Atop Technologies, Inc.

Industrial Serial to Fiber Media Convertor

SF63 Series

Hardware Installation Guide

Version 1.0

Updated on April, 2012

Introduction

Thank you for choosing the Atop Industrial DIN-Rail Serial to Fiber Media Converter. The SF63 Series provide industrial grade media conversion between Fiber and RS-232/RS-422/RS-485.This Guide covers four product models:

■ SF63-TB-DB-1Fm-SC:
   Industrial RS-232/422/485 to Multi-mode Fiber Converter, SC connector
■ SF63-TB-DB-1Fs-SC:
   Industrial RS-232/422/485 to Single-mode Fiber Converter, SC connector
■ SF63-TB-DB-1Fm-ST:
   Industrial RS-232/422/485 to Multi-mode Fiber Converter, ST connector
■ SF63-TB-DB-1Fs-ST:
   Industrial RS-232/422/485 to Single-mode Fiber Converter, ST connector
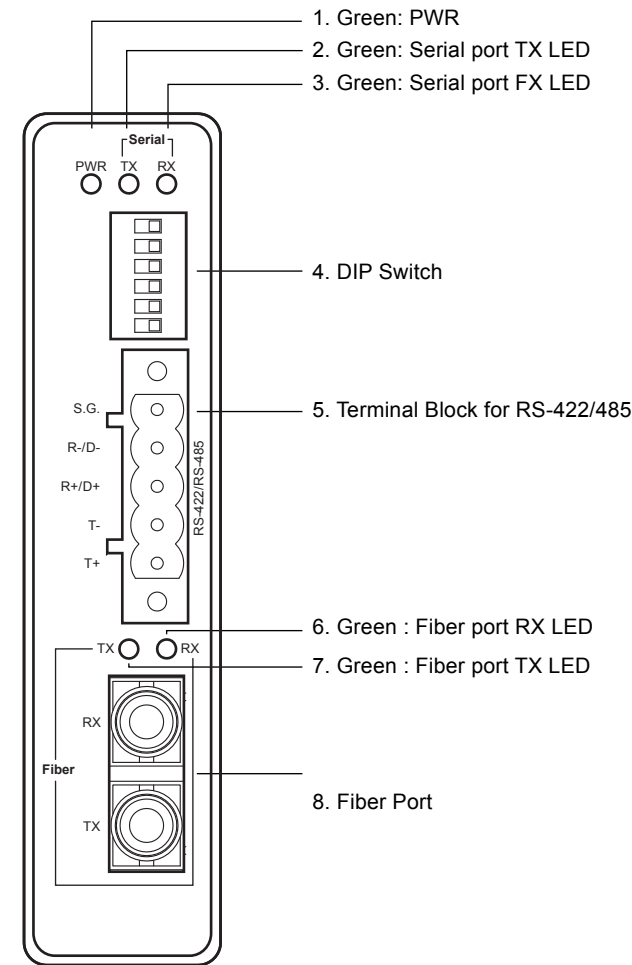
Inside the Package

Item	Atop P/N	Specifications/Descriptions
Atop SF63		Industrial Serial to Fiber Media Converter x1
Terminal Block	50706701G	3-pin Terminal Block (2ESDVM-03P) x1
Terminal Block	50706711G	5-pin Terminal Block (2ESDVM-05P) x1
Installation Guide	89900423G	Hardware installation guide (Warranty card is included) x1

Optional Accessories

| Item	Atop P/N	Specifications/Descriptions
Terminal Block	50706701G	3-pin Terminal Block (2ESDVM-03P)
Terminal Block	50706711G	5-pin Terminal Block (2ESDVM-05P) x1
Adapter	70100000000027G	3-pin Terminal Block (5.08 mm) power adaptor,100-240VAC input, 1.25A @ 12VDC output, US plug
Adapter	70100000000028G	3-pin Terminal Block (5.08 mm) power adaptor,100-240VAC input, 1.25A @ 12VDC output, EU plug

Product Description

SF63   Front View

1. Green: PWR
2. Green: Serial port TX LED
3. Green: Serial port FX LED
4. DIP Switch
5. Terminal Block for RS-422/485
6. Green : Fiber port RX LED
7. Green : Fiber port TX LED
8. Fiber Port

SF63 Series LED Indicators

Name	LED	Status	Description
PWR	Green	ON	Power status is ready
		OFF	Power input is not plugged yet
Serial TX	Green	Blink	The device is transferring data through the port
Serial RX	Green	Blink	The device is receiving data through the port
Fiber TX	Green	Blink	The device is transferring data through the port
Fiber RX	Green	Blink	The device is receiving data through the port

Installation Overview

1. The SF63 Series comes with the DIN-Rail fixture will be already mounted to the device, you can immediately proceed to put the device on the DIN-Rail, Fig. 1.
   To remove the device from DIN-Rail proceed to Fig. 2.

(Fig. 1)   (Fig. 2)
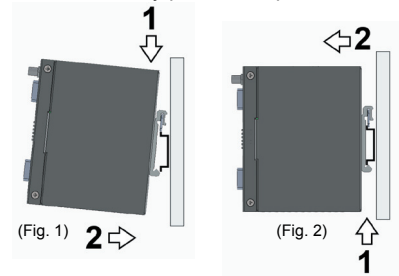
2. There is a screw close to the power terminal block this screw is used to connect the grounding of the SF63 Series. Although internal grounding has been done inside, in order to ensure overall maximum performance and protect your device it is still strongly advised to link this point to the ground as well; hazardous ESD can come inton contact with it and damage your equipment. On the power terminal block, there is a terminal for Frame Ground, you can choose whether to connect it the grounding, you may opt between only one of these two grounds (the one chosen should be connected at all times).
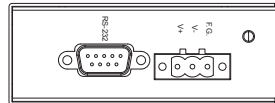
   You can then choose whether to place the power terminal block at this point or do it later depending on the actual location of the device and/or level of comfort for performing such operation.

3. Connect the RS-232 or 422/485 cable to the Serial port on SF63 Series, proceed then to connect the other end to your serial device.
4. Connect the Fiber Port, at this point the TX and RX indicators will be OFF, they will only start blinking once data is being transferred.

Note:
It is strongly recommended to attach all the communications cables first and then proceed to connect the power.

In case you purchased the optional mounting kit (mounting plates), there are mounting plates and screws that come inside the package; proceed to place the screws on the back of the device as shown in Fig. 3.

Once the plate has been firmly put in place, proceed to mount the whole device on your place of preference.


(Fig. 3)
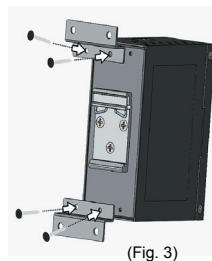
Configuration and Setting Methods

SF63 Series DIP Switch Definition

Setting	Pin 1	Pin 2
RS-232	ON	ON
RS-422	ON	OFF
RS-485-2W	OFF	ON
RS-485-4W	OFF	OFF

RS-485 Terminator 120ohm	Pin 3	RS-485 Data- Pull Low Resister	Pin 4
Enable	ON	1K	ON
Disable	OFF	100K	OFF

RS-485 Data+ Pull High Resister	Pin 5	Fiber Mode	Pin 6
1K	ON	Ring Mode	ON
100K	OFF	Point to Point Mode	OFF

Pin Assignment of Serial Connections

Female
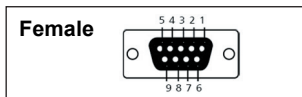
RS-232 Pin Assignment	
1	DCD
2	TX
3	RX
4	DTR
5	S.G.
6	DSR
7	RTS
8	CTS
9	N/A
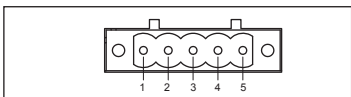
RS-422/485 Pin Assignment			
	RS-422	RS-485 2W	RS-485 4W
1	T+		T+
2	T-		T-
3	R+	Data+	R+
4	R-	Data-	R-
5	S.G.	S.G.	S.G.

Note:

DCD, DTR, and DSR are shorted internally

CTS and RTS are shorted internally

3-pin Terminal Block for Power Input SF63 Series

RS-232 — V+ / V- — Frame Ground — Grounding screw
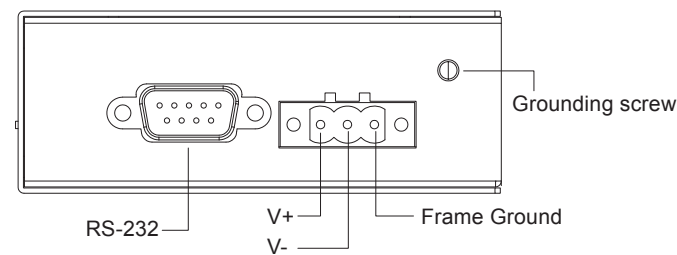
SF63 series Mechanical Dimensions (unit=mm)

Front view   Top view

Redundant Power Supply
(9/12/24/48 VDC)

Side view and Panel Mounting View   Back view
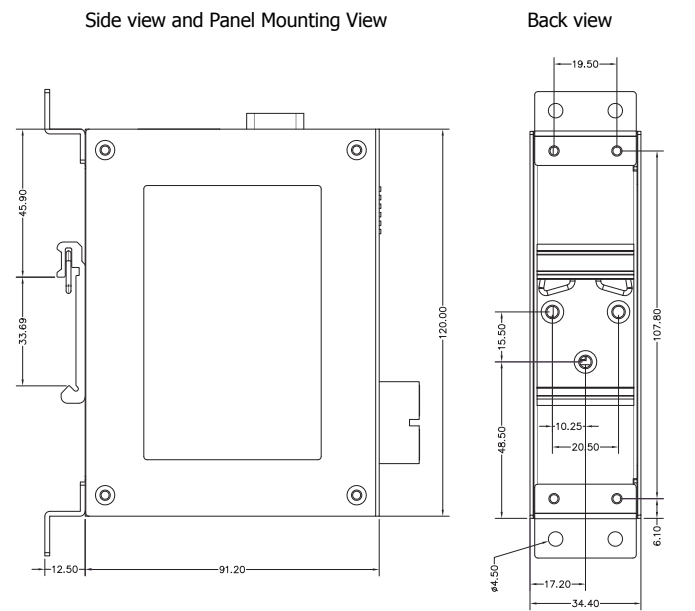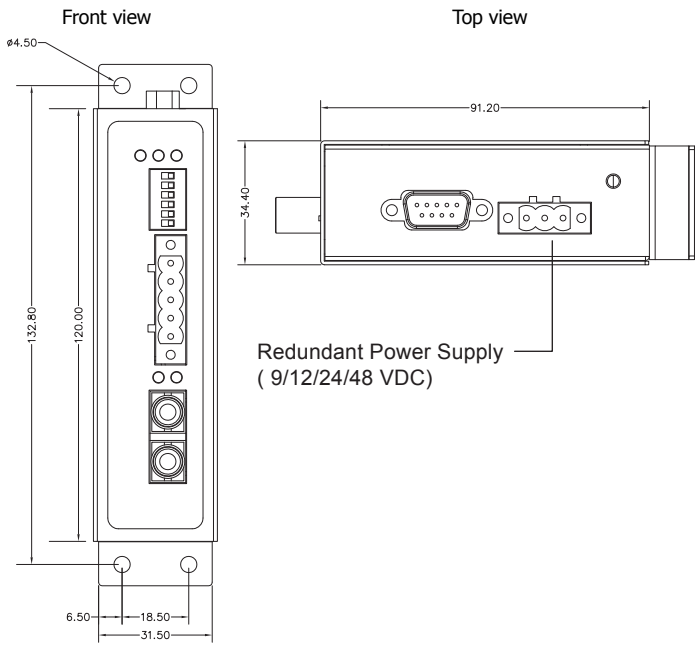
Warranty Policy

Warranty Conditions

Products supplied by Atop Technologies are covered in this warranty for sub-standard performance or defective workmanship. The warranty is not, however, extended to goods damaged in the following circumstances:

(a) Excessive forces or impacts

(b) War or an Act of God: wind storm, fire, flood, electric shock, earthquake

(c) Use of unqualified power supply, connectors, or maintenance procedure

(d) Replacement with unauthorized parts

RMA and Shipping Costs Reimbursement

Customers shall always obtain an authorized "RMA" number from Atop before shipping the goods to be repaired to Atop. When in normal use, a sold product shall be replaced with a new one within 3 months after purchase. The shipping cost from the customer to Atop will be reimbursed by Atop.

After 3 months and still within the warranty period, it is up to Atop whether to replace the unit with a new one; normally, as long as a product is under warranty, all parts and labor are free of charge to the customers.

After the warranty period, the customer shall cover the cost for parts and labor.Three months after purchase, the shipping cost from the customer to Atop will not be reimbursed, but the shipping cost from Atop to the customer will be paid by Atop.

Limited Liability

Atop shall not be held responsible for any consequential losses from using Atop's product.

Warranty Period

Product Categories	Warranty
Ethernet Switches	
Wireless	
Serial Device Servers	5 Years
Modbus Gateways	
Embedded Device Servers	
DIN-Rail Power Supplies	3 Years
Power Adaptors	
Antennas	1 Year
Other Accessories	

Caution

Never install or work on electrical or cabling during periods of lighting activity. Never connect or disconnect power when hazardous gases are present.

WARNING:
Disconnect the power and allow to cool 5 minutes before touching.

Caution:
CLASS 1 LASER PRODUCT. Do not stare into the laser!

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received; including interference that may cause undesired operation.

The warranty certification will not be effective until an authorized stamp issued by Atop's overseas agents.

Purchase Date: /   /   (yyyy/mm/dd)

Serial Number:
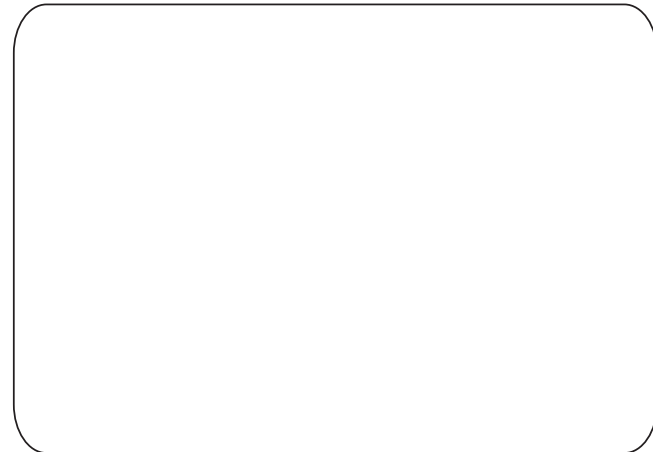
Atop Customer Services and Supports

1. Please contact your local dealers or Atop Technical Support Center at the following numbers.

   + 886-3-550-8137   (Atop Taiwan)

   + 86-21-6495-6232 (Atop China)

2. Please report the defected problems via Atop's Web site or E-mail account

   Web Site : www.atop.com.tw, e-mail : service@atop.com.tw

   Web Site : www.atop.com.cn, e-mail : service@atop.com.cn

— **Any change by website in material announcement primarily.** —