MEGMEET

MU200 Series Communication Expansion Card

User Manual

Thank you for using MU200 series expansion cards independently developed and produced by MEGMEET, which mainly works with main module to complete communication functions. Before using the MU200 series PLC product, please carefully read this manual so as to better understand it, fully use it, and ensure safety.

This manual is suitable for the following members of the MU200 series expansion card:

MUE-RS485	*RS485* communication expansion card
MUE-RS232	*RS232* communication expansion card

Version Number: A00
Data: 2022-08-25
BOM Code: R33010806

For detailed product information, please refer to *MU200 Series PLC User Manual*, *MU200 Series PLC Programming Reference Manual*. For ordering the above user manuals, contact your Megmeet distributor or download from MEGMEET website (www.megmeet.com).
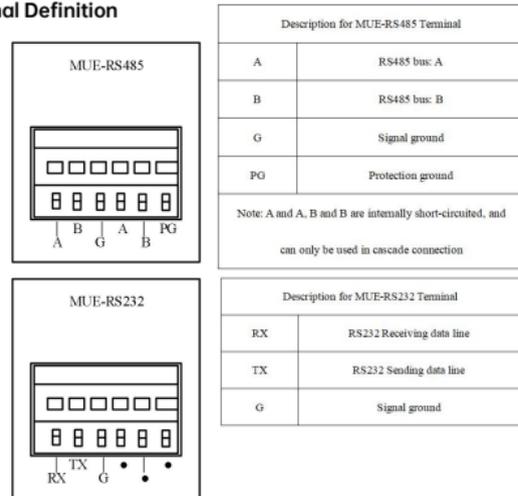
1. Terminal Definition

Fig 1-1 Terminal definition and description of expansion card

2. Installation

◆ Pull upward from the left edge of expansion card to open the cover plate one by one when the main module is powered off;

◆ Insert the expansion card pin header into the base accurately and vertically;

◆ Install two tapping screws to fix the expansion card and cover the plate;

◆ Wire external signal.

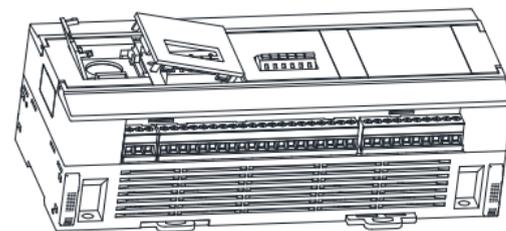**❗Note: Do not plug or remove with power-on!**

Fig 2-1 Expansion card installation diagram

3. Cable Connection and Specification

It is recommended to use shielded twisted-pair cables to ensure connection quality. The following table lists the sectional areas and models of the recommended cables.

Table 3-1 Model of recommended cable

Cable	Cross-section	Cable number	Strip length	Terminal
signal line	0.8~1.0mm²	AWG18、20	8.0~9.0mm	Tinning

Note: Insert the wire smoothly instead of using explosive force.

4. Technical Specification

Table 4-1 RS485 performance specification

Item	Technical specification
Channel number	1
Communication rate	1200、2400、4800、9600、19200、38400、57600、115200
Bus protocol	Free-port protocol, Modbus-RTU(master/slave)
Terminal matching resistance	None
Isolation mode	magnetic coupling isolation

Table 4-2 RS232 performance specification

Item	Technical specification
Channel number	1
Communication rate	1200、2400、4800、9600、19200、38400、57600、115200
Bus protocol	Free-port protocol, Modbus-RTU(master/slave)
Terminal matching resistance	None
Isolation mode	magnetic coupling isolation

5. Wiring requirement

Figure 5-1 and Figure 5-2 show the wiring requirement for user terminal.

Note for wiring:

① It is recommended to use shielded twisted-pair cable as analog signal line and stay away from power line.

② Do not use the empty PIN on the user terminal.

③ It is recommended to connect the equipment signal to ground in strong interference environments when using MUE-RS485 equipment.
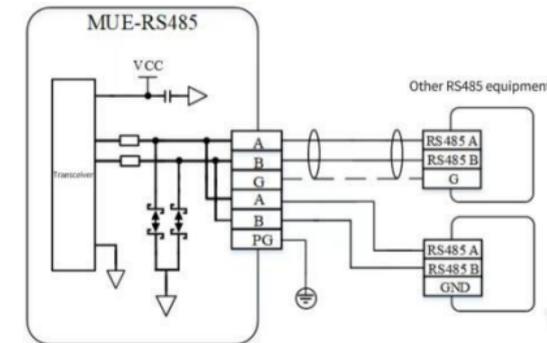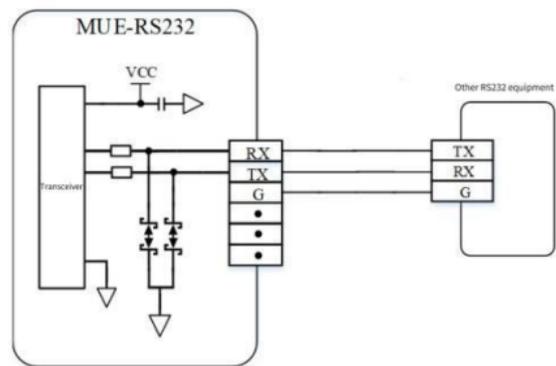
Fig 5-1   MUE-RS485 external wiring diagram

Fig 5-2   MUE-RS232 external wiring diagram

6. Routine Inspection

1. Check that the wiring meets requirements.

2. Check that the expansion card is properly inserted in the extension port of main module.

3. Check the application for making sure that the correct module configuration and parameter setting range are selected.

4. Set the MU200 main module to RUN to check the ERR light status.

7. Indicator and Fault Inspection

Phenomenon	Possible cause	Coping strategy
ERR light flashes	No expansion card connection in background configuration	Check the expansion card information in the PLC information column in the background to ensure that the configuration is correct
	Expansion card configuration error in background	
No expansion card in PLC information column/Information inconsistency	No insertion of expansion card	Connect the expansion card to the main module accurately.
	Expansion card damage	Contact the manufacturer

Abnormal serial port communication	Poor cable connection or connection signal properties error, e.g reverse connection between A and B	Connect the signal lines correctly
	Inconsistent parameter setting of communication master/slave machine, such as baud rate, parity check, data bit, and address	Set the communication parameters to be consistent
	Inconsistent protocol of communication master/slave machine	Set the communication protocol to be consistent

Notice

1. The warranty range is confined to the PLC only.

2. Warranty period is 18 months, within which period Megmeet conducts free maintenance and repairing to the PLC that has any fault or damage under the normal operation conditions.

3. The start time of warranty period is the delivery date of the product, of which the product SN is the sole basis of judgment. PLC without a product SN shall be regarded as out of warranty.

4. Even within 18 months, maintenance will also be charged in the following situations:

- Damages incurred to the PLC due to mis-operations, which are not in compliance with the User Manual;
- Damages incurred to the PLC due to fire, flood, abnormal voltage, etc;
- Damages incurred to the PLC due to the improper use of PLC functions.
- Remove the PLC personally.

5. The service fee will be charged according to the actual costs. If there is any contract, the contract prevails.

6. If you have any question, please contact the distributor or our company directly.