

# ***SN-1 PLUS SNMP Module Operation Handbook***

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## About This Guide

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### Scope

This guide covers operation of the SR-1 SNMP Module for SR Series Inverter.

### Audience

This guide is intended for use by:

- Installers competent in:
  - installing and commissioning dc and ac power systems.
  - safe working practices for ac and dc powered equipment.
  - the relevant local electrical safety regulations and wiring standards.
- Operators and maintenance staff competent in:
  - operation of dc and ac power systems.
  - safe working practices for ac and dc powered equipment.

### Related Information

SR-1600 PLUS Modular Inverter Handbook.

### Reporting Problems with this Guide

Please use this email address to report any problems you find in this guide:

**DCInfo@eaton.com**

### For Further Information and Technical Assistance

For further information and technical assistance see Worldwide Support on page 13.



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## 0 Safety Instructions

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### 0.1 General Safety Precautions



**Warning!** Before using or working on the Inverter, read the safety instructions.

- To avoid the risk of fire and electric shock, make sure that the existing wiring is in good electrical condition, and the wire size is not undersized.
- The inverter equipment contains components which can produce arcs or sparks. To prevent fire or explosion do not install in compartments containing batteries or flammable materials or in locations which require ignition protected equipment. This includes any space containing gasoline-powered machinery, fuel tanks, or joints, fittings, or other connection between components of the fuel system.
- The following precautions should be taken when working on the inverter:
  - Step 1 Remove watches, rings, or other metal objects
  - Step 2 Use tools with insulated handles
  - Step 3 Wear rubber gloves and boots, and safety glasses
  - Step 4 Follow local PPE and OH&S requirements

### 0.2 Other Safety Notes

- Ensure inverter system is isolated from all power sources before installing or working on SN-1 SNMP card.
- Upon receipt, examine the carton box for damage. Notify the carrier immediately, before opening, if damage is evident.
- Do not operate near water or in excessive humidity.
- Grounding: Reliable grounding must be maintained.
- This equipment is intended for installation in restricted access locations, such that only suitably qualified service personal can access/perform works on any electrical connections, including but not limited to the rear AC/DC connections.
- This equipment must be installed in an enclosed cabinet rack.

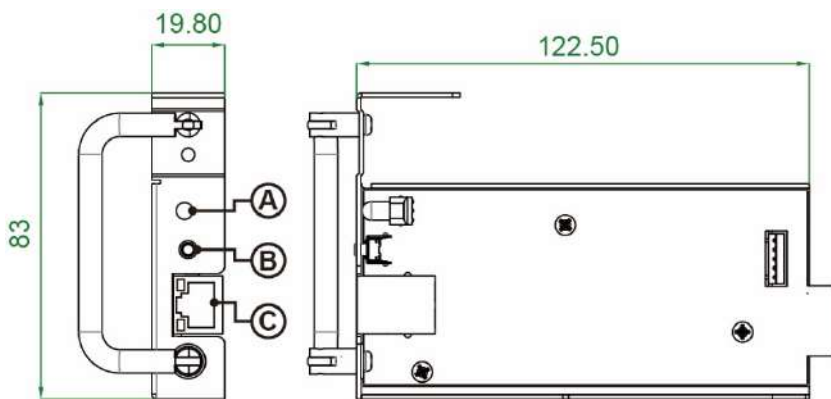
## 1 Introduction

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### 1.1 Main features

- SNMP: SN-1 PLUS's version is V2C. It can be connected to system with NMS, to set up and monitor SR-Host parameters.
- Web-Server: Using the browser to set up and monitor SR-Host parameters.

### 1.2 Hardware introduction



	Description	Function
A	LED light	To display below operation status: Green: Communicate with SR-Host successfully Red: Fail to communicate with SR-Host
B	Reset Button	Go back to SN-1 PLUS default settings
C	RJ45	Connect to PC locally



## 1.3 How to use Web-Server

### 1.3.1 Web-Server introduction

Main menu item description:

Status	Status: To display SR-Host status
Event Log	Event Log: To display inverter historical events
Event Log Time	Event Log Time: To set time
System Control	System Control: system output control
UI Config	UI Configuration: RS232/ Interface language/ Login password
Inverter Config	Inverter Configuration: Inverter parameter (settings ex. OVP/UVF...)
Network Config	Network Configuration: SNMP network settings (DHCP/IP...)
SNMP Config	SNMP Configuration: Community Name setup for SNMP V2C



**Note!** Default login name: admin

Default login password: 000000

(According to the RS-485 password setting)

### 1.3.2 Status Page

<b>Inverter</b>		
①	Type	SR1600 PLUS-124
	Firmware Version	1450
<b>Inverter Status</b>		
	Output Voltage	111.6 V
	Output Current	1.1 A
	Output Freq	60.0 Hz
	Output Watt	66 W
②	Output Watt(%)	2 %
	Output VA	122 VA
	Output VA(%)	3 %
	Working Slave Module Quantity	1
	Total Slave Module Quantity	1
<b>Battery Status</b>		
	Voltage	24.52 V
③	Charge Current	0.0 A
<b>Grid Status</b>		
	Voltage	0.0 V
	Current	0.0 A
④	Energy Graph	
	GRID ⇌ SR-HOST → LOAD BAT → ⚡	
<b>Alarm Status</b>		
	[Grid Is Abnormal]	

	Description	Function
①	Type	Model name
②	Loading	Inverter loading Capacity
③	Charge Current	SRC Inverter series only
④	Energy Graph	It displays the energy stream direction

### 1.3.3 Event Log Page

#### Event Log

Update		
Date	Event Code	Description
-	-	-

- The first index information is the latest event.

### Event Log Time

Date: 2019 ▼ Jan. ▼ 21 ▼  
Time (hour,minute,second): 13 ▼ 26 ▼ 19 ▼

- To set Year/Date/Time

### 1.3.4 System Control Page

### System Control

Power Switch: Power Off ▼  
Buzz Setting: Normal ▼  
Dry C Setting: DRY C for Major ▼

- Power Switch: To control the power on/off of the Inverter.
- Buzz Setting: To set module buzzer normal/mute/one time.
- Dry C Setting: To set rs485 dry contactor relay definition for major/minor.

### 1.3.5 UI Config Page

### User Interface Configuration

RS-485 Baudrate: 4800 ▼  
Password: 000000

- RS-485 Baud rate: To set RS-485 baud rate.
- Password: To set RS-485 6 digits password. (Default: 000000)

### 1.3.6 Inverter Config Page

## Inverter Config

Batt OVP Setting:	<input type="text" value="33.58"/>	V 30.00~34.00 V (0.02/step)
Batt OVP Recovery:	<input type="text" value="28.00"/>	V 26.00~30.00 V (0.02/Step)
Batt UVP Setting:	<input type="text" value="18.00"/>	V 18.00~25.00 V (0.02/Step)
Batt UVP Recovery:	<input type="text" value="25.00"/>	V 23.00~27.00 V (0.02/Step)
Batt UV Alarm:	<input type="text" value="21.00"/>	V 19.00~26.00 V (0.02/Step)
Grid OVP:	<input type="text" value="130.0"/>	V 127.5V~132.5V(0.5V/step)
Grid OVP:	<input type="text" value="125.0"/>	V 120.0V~127.0V(0.5V/step)
Grid UVP:	<input type="text" value="90.0"/>	V 75.0V~90V(0.5V/step)
Grid UVP:	<input type="text" value="95.0"/>	V 90.5V~100.0V(0.5V/step)
O/P Voltage:	<input type="text" value="111.5"/>	V 97.0~127.0 V(0.5V/step)
O/P Frequency:	<input type="text" value="60Hz"/>	
Sync Frequency:	<input type="text" value="3.0"/>	Hz (0~3.0 Hz)
Sharing:	<input type="text" value="Disable"/>	
DC/AC mode:	<input type="text" value="AC mode"/>	
VCHG Setting:	<input type="text" value="27.00"/>	V SRC-series only.
ICHG Setting:	<input type="text" value="0"/>	A SRC-series only.

### 1.3.7 Network Config Page

## Network Config

This page allows the configuration of the board's network settings.

**CAUTION:** Incorrect settings may cause the board to lose network connectivity.

Enter the new settings for the board below:

MAC Address:	<input type="text" value="00:04:A3:85:4F:74"/>	
<b>1</b> Host Name:	<input type="text" value="SR-SERIES"/>	
	<input type="checkbox"/>	Enable DHCP
IP Address:	<input type="text" value="192.168.101.16"/>	
Gateway:	<input type="text" value="192.168.101.1"/>	
Subnet Mask:	<input type="text" value="255.255.255.0"/>	

	Description	Function
1	Host Name	SN-1 PLUS Network Name



**Note!** Incorrect network setting may cause SN-1 PLUS connection issue. Please set the values back to default whenever issue arises (Refer to 2-3).

### 1.3.8 SNMP Config Page

#### SNMP Community Configuration

Read/Write Community String configuration for SNMPv2c Agent.

Configure multiple community names if you want the SNMP agent to respond to the NMS/SNMP manager with different read and write community names.

Read Comm1 :	<input type="text" value="public"/>
Read Comm2 :	<input type="text" value="read"/>
Read Comm3 :	<input type="text"/>
Write Comm1:	<input type="text" value="private"/>
Write Comm2:	<input type="text" value="write"/>
Write Comm3:	<input type="text" value="public"/>
NMS/HOST Address:	<input type="text" value="192.168.101.16"/>

#### Set SN-1 PLUS Community Name:



**Note!** After AC restart, Community Name will go back to default.

## 1.4 SNMP V2C Description

### SNMP Agent Trap

Item	Description
trapReceiverIPAddress	Network Management Station trap IP
trapCommunity	NMS trap community name.
trapEnable	If=0, Disable SN-1 trap, If =1, Enable SN-1 trap
trapTimeInterval	Setting the interval at which traps occur each time. MAX = 65535 / per100ms, MIN = 1 / per100ms



**Note!** Please contact your Eaton local distributor for MIB file.

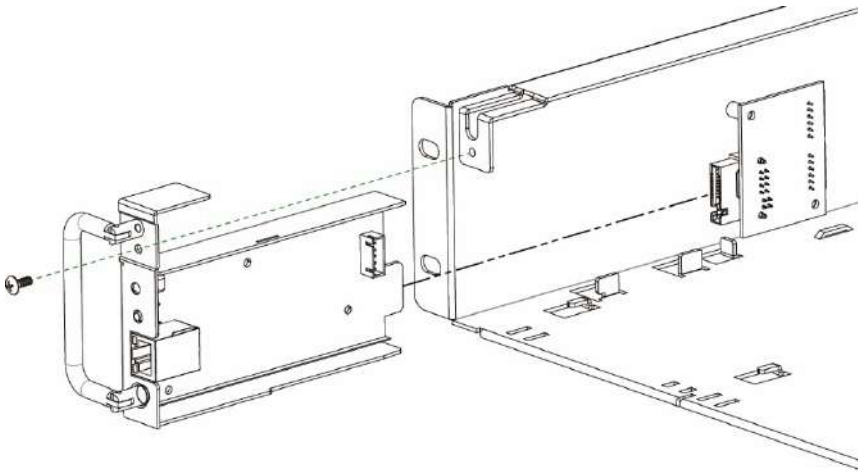


**Note!** After AC restart, trap will go back to default.

## 2 Installation and Operation

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### 2.1 Installation of SN-1 PLUS



Step 1: Hold the button on the panel and slot in the SN-1 PLUS card for 1 second.

Step 2: Fix the screw.

### 2.2 Connection from SN-1 PLUS to PC

#### 2.2.1 Connection via the router

- Connect SN-1 PLUS to the router.
- Find the IP address of SN-1 PLUS from the router.
- Type IP address of SN-1 PLUS in the web browser/NMS and then connect to web-server / SNMP agent.

#### 2.2.2 Connection via PC

- Connect from SN-1 PLUS to PC.
- The default static IP of SN-1 is 192.168.1.250. Please change the setting value of network interface card in PC. The static IP address of PC is 192.168.1.X (The value X cannot be the same value of SN-1 PLUS IP's 250).
- Type IP address of SN-1 PLUS in the web browser/NMS and then connect to web-server / SNMP agent.

## 2.3 Reset SN-1 PLUS to Default

Hold the button on the front panel for 1 second then and slot in the card of SN-1 PLUS.



## 3 Troubleshooting

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LED Status	Signal Description	Suggestion actions
LED Red	SN-1 PLUS fails to communicate with SR-Host.	<ol style="list-style-type: none"><li>1. Check LED of SR-1600 PLUS module</li><li>2. Unplug and plug in SN-1 PLUS module again.</li><li>3. Check the LED status on SN-1 PLUS.</li></ol>
LED Green	SN-1 PLUS communicates with SR-Host correctly, but the data transmission is still abnormal	<ol style="list-style-type: none"><li>1. Press Reset button and go back to default value.</li><li>2. Check if router or PC network setting is correct.</li><li>3. Check firewall setting and PORT 80,161,162 for SN-1 PLUS</li><li>4. Change another Ethernet cable.</li></ol>

Table 6. Troubleshooting guide

## 4 Warranty

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We guarantee this product against defects in materials and workmanship. In case you need to repair or replace any defective SNMP module, please contact Eaton or local distributor. Your local Eaton sales office can confirm the warranty status, duration and conditions.

This warranty will be considered void if the module has been misused, altered, or accidentally damaged. Eaton is not liable for anything that occurs as a result of the user's fault.



## 5 Equipment Incident Report

Please enter as much information as you can. Send the completed form, together with the item for repair to your nearest authorized service agent. NOTE: Only one fault to be recorded per form.

For further information contact your local Eaton dc product supplier or Eaton (see contact details on page 39).

Date: \_\_\_\_\_

### Customer Information

Company: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Return Address: \_\_\_\_\_

(Not PO Box)

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Contact Name: \_\_\_\_\_

### Location of Failure

Product code: \_\_\_\_\_ Serial number: \_\_\_\_\_ Document number: \_\_\_\_\_

System type installed in: \_\_\_\_\_ Serial number: \_\_\_\_\_

Site name or location: \_\_\_\_\_

### Fault discovered

Delivery

Initial test

Unpacking

Operation after \_\_\_\_\_ years

Installation

Other \_\_\_\_\_

### Failure source

Design

Transportation

\_\_\_\_\_

Manufacturing

Installation

Documentation

Handling

### Effect on system operation

None

Minor

Major

\_\_\_\_\_



## 6 Contacts

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For product information and a complete listing of worldwide sales offices, visit Eaton's website at:

**Eaton.com** or email:

**DCinfo@eaton.com**