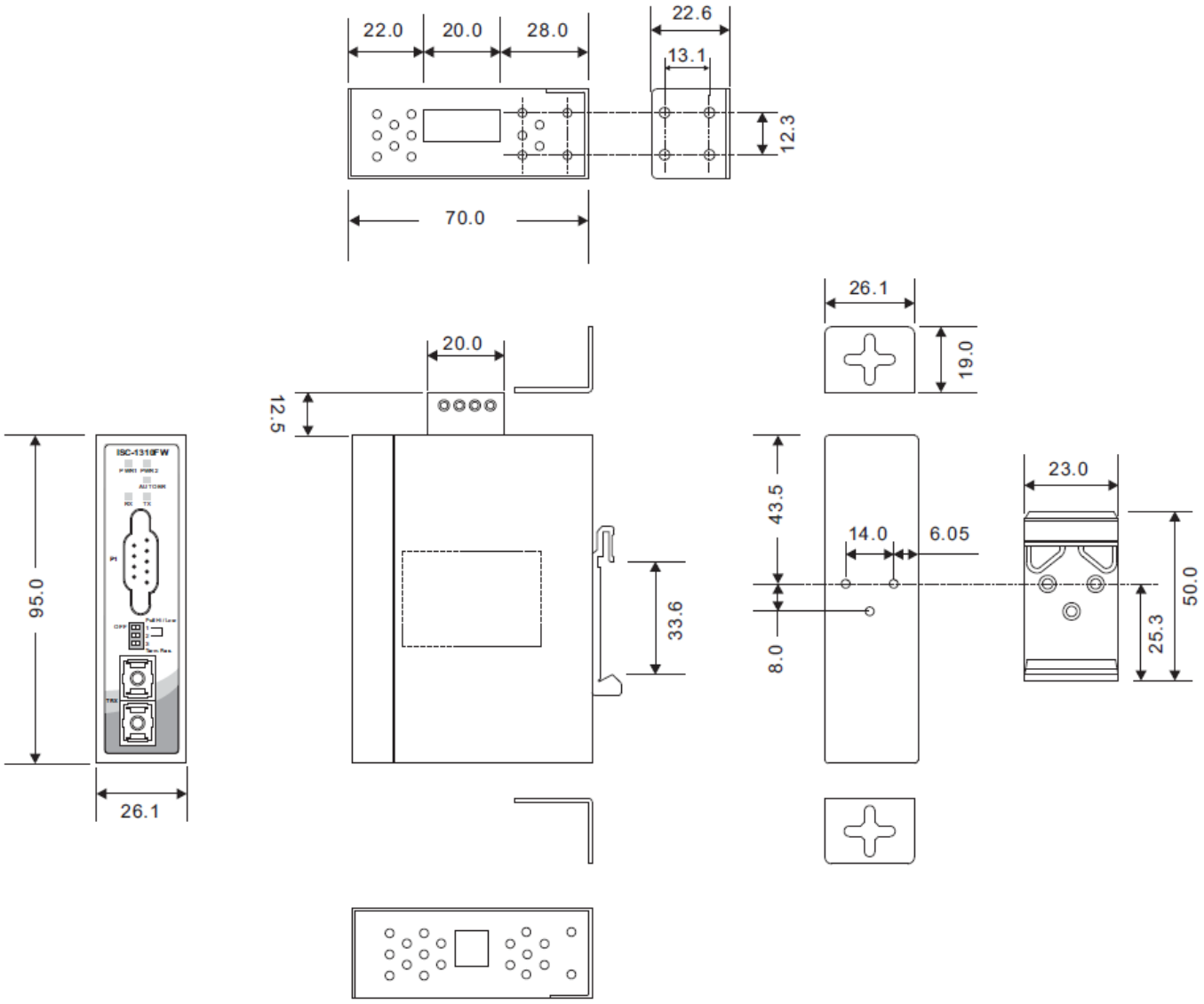
	RS232	RS422	4W-RS485	2W-RS485
SW1	ON	ON	OFF	OFF
SW2	OFF	ON	OFF	ON

	Normal	Ring		
SW3	OFF	ON		

***SW3 must be OFF for 1310FW.**

Dimension

Unit = mm



Specifications

ORing Media Converter Model	ISC-1310FW-SS-SC-L	ISC-1310FW-SS-SC-R
Fiber Port		
Fiber Port Number	**1**	
Fiber Optical Connector	SC	
Fiber Mode	Single-mode	
Typical Distance (km)	40 Km	
Wavelength (nm)	TX 1310/RX 1550 nm	TX 1550/RX 1310 nm
TX Output	0 ~ -5 dBm	0 ~ -5 dBm
RX sensitivity	-5 ~ -20 dBm	-5 ~ -20 dBm
Serial Port		
Connector	DB9(male) 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	
RS-232	TxD, RxD, GND	
RS-422	Tx+,Tx-, Rx+, Rx-,GND	
RS-485 (2-wire)	D+, D-, GND	
RS-485 (4-wire)	Tx+,Tx-, Rx+, Rx-,GND	
LED Indicator		
Power indicator	2 x LEDs, Green On : Power is on and functioning Normal	
Auto Baud Rate LED	Green: Auto baud rate	
Serial TX / RX LEDs	Orange: Serial port is receiving data (RX) Green: Serial port is transmitting data (TX)	
Power		
Input Power	Dual DC inputs. +12 ~ 48VDC on 4-pin terminal block	
Power Consumption (Typ.)	1.6W	
Overload current protection	2 A	
Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	26.1 (W) x 70 (D) x 95 (H)mm	
Weight (g)	204 g	
Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-40 to 75°C (-40 to 167°F)	
Operating Humidity	5% to 95% Non-condensing	
EMS	EN61000-4-2 (ESD) EN61000-4-3 (RS) EN61000-4-4 (EFT) EN61000-4-5 (Surge) EN61000-4-6 (CS) EN61000-4-8 EN61000-4-11	
Shock	IEC60068-2-27	
Free Fall	IEC60068-2-31	

Vibration	IEC60068-2-6
Warranty	5 years

Ordering Information

ISC- A B C D E F

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 :** Fiber	**- W :** Wave Division Modulation

	Model Name	Description
Available Model	**ISC-1310FW-SS-SC-L**	Industrial 1 port RS-232/422/485 to 1 port Fiber serial media converter, single-mode, SC connector, L-TX1310/RX1550
	ISC-1310FW-SS-SC-R	Industrial 1 port RS-232/422/485 to 1 port Fiber serial media converter, single-mode, SC connector, R-TX1550/RX1310

Packing List

- **ISC-1310FW x 1**
- **Quick Installation Guide x 1**
- **Wall-mount Kit x 1**
- **DIN-Rail Kit x 1**