

I-7514-U-CR

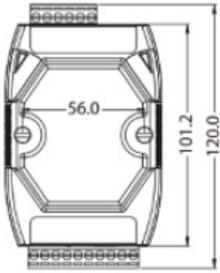
Installation Guide



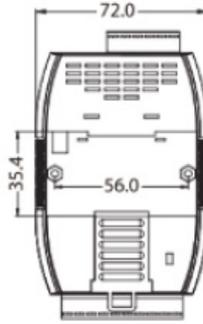
Ref. 9018147

A

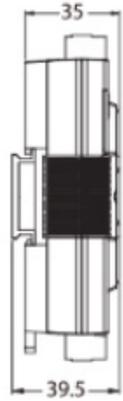
[1]



[2]

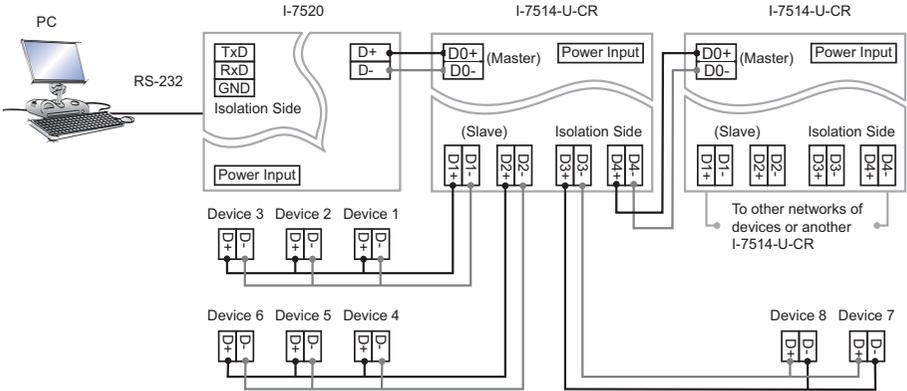


[3]



B

[1]



[2]



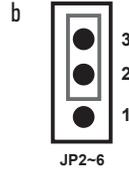
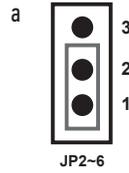
Terminal No.	Pin Assignment
1	D1+
2	D1-
3	D2+
4	D2-
5	D3+
6	D3-
7	D4+
8	D4-
9	N.C.
10	ISO.GND
11	D0-
12	D0+
13	D0-
14	D0+
15	(R)+Vs
16	(B)GND

C

[1]



[2]



[3]



a

Baud Rate settings (RSW)	
No.	Speed
0	Self-Tuner (Default)
No. (1 ~ 8 for Fixed Baud Rate mode)	
1	1200 bps
2	2400 bps
3	4800 bps
4	9600 bps
5	19.2 kbps
6	38.4 kbps
7	57.6 kbps
8	115.2 kbps

b

Data format settings (DSW) for Fixed Baud Rate mode		
No.	1	2
09-Bit	On	On
10-Bit	On	Off
11-Bit	Off	On
12-Bit	Off	Off

The I-7514-U-CR is 4-ch isolated 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.

A FITTING

Choose the optimal location: a large, flat surface

- [1] Front view
- [2] Rear view
- [3] Din-Rail mounting bracket

B WIRING

- [1] Wiring diagram
- [2] Pin assignment
Pin 11/13 and Pin 12/14 easy-to-use wiring for RS485 in a daisy-chain configuration

C CONFIGURATION

- [1] Termination resistors setting
In some critical environments, you may need to add termination resistors to prevent the reflection of serial signals. The I-7514-U-CR includes a 120 Ω termination resistor for each channel selectable by jumper:
 - a. Master (D0)
 - b. Slave (D1)
 - c. Slave (D2)
 - d. Slave (D3)
 - e. Slave (D4)
- [2] Termination resistor for each channel
 - a. Enable 120 Ω
 - b. Disable 120 Ω (default)
- [3] Baud Rate Setting
The I-7514-U-CR provides two modes of baud rate setting. One is self tuner mode and the other is fixed baud rate mode. The self tuner mode can support multiple baud rate and multiple data format. The self tuner design is exactly the same as I-7510 series. The fixed baud rate mode offers a better quality for data transmission over long or loss lines or electrically noisy environments.
 - a. Baud rate settings (RSW)
 - b. Data format settings (DSW) for fixed baud rate mode
- [4] LED indicator functions
The I-7514-U-CR 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.

LED	Channel	Color	Description
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

Interface	
Input	1 RS485 channel: data+, data-
Output	4 RS485 channels: data+, data-
2-wire cabling	Belden 9841 (2P twisted pair cable) If different cables are used, the transmission distance may change
Transfer distance	Max. 1,200 m@9.6 kbps Max 400 m@115.2 kbps with Belden 9841 cable
Self-tuner Asic inside	Yes
Speed	300 ~ 115.200 bps via self-tuner mode 1.200 ~ 115.200 bps via fixed baud rate mode
4 kV ESD protection	Yes
2.500 VDC isolation on CH1 ~ CH4	Yes
Connection	Removable 10 pin terminal block x 1 Removable 6 pin terminal block x 1
LED indicators	
Power/communication	Yes
Power	
Input voltage range	+ 10 V DC ~ + 30 V DC (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)	72 mm x 122 mm x 35 mm
Installation	Din-rail
Environmental	
Operating temperature	- 25 ° C ~ + 75 ° C
Storage temperature	- 30 ° C ~ + 80 ° C
Ambient relative humidity	10 % ~90 % RH, non-condensing

Address of the manufacturer established in the European Union:
ICPCAS-EUROPE GmbH, Mahdenstrasse 3, 72768 Reutlingen, Germany

Information merged from English original instructions by Somfy, 50 Avenue du Nouveau Monde, 74300 Cluses, France.