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# LC-485

## (4 Channels RS-485 Active Hub)

### ***Introduction:***

#### **RS-485 Active Hub**

The LC-485 is 4-ch RS-485 active star wiring hub, 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.

#### **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.

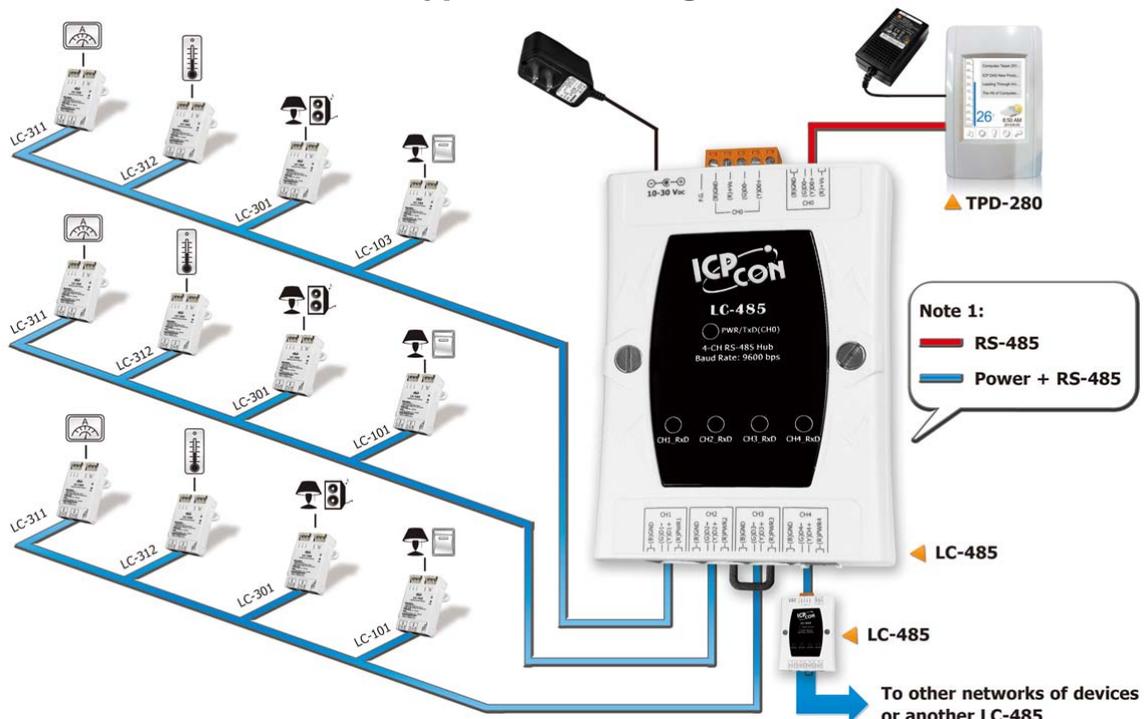
### ***Features:***

True RS-485 Star Wiring Hub
Independent RS-485 driver for each channel
LEDs for indicating TxD/RxD activity
Self-tuner baud rate, 1200 ~ 115200 bps
Power Input, +10 ~ +30 VDC
Operating Temperatures, -25 °C ~ +75 °C
DIN-Rail

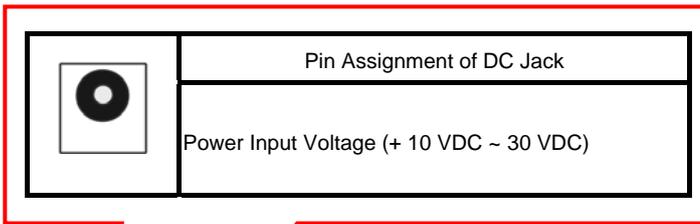
## Specifications:

Interface	
Input	1 RS-485 Channels: Data+, Data-
Output	4 RS-485 Channels: Data+, Data-
Connector	RJ-11
Self-Tuner Asic Inside	Yes
Speed	1200 ~ 115200 bps via Self-tuner mode;
4 kV ESD Protection	Yes
LED Indicators	
Power /Communication	Yes
Power	
Input Voltage Range	+10 VDC ~ +30 VDC (Non-isolated)
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	-40 °C ~ +80 °C
Ambient Relative Humidity	10% ~ 90% RH, non-condensing

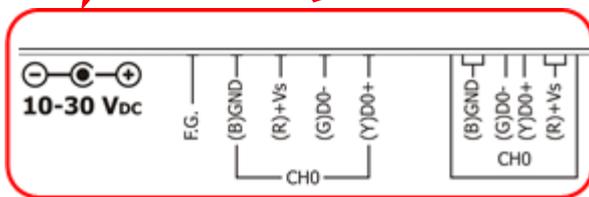
## Application for RS-485 Star type Networking:



**Pin assignment:**

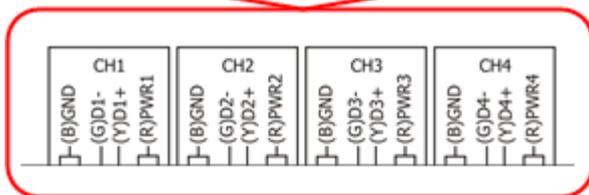
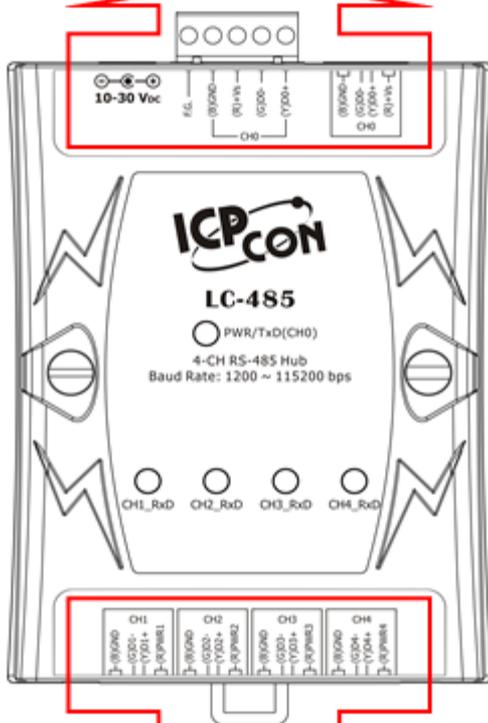


Pin Assignment of Terminal Block (CH 0)		
No	Descriptions	
1	D0+	RS-485 Interface
2	D0-	
3	+Vs	Power Input Voltage (+ 10 VDC ~ 30 VDC)
4	GND	Ground
5	F.G.	Frame Ground



Pin Assignment of RJ-11 (CH0)		
Pin	Descriptions	
1、2	+Vs	Power Input Voltage (+ 10 VDC ~ 30 VDC)
3	D0+	RS-485 Interface
4	D0-	
5、6	GND	Ground

\* Remark : The CH0 Terminal Block and RJ-11 is the same function.



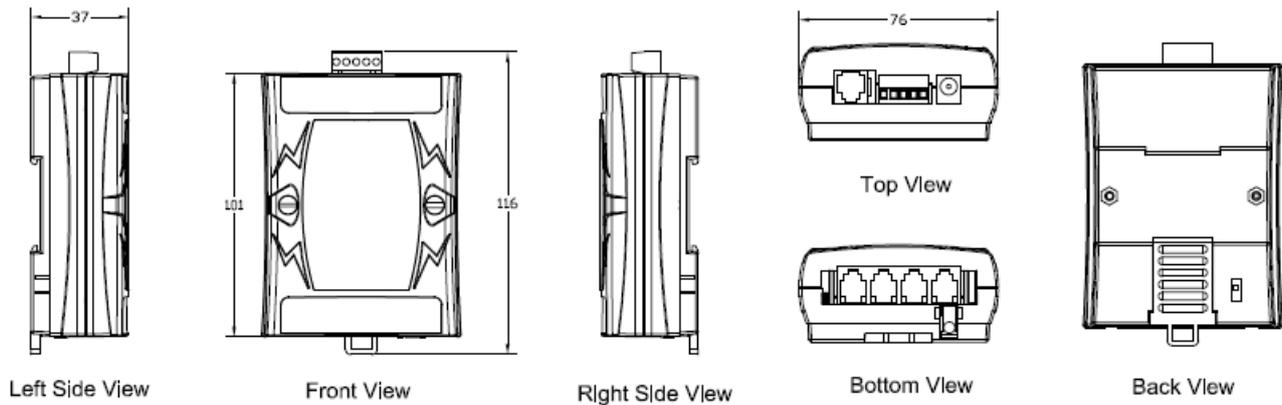
Pin Assignment of RJ-11 (CH1 ~ 4)		
Pin	Descriptions	
1、2	PWR1 ~PWR4	Power Output Voltage
3	D1+ ~D4-	RS-485 Interface
4	D1- ~D4-	
5、6	GND	Ground

**LED Indicator Functions:**

The LC-485 has 6 LED to indicate the power status and network traffic.  
 The TxD/RxD LED will flash when the unit is being sent out or received data.

<b>LED</b>	<b>Color</b>	<b>Description</b>
PWR x 1	Red	LED will be ON solid when the power is On.
TxD x 1 (CH0)	Green	LED will flash when the unit is being sent out.
RxD x 4 (CH1 ~ CH4)	Orange	LED will flash when the unit is being received data.

**Dimensions: Unit = mm**



**Ordering information:**

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

FAR05-S12-SU CR	12V/0.58A (max.) Power Supply (RoHS)
LC-103 CR	1-channel AC Digital Input and 3-channel Relay Output Lighting Control Module (RoHS)
I-7520 CR	Isolated RS-232 to RS-485 Converter (RoHS)
tM-7520U CR	RS-232 to RS-485 converter (RoHS)
tM-7561 CR	USB to RS-485 converter (RoHS)