

**MU200 Series Digital Quantity Expansion Card
User Manual**

Thank you for using MU200 series expansion cards independently developed and produced by MEGMEET company, which mainly works with main module to complete digital quantity input and output 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-4X	4-point 24VDC input expansion card
MUE-4Y	4-point transistor output expansion card
MUE-4XY	2-point input and 2-point transistor output expansion card

Version Number: A00
Data: 2022-08-25
BOM Code: R33010804

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

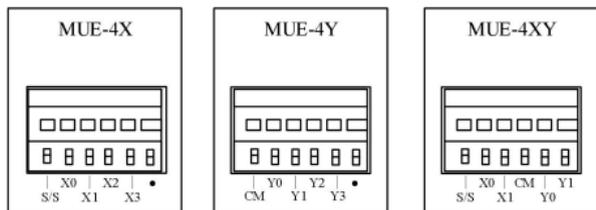


Fig 1-1 Terminal definition diagram

Pin mark	Function description
S/S	Input mode selection, leakage type: connect to +24V; source type: connect to COM
X0~X3	Digital quantity signal input terminal
CM	Control output common terminal
Y0~Y3	Digital quantity control output terminal
●	Idle terminal, no wiring

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!

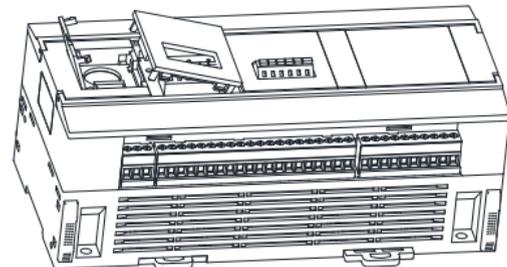


Fig 2-1 Expansion card installation diagram

3. Cable connection and specification

It is recommended to use stranded copper conductors 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	0.8~1.0mm ²	AWG18、20	8.0~9.0mm	Tinning

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

4. Technical Parameter

Table 4-1 Electrical specification of digital quantity input

Item	Technical Specification
Input mode	Leakage type、source type
Input voltage level	24V DC (-15%~+20%)
Port filter time	1ms~64ms (Default: 8ms, adjustable)
Input impedance	4.3k Ω
Signal frequency	1kHz (MAX)
Isolation mode	Opto-coupler isolation

Table 4-2 Electrical specification of digital quantity output

Item	Technical Specification
Control circuit voltage	DC 5V~24V
Isolation mode	Opto-coupler isolation
Load current	0.3A/1 point; 0.8A/4 points
Signal frequency	1kHz (MAX)

Min. load	5mA(DC 5~24V)
Open-path leakage current	Less than 0.1mA/DC 24V
ON response time	0.5ms MAX (100mA/DC24V)
OFF response time	0.5ms MAX (100mA/DC24V)

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 stranded copper conductors as signal line and stay away from power line.
- ② Do not use the empty pin on the user terminal.

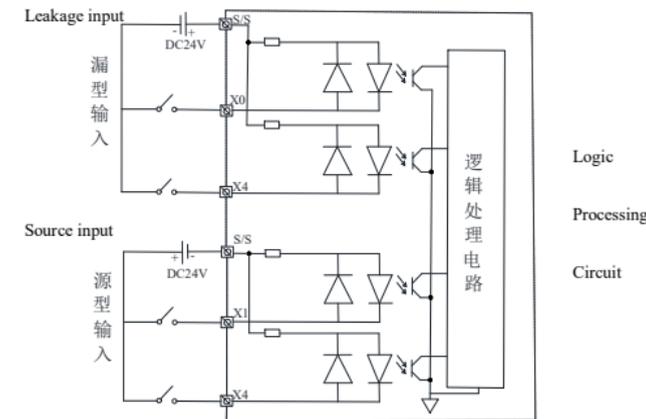


Fig 5-1 Internal input equivalent circuit and external wiring diagram

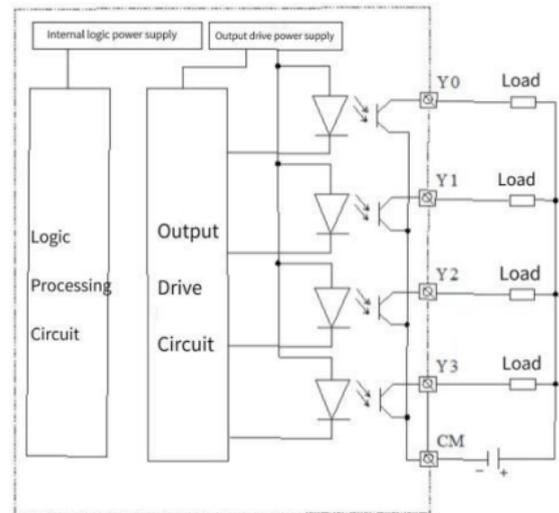


Fig 5-2 Output equivalent circuit diagram

6. Routine Inspection

1. Check that the wiring meets requirements.
2. Check that the extension card is properly inserted in the extension port of main module.
3. Check the application, make 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	Solution
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
Output status is inconsistent with actual output status	Address error	Check the correct address in the basic background information of the expansion card

	Expansion card damage	Contact the manufacturer
Input status is inconsistent with actual input status	Address error	Check the correct address in the basic background information of the expansion card
	Expansion card damage	Contact the manufacturer

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.

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