

# RS-485 Hub Module



**LC-485**

4 Channels RS-485 Active Hub

## Introduction

RS-485 Active Hub with power supply function

The LC-485 is a 4-ch RS-485 active star wiring hub with power supply function. It has 4 independent RS-485 output channels and one RS-485 input channel. Each output channel is equipped with an individual driver. The data from a master to the input channel will simultaneously be forwarded to all the four output channels, and can supply power.

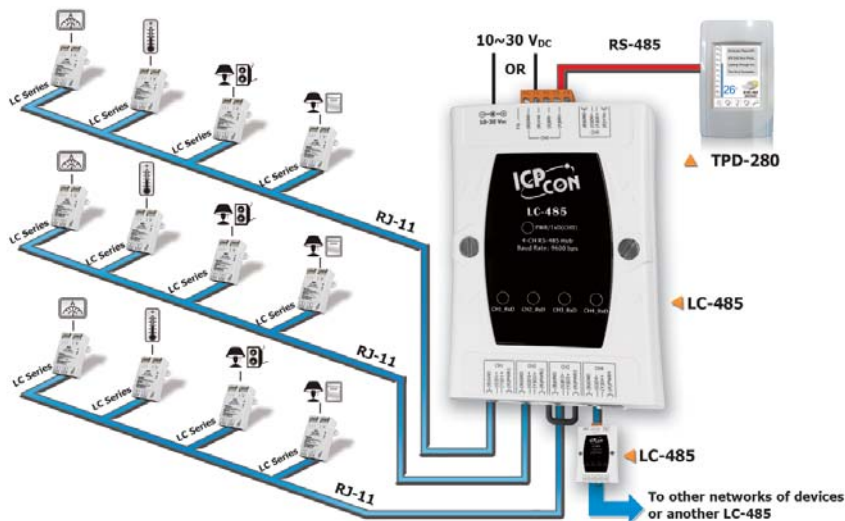
The total power consumption of the LC-485 device plus all devices on the four output channels must be less than the power of the input power supply, and the total consumption of all devices on the four output channels must be less than 1 A. The power consumptions of the LC/SC series modules for 24 V and 12 V currents are shown in the list.

Model	24 V	12 V
LC-101/LC-103	0.02 A	0.04 A
LC-131	0.04 A	0.07 A
LC-221	0.06 A	0.18 A
LC-485	0.06 A	0.11 A
SC-4104-W1	0.1 A	0.2 A

## RS-485 Short-Circuit protection

The Short-circuit protection can automatically shut off the breakdown channel, this kind of design can suffice to protect the communication system. When connected RS-485 equipment breaks down, the breakdown channel will be isolated to ensure that other equipments work normally.

## Applications



## Features

- True RS-485 Star Wiring Hub with power supply function
- Independent RS-485 driver for each channel
- LEDs for indicating RS-485 Tx/D/RxD activity
- Auto Switching baud rate: 1200 ~ 115200 bps
- RS-485 Short-Circuit protection
- Power Input: +10 ~ +30 VDC
- Operating Temperatures: -25 ° C ~ +75 ° C
- DIN-Rail Mounting




## Specifications


Interface	
Input	1 RS-485 Channels: Data+, Data-
Output	4 RS-485 Channels: Data+, Data-
Connector	RJ-11
Speed	1200 ~ 115200 bps
4 kV ESD Protection	Yes
LED Indicators	
LED	Yes; Power/Communication (Tx/D/RxD)
Power	
Type	Connector: RJ-11, DC Jack, screw terminal
Input Voltage Range	10 ~ 30 VDC
Output Voltage Limit	10 ~ 30 VDC, Max. 1 A
Power consumption	1.3 W
Power reverse polarity protection	Yes
Mechanical	
Casing	Plastic (Flammability UL 94V-0)
Dimensions (W x H x D)	76 mm x 116 mm x 37 mm
Installation	DIN-Rail
Environmental	
Operating Temperature	-25 ° C ~ +75 ° C
Storage Temperature	-30 ° C ~ +80 ° C
Humidity	10% ~ 90% RH, non-condensing

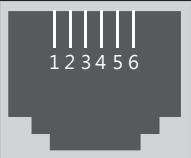
**Power and Communication**

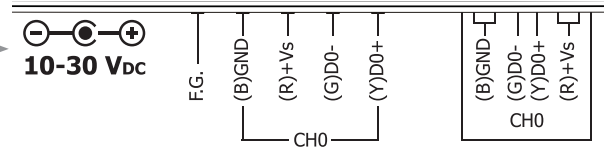
LC-485

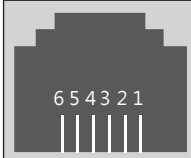


DC Jack Power Input Description	
	Power Input Voltage (+10 VDC ~ 30 VDC)

CH0 Connector	No	CH0 Terminal Block Description
	1	D0+
	2	D0-
	3	+VS
	4	GND
	5	F.G.

RJ-11 Connector	Pin	CH0 RJ-11 Pin Assignments
	1	+VS
	2	D0-
	3	D0+
	4	D0-
	5	GND
	6	GND



RJ-11 Connector	Pin	CH1 ~ CH4 RJ-11 Pin Assignments
	1	PWR1 ~ PWR4
	2	D1+ ~ D4+
	3	D1- ~ D4-
	4	D1- ~ D4-
	5	GND
	6	GND

**Ordering Information**

LC-485 CR	4 Channels RS-485 Active Hub (RoHS)
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