LC1101
Quick User Manual

LC1101, Quick user manual

This document is a quick description of the use of LC1101 couplers and LC series IO modules for people with some engineering experience, designed to allow users to get started quickly.

1. Installation and removal

1. Installation

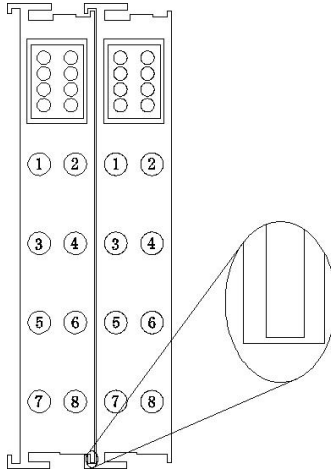➢ Align the notch at the module shown in the figure below:

Figure 1-1 at the notch of the alignment module

➢ Push the IO module into the DIN pin in the direction of the arrow and place the module on the DIN guide;
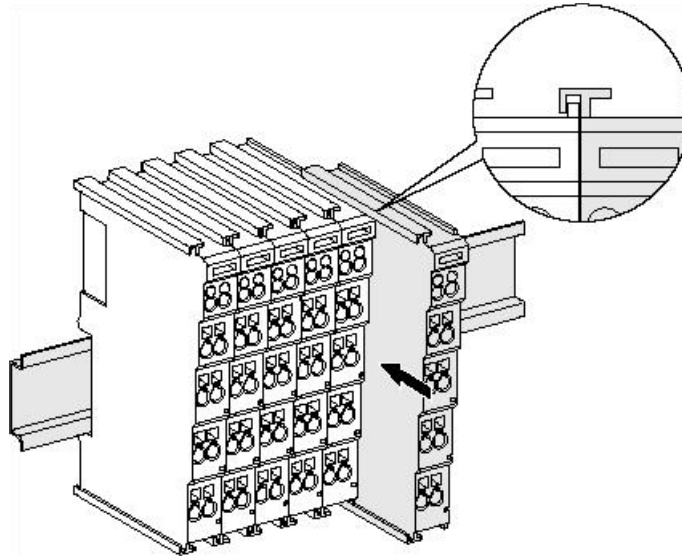

Figure 1-2 Install the module on the guide rail

2. Removal mode

➢ First, all the signal cables or power cables of this module shall be removed;

➢ Pull the pin in the direction of the arrow (the yellow part in the figure below);
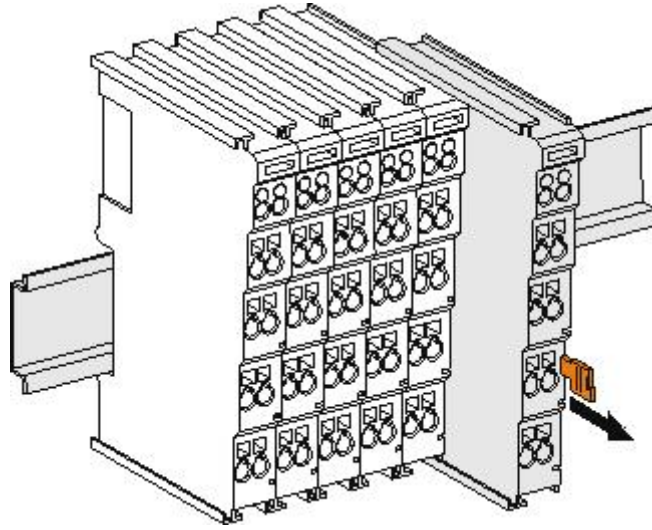
➢ Remove the module.

Figure 1-3 Removing the module from the guide rail

3. Precautions

If a module is difficult to install, do not use brute force to avoid damage to the current module or other modules; remove the module from the guide rail, check for abnormalities (such as foreign body blockage, etc.), and plug if there is no problem.

2. The wiring instructions

> This paper illustrate the topology as LC1101 + L C1488 + L C1488 + LC2488 + LC2488

The flutter structure is illustrated by example.

1、Terminal wiring

> The terminals of the LC series IO module have a screw-free design and require only a one-word screwdriver for installation / removal

(Recommended to use a word, the screwdriver model is 275mm). It is recommended to use 14 AWG wire. In the wiring process, the wire is stripped of a certain length, then the wire is inserted vertically with a sub-screwdriver into the terminal hole, and the other hand inserts the peeled wire into the opened circular hole, and then a sub-screwdriver is pulled out, and the wire will automatically be pressed by the spring.

Be careful not to connect the positive and negative poles of the power supply, otherwise it may cause the module to fail to work, work abnormally, or even damage the module.

2、power supply wiring

> Use a 220V AC-> 24V DC power module (preferably dual output) to connect the power cord as shown.
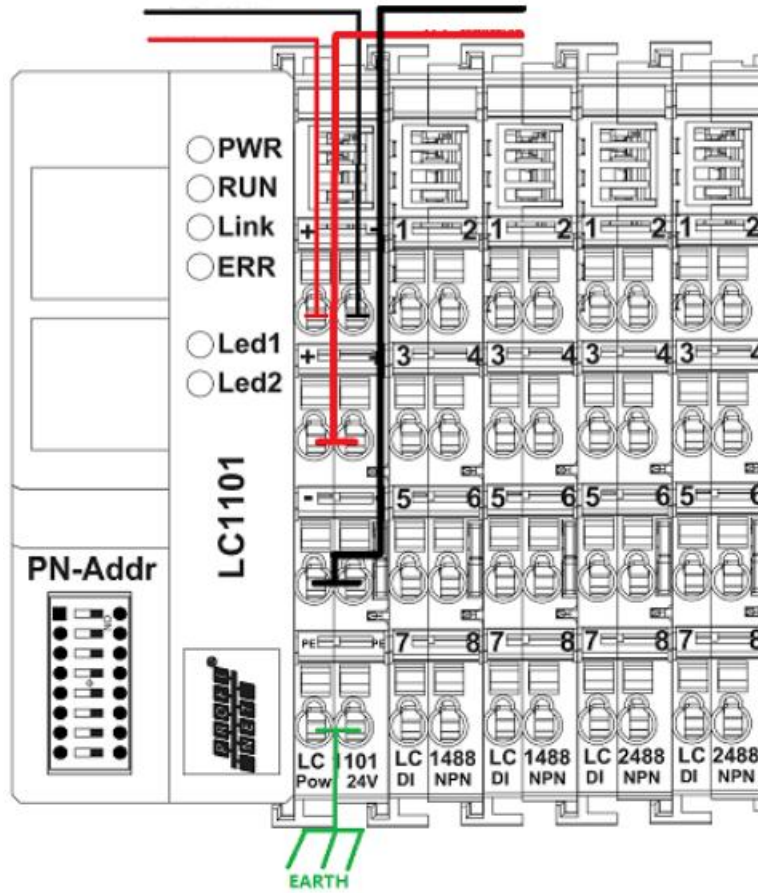
Figure 2-1 Power supply connected to the LC1101

3、System and PLC wiring

➢ Connect the S7-300 PLC and the PROFINET network port of the LC1101 through the network cable:
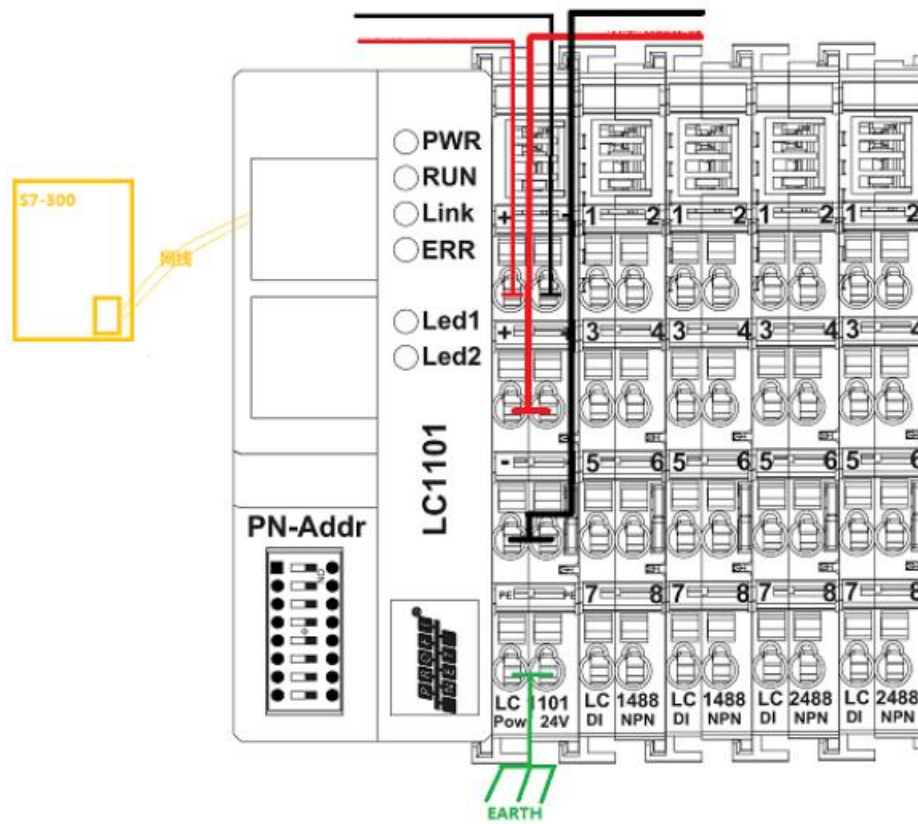
Figure 2-2 Schematic diagram of connecting LC1101 to PLC

➢ Note: The dial switch function of LC1101 is not open to the public, so users do not need to set it.

4、Indicator light description

Table 1 LC1101 indicator light instructions

number	pilot lamp	explain	pigment	state	meaning
1	PWR	power light	green	bright	The power supply is normal
				go out	power failure
2	RUN	Run the indicator light	green	bright	PROFINET The slave equipment is in operation state
				go out	PROFINET The slave equipment is not in the running state
3	Link	System indicator light	green	twinkle	The IO module runs the scan status
				go out	The IO module does not run the scan status
4	ERR	The IO module error indicator light	red	bright	The IO module transport data is lost
				go out	The IO module scan is normal
5	Led 1	BF	red	bright	There is no communication link

				twinkle	Link status is determined, with no communication link to the controller
				go out	There is an active communication link to the IO device
6	Led2	SF	red	bright	PROFINET Diagnosis exists
				go out	There was no PROFINET diagnosis

5. Technical parameters

5.1 Technical parameters of the coupler LC1101

system parameter	ProfiNET / LC1101	
Number of adaptation modules	32 Pieces	
Data transmission medium	The Ethernet / EtherCAT CAT5 cable	
Maximum cable length	100 m （100BASE-TX）	
rate of data signalling	100Mbaud	
Configuration mode	Profinet	
Power specifications		
system power supply Sys	rated voltage	24V DC （±20%）
	output	Maximum of 5V / 700 mA
Public end power supply Field	rated voltage	24V DC （±20%）
	input currenton	Maximum of 24V / 10A
Communication parameters		
BI	2 × RJ45	
Communication cycle	Minimum of 1ms, with the main station setting	
Isolation level		
Isolation and pressure resistance	500V	
isolation	Isolation transformer (RJ 45	
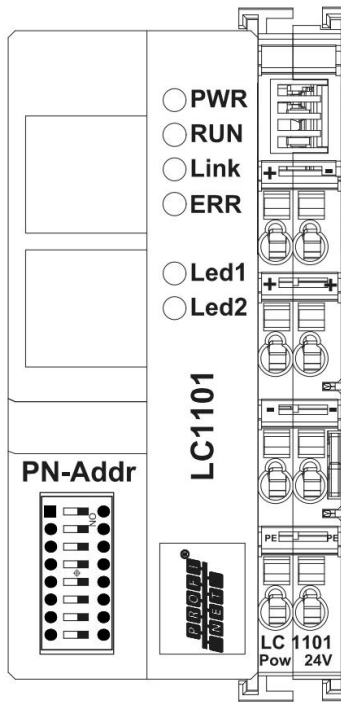
method	communication)
physical characteristics	
dimensions	99mm 48mm 69mm (length, width and height)
working temperature	0~55℃
Storage temperature	-25~85℃
relative humidity	95%, with no condensation
levels of protection	IP20