

Thank you for using MU300 series PLC. Before using the product, please carefully read this manual so as to better understand it, fully use it, and ensure safety. This quick start manual is to offer you a quick guide to the design, installation, connection and maintenance of MU300 series PLC, convenient for on-site reference.

This manual is for the following MU200 series members:

MU300-0808BTA MU300-1210BTA

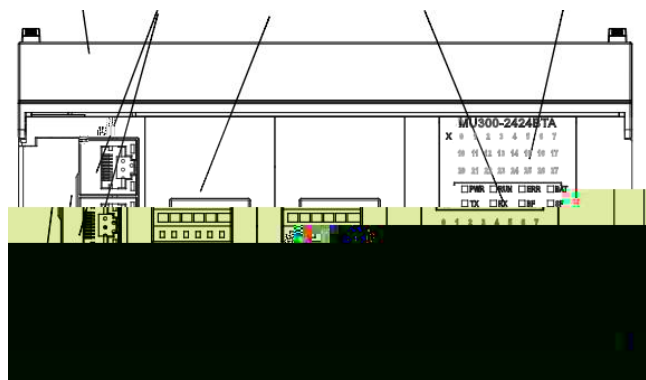
MU300-1210BRA MU300-2424BTA

Version 1.2

Revision Date 2024-11-11

BOM Code R33011245

For detailed product information, please refer to *MU Series PLC User Manual*, *MEGcreator Programming Software User Manual*, and *MU Series PLC Programming Reference Manual*. For ordering the above user manuals, contact your Megmeet distributor or sales office.



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Fig 1-1 Appearance and part name of module

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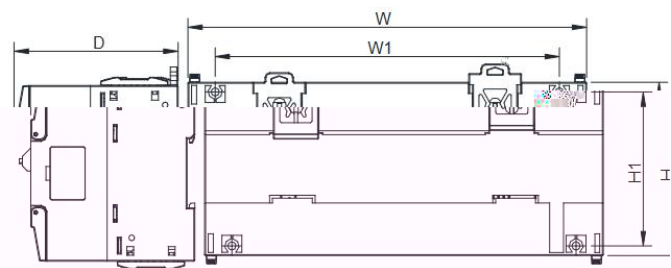
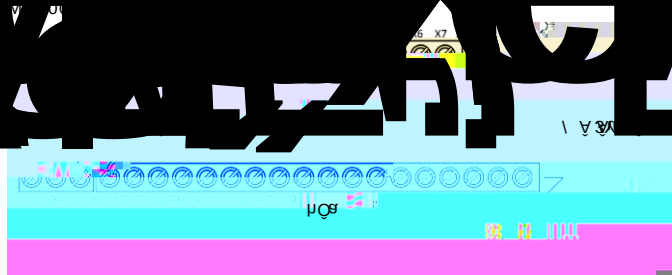


Fig 3-3 Dimensions of MU300 series main module

| Model         | W   | W1    | H  | H1 | D  |
|---------------|-----|-------|----|----|----|
| MU300-0808BTA | 105 | 78.3  | 90 | 80 | 85 |
| MU300-1210BTA |     |       |    |    |    |
| MU300-1210BRA |     |       |    |    |    |
| MU300-2424BTA | 210 | 181.3 | 90 | 80 | 85 |

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MU300 series PLC can provide a S/S terminal, in which user can select the signal input

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| Model<br>Function    | MU300-<br>0808BTA                                                                                                | MU300-<br>1210BTA | MU300-<br>1210BRA | MU300-<br>2424BTA |
|----------------------|------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|
| High-speed<br>input  | X0~X3<br>200KHz                                                                                                  | X0~X3<br>200KHz × |                   | X0~X7<br>200KHz   |
| High-speed<br>output | Y0~Y3<br>200KHz                                                                                                  | Y0~Y3<br>200KHz   | /                 | Y0~Y7<br>200KHz   |
| USB                  | Support for program download and monitoring with TYPE-C port.                                                    |                   |                   |                   |
| Ethernet             | Two front ports integrated with switch, can be configured as EtherNet/IP master/slave or ModBUS TCP master/slave |                   |                   |                   |
| EtherCAT             | Support 16-axis EtherCAT motion control;<br>Min.EtherCAT cycle: 1000us, support up to 16 EtherCAT slaves         |                   |                   |                   |
| CANopen              | MUE-CAN expansion card needs to be installed.                                                                    |                   |                   |                   |
| Expansion<br>card    | 1                                                                                                                |                   |                   | 2                 |
| Expansion<br>module* | 6                                                                                                                |                   |                   | 12                |
| TF card              | Supported                                                                                                        |                   |                   |                   |

\*The expansion module is applicable to MU200 series.

### 9.1 Input Characteristic and Signal Specification

Table 8-1 Input port specification

| Item                 |                   | Specification                                                                                                                   |
|----------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Signal Input Mode    |                   | Source type/leakage type, user can choose through the S/S terminal.                                                             |
| Electrical parameter | Detection Voltage | 24VDC                                                                                                                           |
|                      | Input Impedance   | High-speed input port: 2.4KΩ<br>other ports: 4.3KΩ                                                                              |
|                      | Input as ON       | External circuit resistance 400Ω                                                                                                |
|                      | Input as OFF      | External circuit resistance 24KΩ                                                                                                |
| Filter function      | Digital filter    | All ports support the digital filter function, and the filter time can be set                                                   |
|                      | Hardware filter   | The ports have the hardware filter function, and the filter time is about 0.5ms                                                 |
| High-speed function  |                   | Functions like high-speed counting, interrupt, pulse capture can be achieved<br>The port counting frequency can be up to 200KHz |
| Common wiring method |                   | All input channels share one input common terminal                                                                              |

Table 9-3 Relay output port

| Item                               | Specification               |
|------------------------------------|-----------------------------|
| Rated voltage of loop power supply | Below AC250V/DC30V          |
| Circuit insulation                 | Relay mechanical insulation |

Table 11-1 Common problem and solution

| Phenomenon                                                               | Possible cause                                                                                                          | Solution                                                                                                                                                   |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PWR and other indicators are OFF                                         | Power supply voltage loss or low voltage                                                                                | Check the power supply condition                                                                                                                           |
|                                                                          | Disconnect the power switch or fuse blown                                                                               | Check the switch, wire or fuse condition                                                                                                                   |
|                                                                          | Abnormal power wiring                                                                                                   |                                                                                                                                                            |
|                                                                          | Power board damage                                                                                                      | Check and confirm Whether the voltage between LN terminals is within the normal range; whether exist short circuit or overload between 24V and 0V terminal |
| PWR indicator flash intermittently                                       | Poor contact of power circuit                                                                                           |                                                                                                                                                            |
|                                                                          | Over-connection of expansion modules, to cause current limiting                                                         |                                                                                                                                                            |
|                                                                          | Short circuit in external power supply, to cause current limiting                                                       |                                                                                                                                                            |
| ERR indicator flashing                                                   | User program error                                                                                                      | Re-edit program by MEGreator and download after exclusion                                                                                                  |
|                                                                          | Actual running time exceeds WDT setting                                                                                 | Increase WDT set time                                                                                                                                      |
|                                                                          | Expansion module fault                                                                                                  | Check and rectify faults                                                                                                                                   |
| Inconsistency between input status indicator and input terminal status   | Over on-resistance of user circuit                                                                                      | Set the external-circuit electrical parameters to appropriate range, like shortening wire length, and nonuse of extremely thin wires                       |
|                                                                          | Poor signal circuit contact                                                                                             | Check the cable connection and troubleshoot the fault                                                                                                      |
| Output cannot be closed                                                  | Poor external wiring                                                                                                    |                                                                                                                                                            |
|                                                                          | Output channel damage                                                                                                   | Swap with idle port                                                                                                                                        |
| Inconsistency between output status indicator and output terminal status | Indicator damage or output channel damage                                                                               |                                                                                                                                                            |
| Upload, download, and monitor disable                                    | Poor cable connection                                                                                                   | Use the special cable of Megmeet PLC                                                                                                                       |
| Non-response of expansion module                                         | Unreliable connection                                                                                                   | Check in power-down status, and power on after rectifying the fault                                                                                        |
| Serial port controls other equipment unsuccessfully                      | Poor cable connection or incorrect wiring signal property                                                               | Connect communication cables correctly                                                                                                                     |
|                                                                          | Inconsistent settings of communication master and slave devices, such as baud rate, parity check, data bit, and address | Set the same communication parameter                                                                                                                       |
|                                                                          | Communication protocol is inconsistent with the master and slave                                                        | Set the same communication protocol                                                                                                                        |
| High speed miscounting                                                   | In most cases, the input signal is interfered                                                                           | Route the low voltage sensitive signal cable separately from the power cable                                                                               |

**Notice**

- The warranty range is confined to the PLC only.
- 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.
- 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.
- 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.
- The service fee will be charged according to the actual costs. If there is any contract, the contract prevails.
- If you have any question, please contact the distributor or our company directly.

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