上海恩阶电子科技有限公司
Shanghai energy Electronic Technology Co., Ltd.

Specification

Product name	IMU1740-COM1-V1.0-240502
Version	V1.0
Date	2024.12.17

Ver	Date	Modify	Version revision notes
V1.0	2024/12/17	Zhou Jingnan	Create the first draft
V1.0	2025/4/16	Zhang Jiamin	Add English version

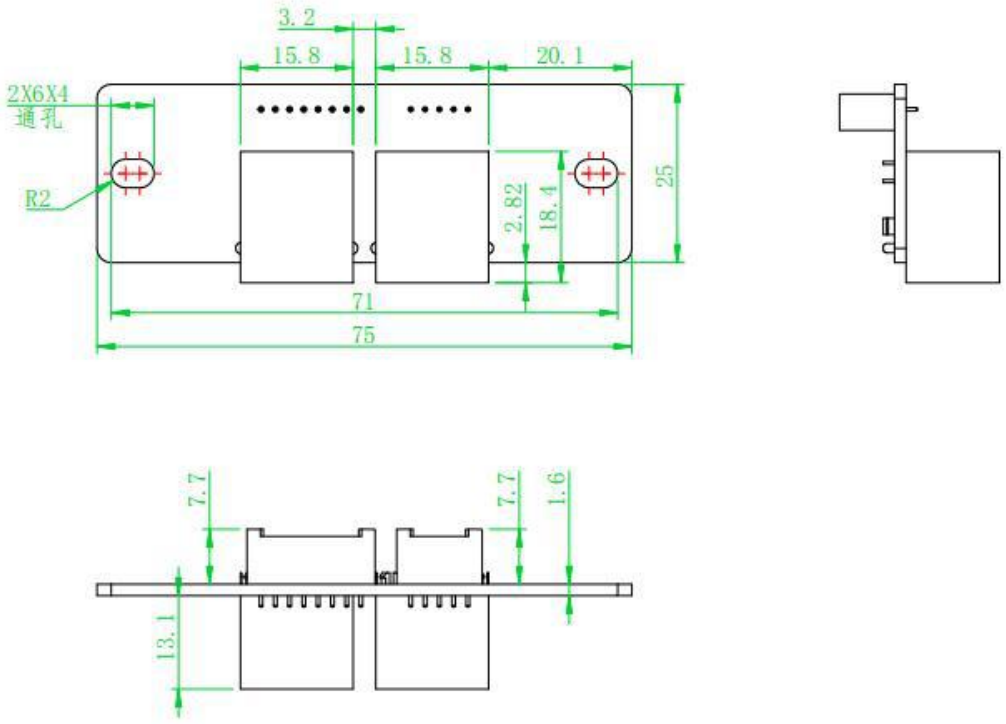
Content

一、Summary

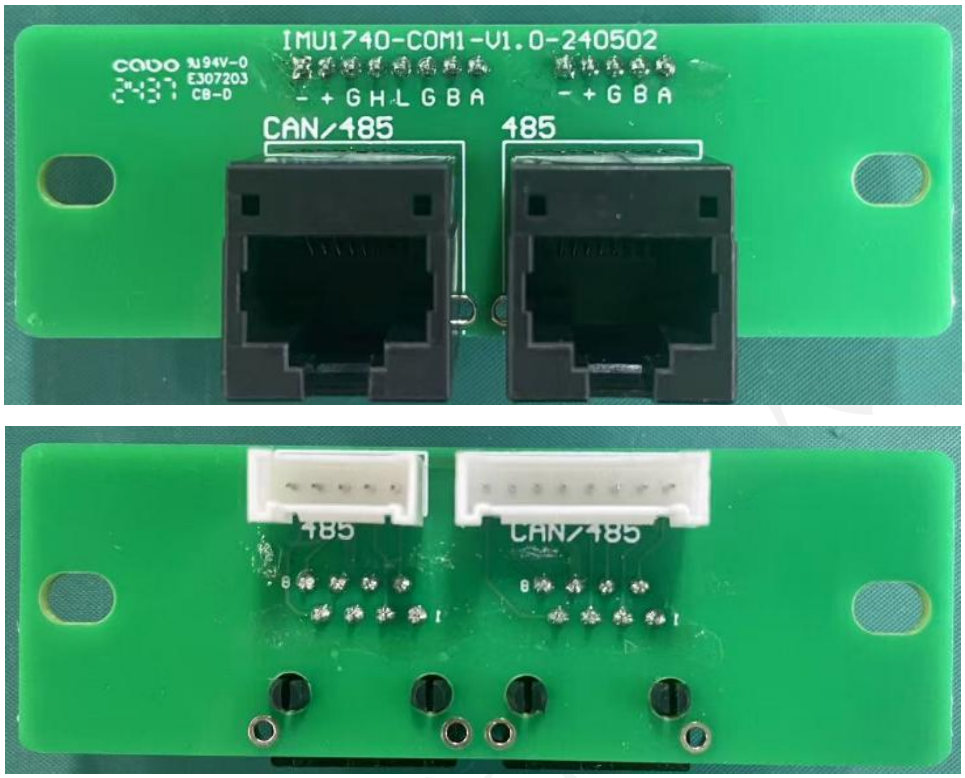
The product is the supporting equipment of 1740 series energy storage products, and integrates CAN and 485 communication interfaces. In order to use this product correctly, please read the user manual carefully first, and keep it properly for future use. Please install, use and operate according to the requirements in the user manual.

二、Surface

2.1、Size drawing



2.2、 Picture of real products



2.3、Plug-in description

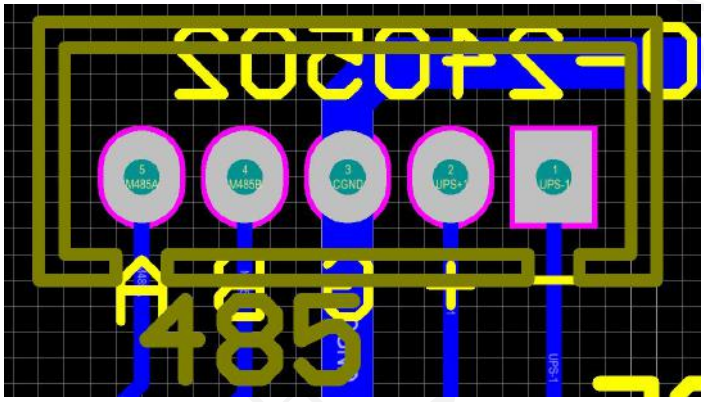
Num	Name	Describe	Function	Type
1	485	485 communication interface	Connect to the BMS 485/CAN interface	5pin
2	CAN/485	CAN/485 communication interface	Connect to BMS 485/CAN and UPS interfaces	8pin
3	485	485 communication interface	Communicate with the upper computer	RJ45
4	CAN/485	CAN/485 communication interface	CAN/485 communication is conducted externally	RJ45

三、Plug-in interface description

3.1、Definition of 485 interface pins

The 485 communication signal input port is used to connect the communication port of the opposite end to the BMS and concentrate the 485 communication interface of the opposite end on this terminal.

The interface pin is defined as：



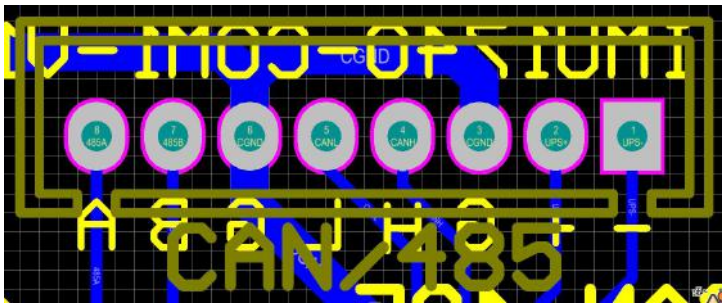
Plug model on the board：HX20020-5A

Num	Pin	Name	Describe
1	PIN1	UPS-1	Leave the UPS interface in place
2	PIN2	UPS+1	Leave the UPS interface in place
3	PIN3	CGND	CGND
4	PIN4	M485B	Upper computer communication 485-B signal
5	PIN5	M485A	Upper computer communication 485-A signal

3.2、CAN/485 interface pin definition

485/CAN communication signal input interface, which connects the communication port of the other end to BMS to centralize the communication ports of the other end, CAN and UPS interfaces on this terminal。

The interface pin is defined as：



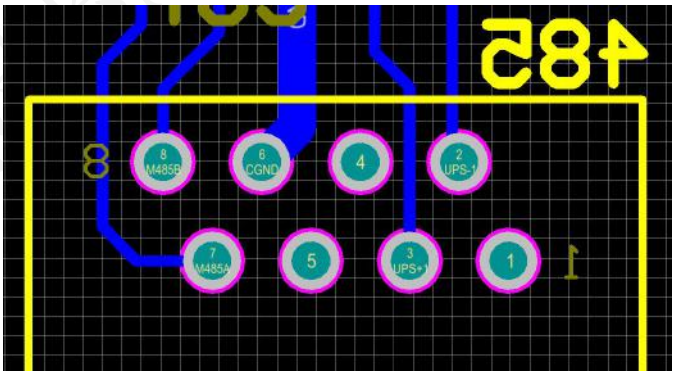
Plug model on the board：HX20020-8A

Num	Pin	Name	Describe
1	PIN1	UPS-	UPS signal -
2	PIN2	UPS+	UPS signal +
3	PIN3	CGND	CGND
4	PIN4	CANH	CAN-H signal
5	PIN5	CANL	CAN-L signal
6	PIN6	CGND	CGND
7	PIN7	485B	485-B signal for parallel machine communication
8	PIN8	485A	485-A signal for parallel machine communication

3.3、RJ45-485 interface pin definition

485 communication interface, mainly used to connect the upper computer communication.

The interface pin is defined as：



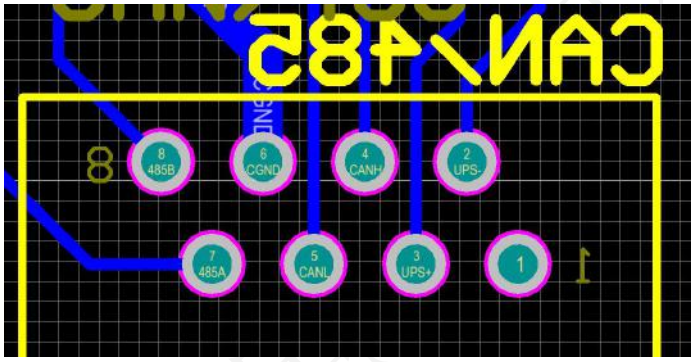
Num	Pin	Name	Describe
1	PIN1	/	
2	PIN2	UPS-1	Leave the UPS interface in place
3	PIN3	UPS+1	Leave the UPS interface
4	PIN4	/	
5	PIN5	/	

6	PIN6	CGND	CGND
7	PIN7	M485A	Upper computer communication 485-A signal
8	PIN8	M485B	Upper computer communication 485-B signal

3.4、RJ45-CAN/485 interface pin definition

CAN/485 communication interface is mainly used for communication with external devices such as inverter. Communication mode can be 485 or CAN. The interface can also input external signals from UPS to control the on/off state of BMS.

The interface pin is defined as：



Num	Pin	Name	Describe
1	PIN1	/	
2	PIN2	UPS-	Leave the UPS interface in place
3	PIN3	UPS+	Leave the UPS interface in place
4	PIN4	CANH	CAN-H signal
5	PIN5	CANL	CAN-L signal
6	PIN6	CGND	CGND
7	PIN7	485A	485-A signal for parallel machine communication
8	PIN8	485B	485-B signal for parallel machine communication

四、Wiring diagram (this diagram is for reference only)