

Installation and Configuration Guide

S601 External Relay Module



1 Introduction

The relay module provides eight relay outputs to meet your needs for additional relays.

If you are planning to add a relay module to an existing S601, you need to install the module inside the cabinet and complete the necessary wiring and configuration.

The manual describes the installation, wiring, and configurations for the relay module.

Note: Before doing this, disconnect the S601 from the power supply. Power it up when you are finished.

The power switch is located on the right side of the cabinet.

1.1 Technical Data

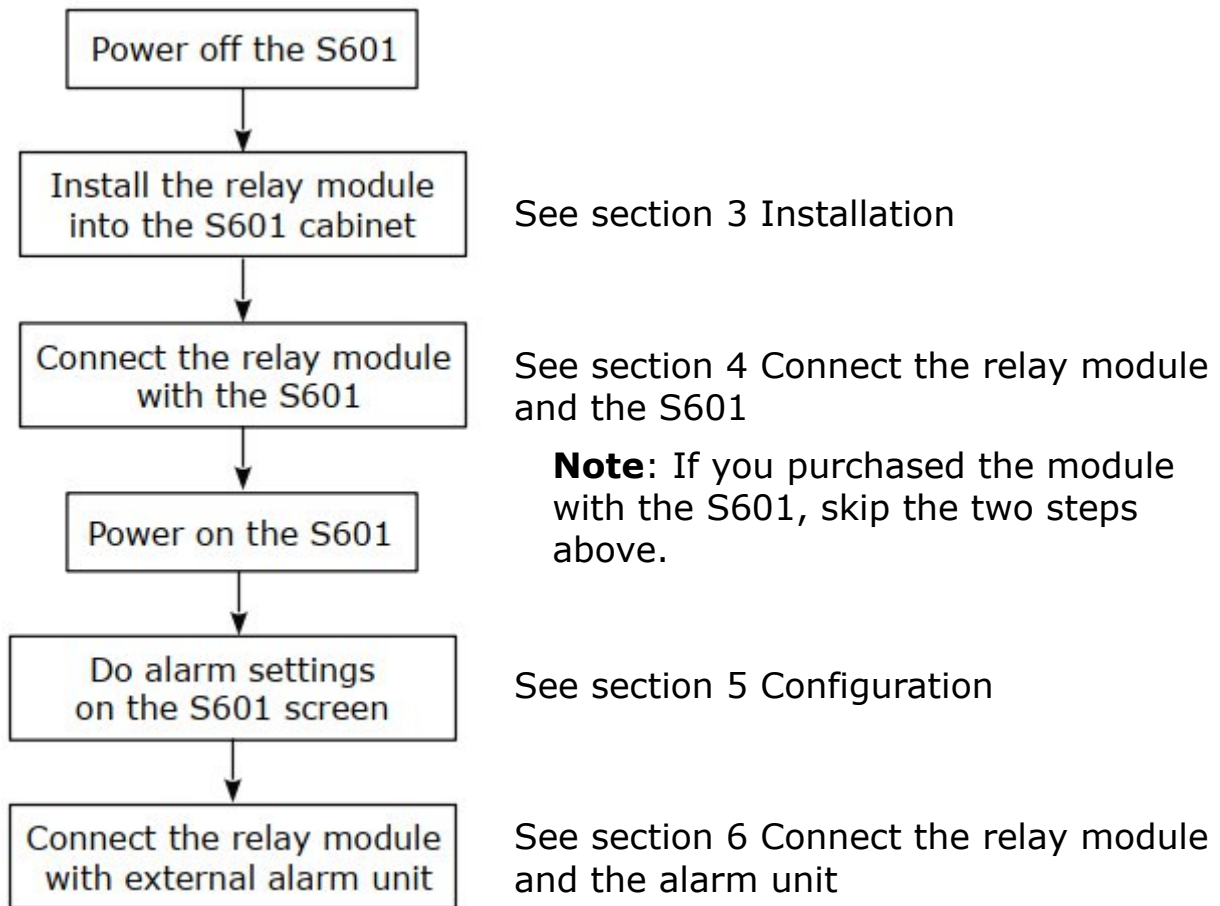
General	
Power consumption	1.8 W @ 24 V DC
Output	8 relays
Relay output	
Contact rating (Resistive)	0.5 A @ 120 VAC 0.25 A @ 240 VAC 1 A @ 30 VDC 0.3 A @ 110 VDC
Breakdown voltage	750 V AC (50/60 Hz)
Initial insulation resistance	1 G Ω min. @ 500 V DC
Relay response time (Typical)	Off: 1 ms On: 3 ms
Total switching time	10 ms
Frequency of pulse output	100 Hz
Maximum operating speed	50 operations/min (at related load)

1.2 Ordering number

The ordering number of the relay module is A1510.

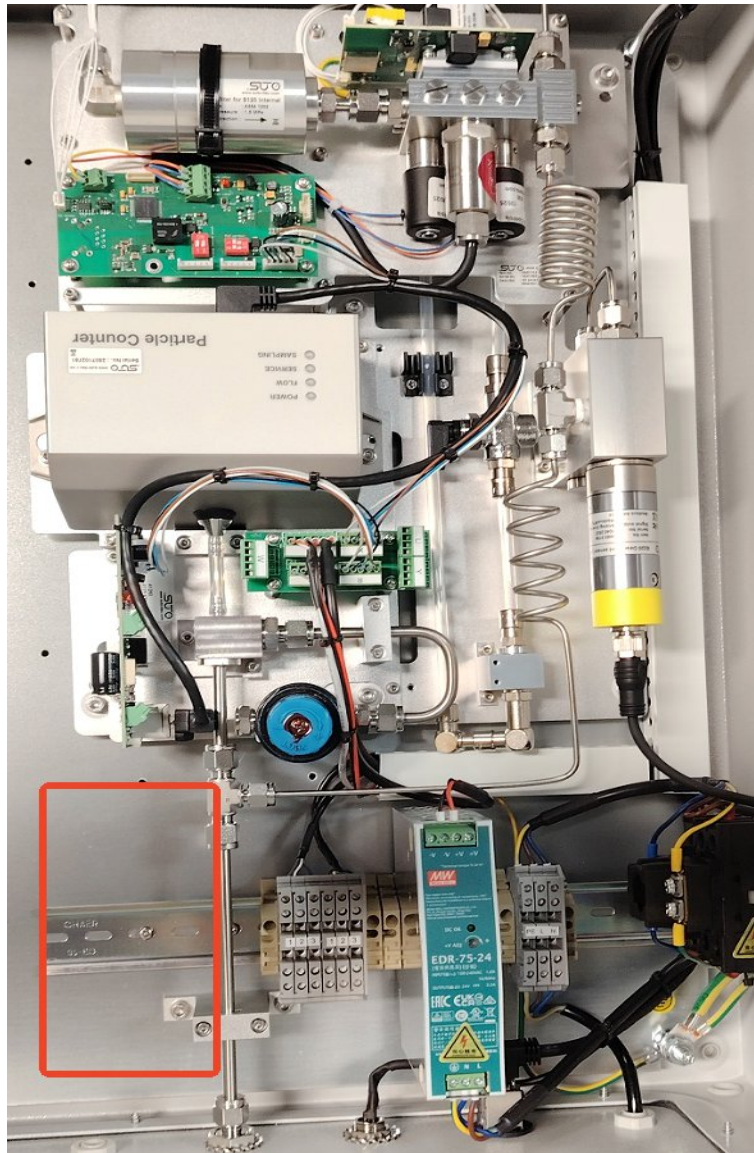
2 Operation Procedure

Follow steps below to install the external module and do alarm settings.

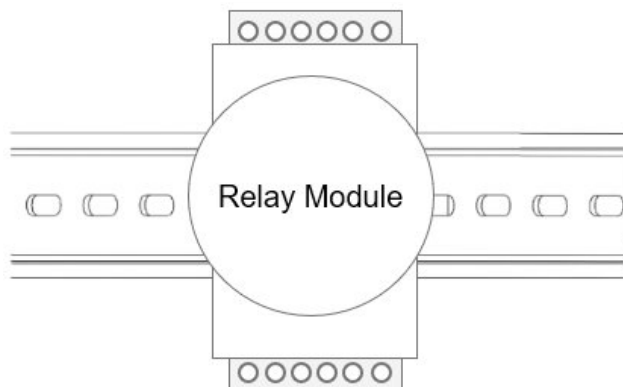


3 Installation

A space for the relay module has been reserved inside the S601 cabinet, as shown in the picture.



The relay module is rail-mounted. Install it in the designated location.

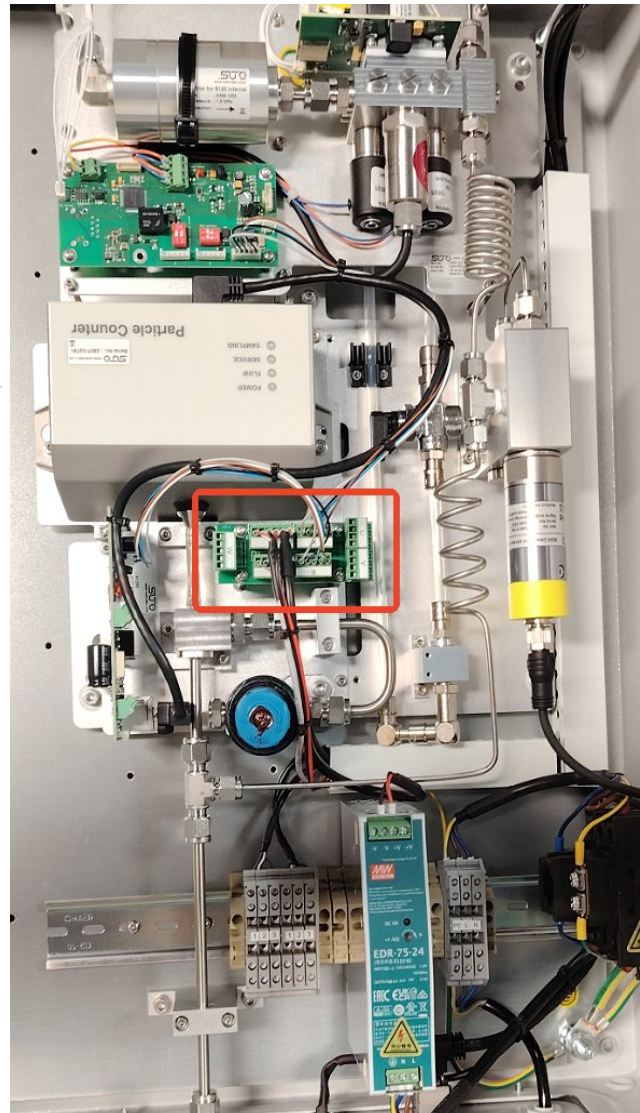


4 Connect the relay module and the S601

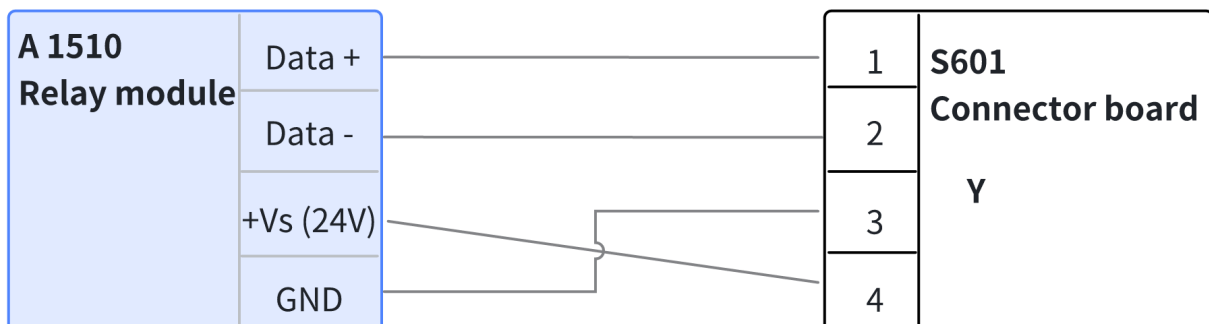
The relay module is powered by and communicates with the S601 through the connector board located inside the S601.

The relay module must be connected to the connection board.

Two cables are supplied with the relay module. The one shown below is used to connect the relay module and the connector board of the S601.



Use the supplied cable to connect the relay module to the connector board according to the diagram below.



5 Configuration

After connecting the relay module with the S601, power on the S601, then do alarm settings on the S601 screen.

Note: To support the external relay module, the firmware of the S601 must be V1.84 or later version.

Click **Menu** > **Alarm** > **Alarm Settings** to enter the alarm setting page.

Channel	Unit	Threshold	Hysteresis	Direction	Relay
0 Location 0 Particle 0.1 < d ≤ 0.5 μm	cn/m ³	5000	0	Up	Relay I
1 Location 0 Dew point Dew point	°Ctd	-11	0	Up	Relay H
2 Location 0 Oil Vapor Oil vapour	ppm	0.1	0	Up	Ext. Rela

Take oil vapor alarm configuration as an example:

When the oil vapor concentration exceeds the set threshold (for example, 0.1 ppm), the specified relay will activate the external audible or visual alarm for warning.

To realize this function, follow the steps below:

1. On the **Alarm settings** page, click **Add**.
2. In the **Channel** column, select **Oil Vapor**.
3. On the **Threshold** column, set the threshold value: in this example, it is 0.1 ppm.
4. On the **Hysteresis** column, set the hysteresis as needed.
5. On the **Direction** column, choose **Up**.
6. On the **Relay** column, choose the the linked relay, for example, **Ext. relay 1**.
7. Exit the **Alarm setting** page.

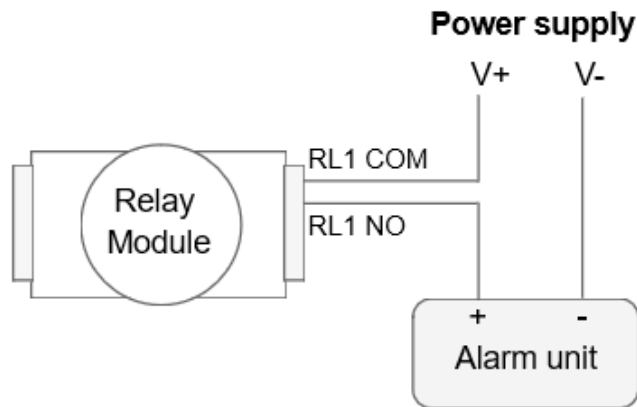
Note: If **Ext. relay 0 ... Ext. Relay 7** do not present in the drop-down menu of the **Relay** column, it means that the relay module has not been connected successfully. You need to power off and check the wiring.

The relay name marked on the relay module is inconsistent with the name displayed on the S601 interface. Mappings between them are as follows.

Name on the S601 screen	Name on the relay module
Ext. relay 0	RL 0
Ext. relay 1	RL 1
Ext. relay 2	RL 2
Ext. relay 3	RL 3
Ext. relay 4	RL 4
Ext. relay 5	RL 5
Ext. relay 6	RL 6
Ext. relay 7	RL 7

6 Connect the relay module and the alarm unit

The example below shows a DC alarm unit wiring.



SUTO iTEC GmbH

Grißheimer Weg 21
D-79423 Heitersheim
Germany

Tel: +49 (0) 7634 50488 00
Email: sales@suto-itec.com
Website: www.suto-itec.com

SUTO iTEC (ASIA) Co., Ltd.

Room 10, 6/F, Block B, Cambridge Plaza
188 San Wan Road, Sheung Shui, N.T.
Hong Kong

Tel: +852 2328 9782
Email: sales.asia@suto-itec.com
Website: www.suto-itec.com

SUTO iTEC Inc.

5460 33rd St SE
Grand Rapids, MI 49512
USA

Tel: +1 (616) 800-7886
Email: sales.us@suto-itec.com
Website: www.suto-itec.com

SUTO iTEC (Thailand) Co., Ltd.

Head Office: 91/66 Suwinthawong Rd,
Minburi Bangkok 10510
Thailand

Tel: +66 (0)2108 9658
Email: sales.th@suto-itec.com
Website: www.suto-itec.com

All rights reserved ©

Modifications and errors reserved
S601 external relay_installation guide_EN