



## Antaira Technologies

### Industrial Serial to Fiber Media Converter

#### STF-401C Series

## Hardware Installation Guide

Version 1.1

Updated on Sep, 2013



## Introduction

Thank you for choosing the Antaira Technologies Industrial Serial to Fiber Media Converter. The STF-401C Series provides industrial grade media conversion between Fiber and RS-232/RS-422/RS-485. This Guide covers four product models:

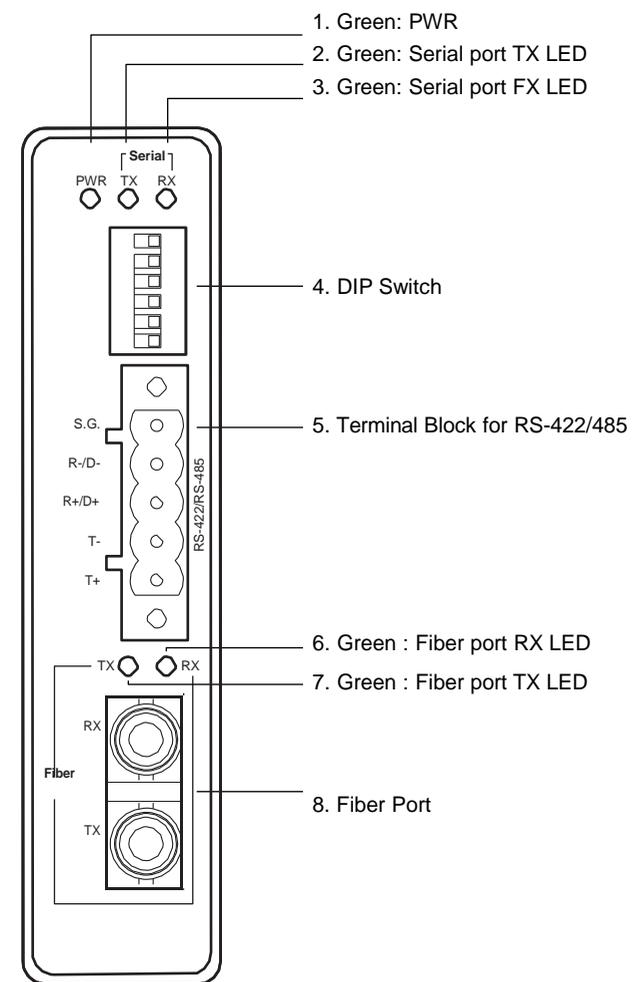
- STF-401C-CM02-T:  
Industrial RS-232/422/485 to Multi-mode Fiber Converter, SC connector
- STF-401C-CS30-T:  
Industrial RS-232/422/485 to Single-mode Fiber Converter, SC connector
- STF-401C-TM02-T:  
Industrial RS-232/422/485 to Multi-mode Fiber Converter, ST connector
- STF-401C-TS30-T:  
Industrial RS-232/422/485 to Single-mode Fiber Converter, ST connector

## Inside the Package

Item	Specifications/Descriptions
STF-401C	Industrial Serial to Fiber Media Converter x1
Terminal Block	3-pin Terminal Block (2ESDVM-03P) x1
Terminal Block	5-pin Terminal Block (2ESDVM-05P) x1
Installation Guide	Hardware installation guide (Warranty card is included) x1

## Product Description

### STF-401C Front View



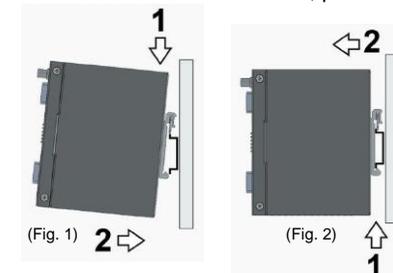
### STF-401C Series LED Indicators

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

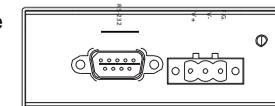
- The STF-401C Series comes with the DIN-Rail fixture will be already mounted to the device; to install the device on the DIN-Rail, please follow Fig.1.

To remove the device from DIN-Rail, please follow Fig. 2.



- There is a screw close to the power terminal block. This screw is used to connect the grounding of the STF-401C Series. Although internal grounding has been done inside, it is still strongly recommended to link this point to the ground as well, in order to ensure overall maximum performance and hazardous ESD protection. On the power terminal block, there is a terminal for Frame Ground; user can have option to connect it with external grounding. Once the grounding is setup, please make sure it would be connected at all times.

User 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.

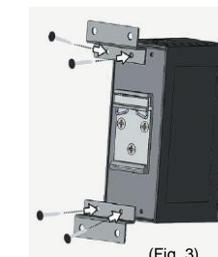


- Connect the serial cable (RS-232 or 422/485) to the Serial port with STF-401C series unit, then connect the other end of the serial cable to the serial device.
- Connect the Fiber Port - The TX and RX indicators of the unit should be OFF. They will only start blinking once data is being transferred.

#### Note:

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

The STF-401C series package comes with an extra wall mounting kit with screws, in case the application requires Wall Mounting solution. Please refer to Fig. 3 for how to install wall mounting kit.



(Fig. 3)

# Configuration and Setting Methods

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 Resistor	Pin 4
Enable	ON	1K	ON
Disable	OFF	100K	OFF

RS-485 Data+ Pull High Resistor	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

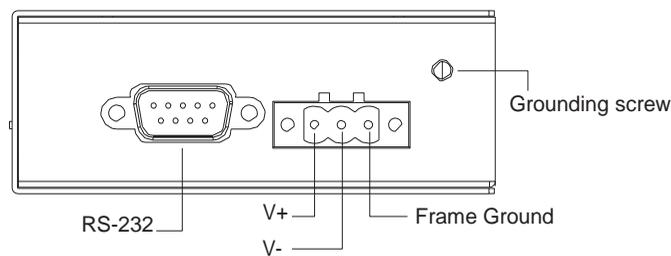
RS-422/485 Pin Assignment			
	RS-422	RS-485 2W	RS-485 4W
1	T+		T+
2	T-		T-
3	R+	Data+	R+
4	R-	Data-	R-
5	S.G.	S.G.	S.G.

### Note:

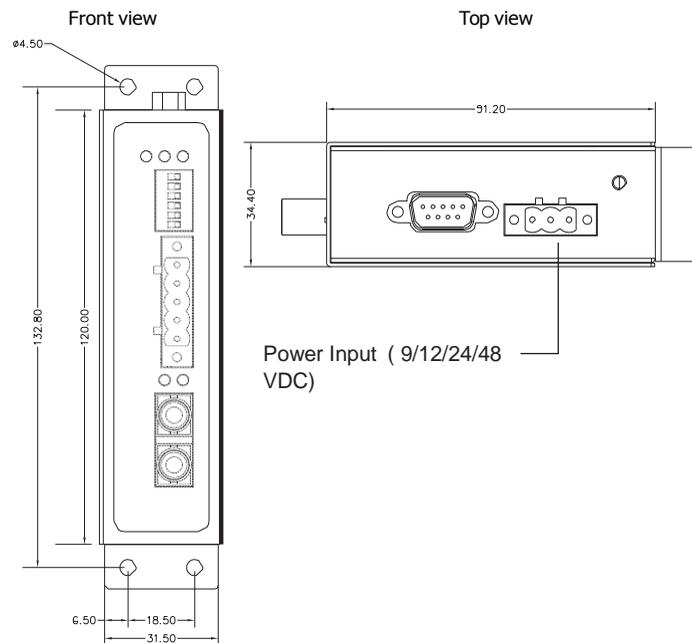
DCD, DTR, and DSR are shorted internally

CTS and RTS are shorted internally

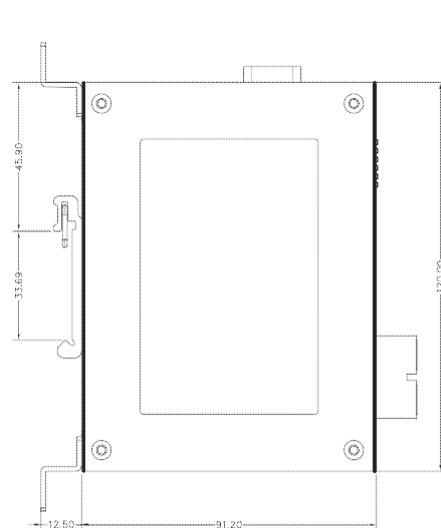
## 3-pin Terminal Block for Power Input



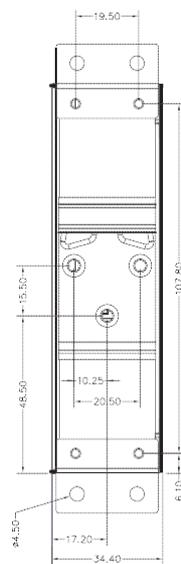
# STF-401C series Mechanical Dimensions (unit=mm)



Side view and Panel Mounting View



Back view



# Warranty Policy

## Warranty Conditions

Products supplied by Antaira 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) Disasters: wind storm, fire, flood, electric shock, earthquake
- (c) Use of unqualified power supply, connectors, or maintenance procedure
- (d) Replacement with unauthorized parts

## Caution

Never install or work on electrical or cabling during periods of lightning 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.

## Antaira Technical Support

Please contact Antaira Technical Support Center

Website: [www.antaira.com](http://www.antaira.com)

E-mail: [support@antaira.com](mailto:support@antaira.com)