Atop Technologies, Inc.

Industrial Wireless Serial Device Server

SW550X Series

Hardware Installation Guide

Version 1.0

Updated on June, 2012

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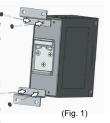Fax: 886-3-5508131
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Installation Overview

The device's appearance is as in the figure below.

1. 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. 1).

(Fig. 1)

2. There is a screw close to the power terminal block this screw is used to connect the grounding of the SW550X.
   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 into contact with it and damage your equipment. On the 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).(Fig. 2)
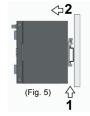
(Fig. 2)

3. Proceed then to fix the antennas to the female RP-SMA connectors deemed to, (Fig. 3).
   You can then choose whether to place the terminal block at this point or do it later depending on the actual location of the device or level of comfort for performing such operation.

(Fig. 3)

4. Once the plate has been firmly put in place, proceed to mount the whole device as shown in (Fig. 4).

Proceed to (Fig. 5) if you want to remove the device from DIN-Rail.

(Fig. 4) (Fig. 5)

5. Next we can then proceed to connect the device to the LAN (switch or PC, depending on the case), take care on using an RJ45 terminal/connector; after this we can then proceed to the device's settings.

Other points to take into consideration when installing the device follow next.

- The antennas are 3dBi (at 2.4 GHz) and a 5 dBi (at 5GHz); once fixed to the rail, do not place them parallel, otherwise their signal will interfere with each other.
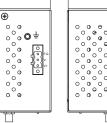

Note:
The first two pictures illustrate **not recommended** setup for the SW550X; signal will strongly decrease with the antennas on this position.

- If the device is not going to be placed on the rail and to be positioned horizontally, then the antennas could be setup making a "V" shape,(Fig. 6).

(Fig. 6)

- The openings to the sides are for the device's heat dissipation and there may be inside hazardous voltages, please never obstruct or cover them with any objects or try to insert them through it.

- SW550X's factory IP by default is 10.0.50.100 you can access the device by its Web UI once it is connected to a physical network (or using Serial Manager, for more information on Serial Manager, please refer to the manual, Chapter 3). Please be aware that the PC needed for this procedure needs to be in the same subnet, or you may refer yourself to the User's Manual on Sec. 3.1.

Field Maintenance and Service

If the device requires servicing of any kind, you may need to disconnect and remove it from its mounting. The initial installation should be done in a way that makes this as convenient as possible.

- Voltage/Power lines should be properly insulated as well as other cables. Be careful when handling them so as to not trip over.

- Do not under any circumstance insert foreign objects of any kind into the heat dissipation holes located in the different faces of the device. This may not only harm the internal layout but might cause harm to you as well.

- Do not under any circumstance open the device for any reason. Please contact your dealer for any repair needed or follow the instructions on section of your User's manual.

Pin Assignments

9-pin D-sub Connector for RS-232/422/485

Pin	RS-232	RS-422	RS-485
1	DCD	N/A	N/A
2	RXD	TXD+	N/A
3	TXD	RXD+	DATA+
4	DTR	N/A	N/A
5	SG	SG	SG
6	DSR	N/A	N/A
7	RTS	RXD-	DATA-
8	CTS	TXD-	N/A
9	RI	N/A	N/A

5-pin Terminal Block for RS-422/485

Pin	RS-422	RS-485
1	TXD+	N/A
2	TXD-	N/A
3	RXD+	DATA+
4	RXD-	DATA-
5	SG	SG

Package Check List

Inside the package you will find the following items:

- Industrial Wireless Serial Device Server SW550X x 1
- 3 ~ 5 dBi antenna x 2
- 3-Pin 5.08mm Lockable Terminal Block x 1
- 5-Pin 5.08mm Lockable Terminal Block x 1 (for SW5501-TB, SW5501-Sis)
- 5-Pin 5.08mm Lockable Terminal Block x 2 (for SW5502-TB, SW5502-Sis)
- Din Rail Kit x 1 (Already mounted to the device)
- Installation Guide + Warranty Card x 1
- CD (User's Manual / Installation Guide / Serial Manager Utility) x 1

Optional Accessories

Item	Description
US315-12 (US-Y) Power Adapter	Y-Type (5.08 mm) power adaptor, 100-240VAC input, 1.25A @ 12VDC output, US plug
USE315-12 (EU-Y) Power Adapter	Y-Type (5.08 mm) power adaptor, 100-240VAC input, 1.25A @ 12VDC output, EU plug
ADP-DB9(F)-TB5	Female DB9 to Female 3.81 TB5 Converter
WMK-454-Black	Black Aluminum Wall Mount Kit

LED Indicators

Name	Color	Status	Description
COM	Green	Blinking	Data transmitting on the serial port
		Off	Data is not transmitting on the serial port
LAN	Orange	Blinking	Ethernet is connected on 10Mbps
		On	Ethernet is connected on 100/1000Mbps
		Off	Ethernet is disconnected
	Green	Blinking	Data is transmitting on Ethernet
WLAN	Green	On	Wireless Radio is enabled
		Blinking	Wireless Radio is enabled and data is transmitting
		Off	Wireless Radio is disabled
RUN	Green	Off	System is not powered on
		Blinking Steadily	AP firmware is running normally
		Blinking Rapidly	AP firmware is not running

Signal LEDs

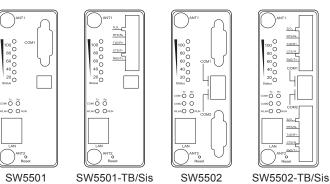| Operations		Status	LED1	LED2	LED3	LED4	LED5
Connecting	Searching for an AP	☼	☼	☼	☼	☼	☼
	Cannot connected to the AP	☼					
	No IP provided by the DHCP Server	☼	☼				
Connected	Signal Strength is less 20%	●					
	Bad Signal Strength (20%-40%)	●	●				
	Poor Signal Strength (40%-60%)	●	●	●			
	Fair Signal Strength (60%-80%)	●	●	●	●		
	Good Signal Strength (80%-94%)	●	●	●	●	●	
	Excellent Signal Strength (95%-100%)	●	●	●	●	●	●

○ off   ● on   ☼ blinking

Device Dimensions, Physical Appearance and Mounting

Proceed to mount the SW550X in a dry location free from dirt and corrosive vapors, for more questions on environmental limitations please refer to the User's manual.
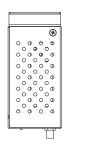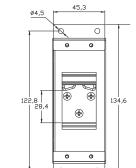
▪ Unit Dimensions and Layout (unit=mm)

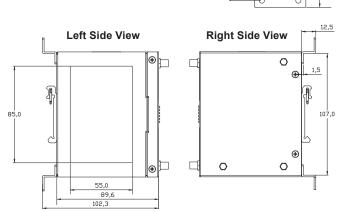The Industrial Wireless Serial Device Server and dimensions are shown below.

Front View

SW5501   SW5501-TB/Sis   SW5502   SW5502-TB/Sis

Top and Bottom View   **Rear View**

Left Side View   **Right Side 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	5 Years
Wireless	
Serial Device Servers	
Modbus Gateways	
Embedded Device Servers	
DIN-Rail Power Supplies	3 Years
Power Adaptors	
Antennas	1 Year
Other Accessories	

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.** —