MEGMEET

Power Solutions

☐ Telecom Power ☐ Server Power ☐ Electric Power ☐ Medical Power ☐ Display Power ☐ LED Power
☐ Laser Power ☐ OA Power ☐ Flat Panel Power ☐ Bi-directional Inverters for Portable Power
☐ Solar & BESS & EV Charging Solution

Industry Automation

☐ Servo System ■ Control System ☐ Elevator Controller ☐ Linear Motors ☐ IOT Solution ☐ Encoder
☐ Variable Frequency Drive ☐ Internal Gear Pump

New Energy Solutions

☐ Multiplexed EV Charging System(OBC & DC-DC) ☐ Power Electronic Unit(2-in-1, 3-in-1)
☐ E-Compressor ☐ TV EDU ☐ Motor Control Unit ☐ Construction Machinery Controller
☐ Intelligent Active Hydraulic Suspension (i-AHS) ☐ Railway A/C Controller ☐ Railway VFD
☐ Light Electric Vehicle Controller ☐ Thermal Mgmt. System

Home Appliance Control Solutions

☐ Residential A/C Controller ☐ Commercial A/C Controller ☐ Heat Pump Controller
☐ Vehicle A/C Controller ☐ Solar A/C Controller ☐ Mini Compressor Controller
☐ Refrigerator Controller ☐ Washer/Dryer Controller ☐ Residential Microwave
☐ Industrial Microwave ☐ Smart Bidet ☐ RF Thawing System

Precision Connection

☐ FFC ☐ FPC ☐ Coaxial Cable ☐ CCS ☐ Litz Wire ☐ Peek Wire

SHENZHEN MEGMEET ELECTRICAL CO., LTD.

Add 1: 5th Floor, Block B, Unisplendour Information Harbor, Langshan Rd., Science & Technology Park, Nanshan District, Shenzhen, 518057, China

Add 2: 34th Floor, High-tech Zone Union Tower, No.63 Xuefu Road, Nanshan District, Shenzhen, 518057, China

FOLLOW US

Megmeet

Version: 202405

MEGMEET

Power Supply Product | **Industrial Automation** | Smart Appliance Electronic Control
New Energy Vehicle& Rail Transit | Intelligent Equipment | Precision Connection

CONTROL SYSTEM

SELECTION BROCHURE

PLC Thermostat HMI

Global Leading Solution Provider In Electrical Automation

MEGMEET

Shenzhen Megmeet Electrical Co., Ltd.(Stock Code:002851) is a one-stop solution provider for the R&D, production, sales and services of hardware and software in electrical automation field, highlighting in power electronics and automatic control echnology. Company's main business covers six parts: power supply products, industrial automation, new energy vehicle& rail transit, intelligent equipment, smart appliance electronic control and precision connection.

Our company has established a strong platform of R&D, manufacturing, marketing and service with more than 2800 R&D personnel and a total of more than 7800 employees. We have established R&D centers in Shenzhen City, Changsha City, Xi'an City, Wuhan City, Zhuzhou City, Hangzhou City, Taizhou City and Chengdu City; overseas research institutes in the United States, Germany, and Sweden; manufacturing centers in Zhuzhou City, Dongguan City, Heyuan City, Taizhou City, and Yiwu City; overseas factories in Thailand and India; overseas marketing station in the United States, Japan, Korea, Southeast Asia, India, Germany, Poland, Romania, Turkey, Sweden to provide quality service resources.

MEGMEET is committed to helping people achieve a more efficient use of electricity, creating a cleaner living environment, continuously improving production efficiency and creating a better life for human beings. Our company aspires to become a global first-class product and solution provider in the field of electrical control and energy saving.

2800+
R&D Personnels

7800+
Workers

10
R&D Centers

8
Manufacturing Bases

Contents

MX600 Series Medium PLC

MX600 series intelligent controller breaks through the 256-axis μs-level synchronous control, supports EtherCAT, EtherNET / IP, ProfiNet and other bus protocols, and the redundant architecture ensures 99.999 % extreme condition stability. It covers high-precision scenarios such as lithium battery winding, semiconductor, photovoltaic, etc., and synchronously meets the ms-level sequential control requirements of 3C assembly, five-axis machining and high-speed packaging.

Product Feature

Excellent performance

- Support 16-axis/250us, 64-axis/500us and 256-axis/2ms sync cycles, and 20us jitter to ensure high-precision control.

High-speed IO

- 16 digital inputs and 16 digital outputs, including 8 high-speed inputs and 8 high-speed outputs; 4 pulse output and 4 AB-phase encoders.

Advanced Motion Control

- Support multiple sets of E-CAMs, E-Gears and multi-axis interpolation, and G-code function

High reliability

- Equipped with dual EtherCAT master station, it supports redundancy, enhancing system stability and security.

Comprehensive protocol

- Compatible with EtherCAT, OPC UA, EtherNet/IP, Profinet, MODBUS RTU, MODBUS TCP and other protocols.

Diversified interfaces

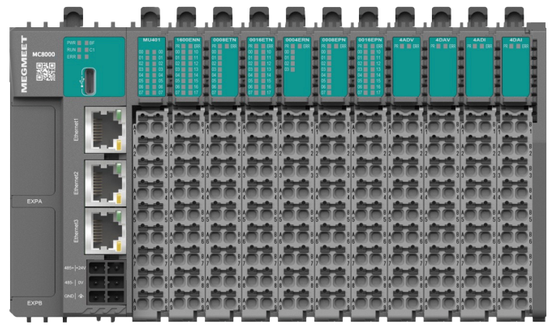
- Provide 5 Ethernet ports, 4 USB ports, 3 RS485 ports, 1 RS232 port, 1 HDMI port, and 1 DP port

Model and Specification

Item		MX610	MX620
Power supply		24V DC (-15%~20%)	
CPU		N97, 2GHz	I3-N305
Memory		8GB DDR4	16GB DDR4
Hard disk		128GB SSD	256GB SSD
SPI FLASH		64Mbit	
Serial port	RS485	3 channels (COM1,COM3,COM4, one MODBUS master support 31 slaves)	
	RS232	1 channel (COM2, support MODBUS-RTU)	
EtherCAT*2	EtherCAT axis	64+64 (LAN1,LAN2 are Masters, redundancy)	128+128 (LAN1,LAN2 are Masters, redundancy)
	EtherCAT slave	256	512
Ethernet	ModbusTCP (Master/Slave)	3 channels (Up to 63 slaves)	/
	EtherNet/IP (Master/Slave)	1 channel (Max. Client connection:64, Max. Server connection:32)	
	Profinet (Slave)	1 channel, support RT	
	OPC UA	3 channels	
IO	General input * 8	8 (NPN/PNP)	
	General output * 8	8 (NPN)	
	High-speed input * 8	8*single-phase (Max. 200KHZ) , 4*AB phase (100KHZ)	
	High-speed output *8	8*single-phase, 4*AB phase (Max. 200KHZ)	
Motion control	Single axis	4 pulse;EtherCAT (64+64)	4 pulse;EtherCAT (128+128)
	ECAM/Gear	127	255
	Axis group/CNC	8 (Max.: 3 axis in one group)	16 (Max.: 3 axis in one group)
External interrupt		8	
Programming method		IEC 61131-3 programming language (LD, ST, SFC, CFC)	
Program execution		Compiling	
Program storage space		128M Byte	
Program storage capacity		Data, Const: 128MB data capacity N Area; Memory: 5 MB (%M Variable) M Area; Inputs: 128KB %I; Outputs:128KB %Q	
Retention space		Persistern: 6MB Retain:1MB (Reset Cold)	
Size (mm)		160(H)*55(W)*147(D)	
Weight (kg)		<1.3Kg	
SD card		Natural cooling	
EMC specification		EN61131-2 Zone B	

MC8000 Series Medium PLC *

MC8000 series product is a new generation of high-performance and cost-effective medium PLC based on the mOPAX platform of MEGMEET. It is fully compatible with the IEC61131-3 programming specification and supports LD, ST, SFC, CFC, FBD, and IL programming languages; adopts the blade-type module design, and supports multi-core processor. Based on multi-bus protocols such as EtherCAT and Profinet, a multi-axis motion control system is constructed, to meet the high-speed response requirements of intelligent devices.



*Developing
Coming soon

Product Feature

Strong expansion & networking

- Expand up to 32 modules, support the expansion of digital, analog, CAN, RS485, RS232, etc.
- Full protocol compatibility, support Modbus/ EtherCAT/EtherNet IP/Profinet and others.

Reliably excellent performance

- Four-core A55 processor, communication, logic and algorithm are completely independent.
- 8*200K high-speed input, 8*200K pulse output (single pulse, pulse + direction, AB phase, FWD+REV, etc.)

Precise Multi-axis control

- 1ms/16-axis sync, support 16/32/64-axis EtherCAT control

Flexible & convenient operation

- 12mm machine body, saving space
- PUSH In terminal, easily wiring and replacing without tools

Ultra-large capacity

- Support 10M program capacity, 20M data capacity, 512KB retention, for complex logic and data processing

MC6000 Series Medium PLC

MC6000 series PLC is a new generation of medium PLC based on the Codesys platform, supporting EtherCAT multi-axis bus control, electronic CAM, electronic gear and other functions. The design conforms to PLCopen specification and IEC61131-3 standard. MC6000 is suitable for lithium battery, 3C electronics, photovoltaic, textile, HVAC and non-standard equipment industries.

Product Feature

EtherCAT Control: Support up to 2ms/16 axis synchronous operation, to achieve electronic gear, electronic CAM and other control easily

High-speed I/O: Built-in 200KHz high-speed I/O(8 * DI+8 * DO)

Programming language: Support ST, SFC, FBD, CFC, LD and IL, etc.—— IEC61131-3 standard programming language

Rich Interface: Ethernet, RS485, CAN, USB, TF card

Large capacity: 16MB program capacity, 16MB data capacity, 256MB storage capacity, 64KB+4KB retention on power down and TF card expansion

Multi-communication: Support standard MODBUS RTU, free format communication, MODBUS TCP, PROFINET, CANOpen master station, EtherCAT master station and other communication protocols

Model and Specification

Item		MC6000	MC6010*	MC6020*
Local IO expansion		16 modules (Max. 1024 points)		
Program capacity		16M		
Data capacity		12MB		
Power-down retention capacity		64+4KB		
Memory area		Area I: 128KB, Area Q: 128K, Area M: 4MB		
Instruction processing speed	Bit instruction processing (AVG.)	24.9ns		
	Word instruction processing (AVG.)	60.9ns		
	Integer four-rule operation(AVG.)	50.7ns		
	Floating number four-rule operation (AVG.)	50.4ns		
High-speed IO	Input	4-channel AB phase/8-channel single phase		
	Output	Y0~Y7：4-channel 200KHz		
Communication function	Ethernet	5*sockets（Modbus TCP Master/Slave，Free protocol)		
	RS485	2-channel（Modbus RTU Master/Slave，MCbus，Free protocol)		
	Special function	Support 4 Clients to access Support OPC UA, TCP/IP, UDP		
Programming language		ST、LD、FBD、SFC、CFC、IL		
EtherCAT	Supported motion axis	Max. 24	Max. 12	
	Slave station quantity	Max. 32（Including motion axis)		
	Min. Synchronization period	1ms		
	Typical value of communication cycle	16 axis-2ms	12 axis-2ms	
Motion control	CAM quantity	8	4	
	Single axis quantity	16	12	
	Axis group/CNC	1 axis group		
Hardware resource	TF card	Supported		
	Type-C	Supported		

MC6010 Profinet(Slave) Index	
Transmission medium	Ethernet CAT5 cable
Transmission distance	≤100m(Station-Station)
Transmission rate	100Mbps
Bus Interface	1*RJ45
RT	Supported; Min. Period: 4ms
IRT	Not supported
Input data area	1440 Bytes
Output data area	1440 Bytes

MC6020 Ethernet/IP Index	
Slave station quantity	31
Transmission medium	Ethernet CAT5 cable
Transmission distance	≤100m(Station-Station)
Transmission rate	100Mbps
Bus Interface	1*RJ45
Max. Input	504 Bytes
Max. Output	504 Bytes
Max. Quantity of CIP connection	10

* Developing

MC5000 Series Medium PLC

MC5000 is a perfect combination of motion control and medium PLC controller, supporting EtherCAT multi-axis bus control, interpolation, E-CAM, G-code, C language programming and other powerful functions. MC5000 is suitable for lithium battery, 3C electronics, photovoltaic, textile, and other industries.

Product Feature

Motion control: Be handled by a separate CPU
- Based on EtherCAT: Min. 250μs control cycle; Max. 64 bus axis
- Based on pulse output: 2M difference， 100K collector, 8PO expansion, control up to 38 pulse axis

Operation speed: Multi-core processiong for communication control, operation and logic, motion control, and 100K-step standard program executes no more than 2.2ms

C language: Support standard C programming, 2500dmips

Communication: Support EtherCAT, EtherNet/IP, standard MODBUS RTU, MODBUS TCP and other communication protocols

Large capacity: 320K-step program capacity, 2M Byte C language, 2M Byte data capacity

Model

MC5	0	0	0	E	A	16
MC5000 series PLC	PLC Type 0：Bus controller 1：Pulse controller 2：General controller	0：Cluster terminal 1：Euroblock	Terminal	Bus Type E: EtherCAT M: MECHATROLINK-III* C: CANopen* P: Profibus*	Function A: 6-axis differential 2M pulse output B: 4-axis collector 200K pulse output None: No pulse output	Bus Control Axis 8: 8 axis 16: 16 axis 32: 32 axis 64: 64 axis None: 0 axis

*Developing

Model and Specification

Item		MC5200E	MC5101EB	MC5100EA	MC5000EA64	MC5000E64	MC5001EB64
Local IO expansion		16 modules (Max. 1024 IO points)					
Program capacity		320K step					
Data capacity		2M					
Operating speed	Bit instruction processing	6.4ns					
	Word instruction processing	25ns					
	Integer four-rule operation (AVG.)	40ns					
	Floating number four-rule operation (AVG.)	50ns					
	Ladder diagram	2ms/100K step					
	C language	2500 dMIPS					
High-speed IO	Output	-	4-axis (collector)	6-axis(difference)		-	4-axis (collector)
	Input	-	2× AB phase	1×5V differential+2×AB AB phase		-	2×AB phase
Common IO(Transistor)		16-input, 16-output	4-input, 4-output			16-input, 16-output	4-input, 4-output
Communication function	Ethernet	8 sockets (ModbusTCP Master/slave，free protocol)					
	RS485	2×(Modbus Master/slave，MCbus，free protocol)					
Programming language		LD, SFC, FBD, C language					
EtherCAT	Supported motion axis	-			64(Max.)		
	Bus expansion rack	8 groups					
	Min. synchronization time	250us					
	Typical value of communication cycle	-			1ms		
Motion Control	CAM and interpolation	-	3×CAM /1 × multi-axis interpolation		Supported		
	Table output	-	10000 steps x2				
	CAD file import	-	Supported				
C Language	Standard C	Support standard C					
	Operation mode	Mixed programming with ladder diagram/Independent C-programming					
	Function library	Rich standard function library					
	User-defined library	Support to encapsulate function blocks by C language(import, export, encryption)					
Hardware Resource	SD card	Supported					
	USB download	Supported					

Model	Description		Specification
CPU Module			
	IO of Main Module	Number of bus control axis	
MC5200E	Input: 16-channel Output: 16-channel transistor	-	Standard medium module Terminal: cluster terminal
MC5100EA	Input: 4-channel 200K pulse，3-channel 1M differential pulse Output: 4-channel transistor, 6×2M differential pulse channel	-	Pulse main module Terminal: cluster terminal
MC5101EB	Input:8-channel(support 4-channel 200K pulse) Output:8-channel transistor(support 4-channel 200K pulse)	-	Pulse main module Terminal: Euroblock
MC5000E8	Input: 16-channel Output: 16-channel transistor	8-axis EtherCAT	Bus main module Terminal: cluster terminal
MC5000E16	Input: 16-channel Output: 16-channel transistor	16-axis EtherCAT	Bus main module Terminal: cluster terminal
MC5000E32	Input: 16-channel Output: 16-channel transistor	32-axis EtherCAT	Bus main module Terminal: cluster terminal
MC5000E64	Input: 16-channel Output: 16-channel transistor	64-axis EtherCAT	Bus main module Terminal: cluster terminal
MC5001EB8	Input:8-channel(support 4-channel 200K pulse) Output:8-channel transistor(support 4-channel 200K pulse)	8-axis EtherCAT	Bus main module Terminal: Euroblock
MC5001EB16	Input:8-channel(support 4-channel 200K pulse) Output:8-channel transistor(support 4-channel 200K pulse)	16-axis EtherCAT	Bus main module Terminal: Euroblock
MC5001EB32	Input:8-channel(support 4-channel 200K pulse) Output:8-channel transistor(support 4-channel 200K pulse)	32-axis EtherCAT	Bus main module Terminal: Euroblock
MC5001EB64	Input:8-channel(support 4-channel 200K pulse) Output:8-channel transistor(support 4-channel 200K pulse)	64-axis EtherCAT	Bus main module Terminal: Euroblock
MC5000EA8	Input: 4-channel 200K pulse，3-channel 1M differential pulse Output: 4-channel transistor, 6×2M differential pulse channel	8-axis EtherCAT	Bus main module Terminal: cluster terminal
MC5000EA16	Input: 4-channel 200K pulse，3-channel 1M differential pulse Output: 4-channel transistor, 6×2M differential pulse channel	16-axis EtherCAT	Bus main module Terminal: cluster terminal
MC5000EA32	Input: 4-channel 200K pulse，3-channel 1M differential pulse Output: 4-channel transistor, 6×2M differential pulse channel	32-axis EtherCAT	Bus main module Terminal: cluster terminal
MC5000EA64	Input: 4-channel 200K pulse，3-channel 1M differential pulse Output: 4-channel transistor, 6×2M differential pulse channel	64-axis EtherCAT	Bus main module Terminal: cluster terminal

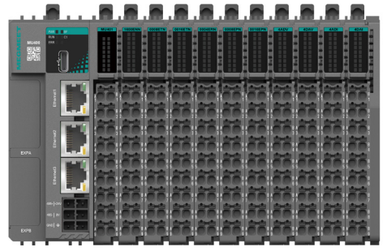
Applicable to MC6000/MC5000 basic modules and MC5000S remote IO modules

Power Module		
MP50AC220	Input: 100~240Vac, Output: 24V/2A	AC power module
IO Expansion Module		
MC5000-3232ETN	32-point 24DVC input, 32-point transistor output	Cluster terminal
MC5000-1616ETN	16-point 24DVC input, 16-point transistor output	Cluster terminal
MC5000-3200ENN	32-point 24DVC input	Cluster terminal
MC5000-0032ETN	32-point transistor output	Cluster terminal
MC5000-6400ENN	64-point 24DVC input	Cluster terminal
MC5000-0064ETN	64-point transistor output	Cluster terminal
MC5000-1600ENN-T	16-point 24DVC input	Plug-pull screw terminal
MC5000-0016ERN-T	16-point relay output	Plug-pull screw terminal
MC5000-0016ETN-T	16-point transistor output	Plug-pull screw terminal
MC5000-3200ENN-P	32-point IO input	Euroblock
MC5000-0032ETN-P	32-point IO output	Euroblock
MC5000-1616ETN-PH	16-point 24DVC input, 16-point transistor output (with 4 channels high-speed counter)	Euroblock
MC5000-1600ENN-P	16-point IO input	Euroblock
MC5000-0016ETN-P	16-point IO output	Euroblock
MC5000-0016ERN-P	16-point relay output	Euroblock
MC5000-0014EPN-P	14-point high-side transistor output	Euroblock
Special Function Module		
MC5000-8PO	8-axis 200KHZ pulse output module (1 main module can configure up to 4, MC5000 only)	Cluster terminal
MC5000-4AD/8AD	4/8-channel analog quantity input module	Plug-pull screw terminal
MC5000-4DA	4-channel analog quantity output module	Plug-pull screw terminal
MC5000-4PT	4-channel thermal resistance temperature module	Plug-pull screw terminal
MC5000-4TC/8TC	4/8-channel thermocouple temperature module	Plug-pull screw terminal
MC5000-2WT*	2-channel weighing module	Plug-pull screw terminal
MC5000-4DA-P	4-channel analog quantity output module	Euroblock
MC5000-6AD-P	6-channel analog quantity input module	Euroblock
MC5000-8TC-P	8-channel thermocouple temperature module	Euroblock
Remote IO Module		
MC5000S-ET	EtherCAT expansion rack	EtherCAT slave station
MC5000S-EIP	EtherNet/IP expansion rack	EtherNet/IP slave station
MC5000S-PN	ProfiNet expansion rack	ProfiNet slave station
Accessory		
MCA05-100L	1m terminal line	Tieline
MCA05-150L	1.5m terminal line	Tieline
MCA10-40P	40PIN terminal	Wiring terminal

* Developing

MU400 Series Small PLC

MU400 is a new generation of economical PLC based on mOPAX platform. It uses LD, ST and FBD languages in accordance with IEC-61121-3 / PLCopen standard; is equipped with EtherCAT, Ethernet, CAN, RS485 and other interfaces; owns 1M program capacity, 1M data capacity; The body is as thin as 12 mm, and supports up to 16 expansion modules, which can meet a variety of applications.



Product Feature

Rich expansion in stable & reliable

- Support up to 16 expansion modules
- Integrate 2 expansion cards, and support the expansion of digital, analog, CAN, RS485, RS232

Intelligent EtherCAT control

- 2ms/4-axis synchronization, ms-level response speed
- Standard EtherCAT master, with up to 8 EtherCAT axis

High performance for precise control

- MCU + FPGA processor, 600MHz frequency
- 8*200K high-speed input, 8*200K pulse output (single pulse, pulse + direction, AB phase, FWD+REV)

Flexible & convenient operation

- 12mm machine body, saving space
- PUSH In terminal, easily wiring and replacing without tools

Basic Module

Model	Description	Dimensions (L x W x H)
MU401	8-point DC24V input, 8-point transistor output-16 bus axis, 4 pulse axis	105mm x 90mm x 85mm
MU402	8-point DC24V input, 8-point transistor output-8 bus axis, 4 pulse axis	

Expansion Module

Model	Description	Dimensions (L x W x H)
MR400-4ADI	4-channel current input	80.7mm x 15.7mm x 107mm
MR400-4ADV	4-channel voltage input	
MR400-4DAI	4-channel current output	
MR400-4DAV	4-channel voltage output	
MR400-0004ERN	4-channel relay output	
MR400-0008EPN	8-channel PNP transistor output	
MR400-0008ETN	8-channel NPN transistor output	
MR400-0016EPN	16-channel PNP transistor output	
MR400-0016ETN	16-channel NPN transistor output	
MR400-0800ENN	8-channel digital quantity input	
MR400-1600ENN	16-channel digital quantity input	
MR400-P2000	Power supply module	

MU300 Series Small PLC

MU300 series is a new bus-type small PLC launched by MEGMEET, equipped with high-performance CPU and EtherCAT/CANopen high-speed communication protocol. It supports multi-axis bus control, interpolation, E-CAM, E-gear and other control function, to achieve high-speed operation and efficient communication, flexible configuration and programming in 3C, packaging, hydraulic industry or other control scenarios.

Product Feature

Flexible expansion

- IO point expands up to 240
- Support a maximum of 12 expansion modules and 2 function expansion cards

Excellent performance for precise control

- Arithmetic speed and control performance are significantly improved based on ARM+FPGA dual-core processor
- Support 8-channel 200K high-speed pulse output and single-phase pulse count, or 4-channel 100K AB-phase, CW/CCW, pulse+direction
- Support linear interpolation and E-gear

EtherCAT Control

- Min. 500μs control cycle, support up to 16 bus axis
- Communication port: 1*EtherCAT+2*EtherNet, support up to 32 slave stations

Networking based on multi-communication

- Support MODBUS protocol, CAN free-port protocol and CANopen protocol
- Support USB and MODBUS-TCP communication with a maximum of 5 sockets and 20 connections
- Support Ethernet programming, USB upload and download

Basic Module (AC Power)

Model	Description	Dimensions(mm) LxWxH
MU300-0808BTA16	8-point DC24V input, 8-point transistor output (16 bus axis)	105×90×85
MU300-0808BTA8	8-point DC24V input, 8-point transistor output (8 bus axis)	
MU300-1210BTA16	12-point DC24V input, 10-point transistor output (16 bus axis)	
MU300-1210BTA8	12-point DC24V input, 10-point transistor output (8 bus axis)	
MU300-1210BRA16	12-point DC24V input, 10-point relay output	
MU300-1210BRA8	12-point DC24V input, 10-point relay output	
MU300-2424BTA16	24-point DC24V input, 24-point transistor output (16 bus axis)	180×90×85
MU300-2424BTA8	24-point DC24V input, 24-point transistor output (16 bus axis)	

MU200 Series Small PLC

MU200 new generation of small PLC uses ARM+FPGA dual-core processor for the powerful processing function, while owns the RS232/ RS485/ Ethernet communication ports, and supports linear interpolation and electronic gear. This product is widely used in 3C industry, packaging industry, hydraulic industry, etc.

Product Feature

Networking based on multi-communication

- Support MODBUS protocol, free protocol, CAN free-port protocol and CANopen protocol
- Support USB and MODBUS-TCP communication with a maximum of 5 sockets and 20 connections

Excellent performance for precise control

- Arithmetic speed and control performance are significantly improved based on ARM+FPGA dual-core processor
- Support up to 12-channel 200K high-speed pulse output and 8-channel high-speed count
- Support linear interpolation and E-gear

Flexible expansion

- IO point expands up to 272
- Support up to 12 special function modules and 2 expansion cards

Simplified programming

- Convenient hardware configuration
- Tabulation communication
- High-level C language programming
- Modularization programming
- Multi-window display programming
- Safe and reliable with multiple protections

Basic Module (AC Power)

Model	Description	Dimensions(mm) LxWxH
MU200-4040BTA	40-point DC24V input, 40-point transistor output	246x90x85
MU200-4040BRA	40-point DC24V input, 40-point relay output	
MU200-3232BTA	32-point DC24V input, 32-point transistor output	210x90x85
MU200-3232BRA	32-point DC24V input, 32-point relay output	
MU200-2424BTA	24-point DC24V input, 24-point transistor output	180x90x85
MU200-2424BRA	24-point DC24V input, 24-point relay output	
MU200-1616BTA	16-point DC24V input, 16-point transistor output	145x90x85
MU200-1616BRA	16-point DC24V input, 16-point relay output	

IO Expansion Module Applicable to the basic modules of MU300/MU200 series PLC

Model	Description	Dimensions(mm) LxWxH
MU200-0016ERN	16-point relay output	60x90x85
MU200-0016ETN	16-point transistor output	
MU200-1600ENN	16-point intput	
MU200-0808ERN	8-point DC24V input, 8-point relay output	
MU200-0808ETN	8-point DC24V input, 8-point transistor output	

Special Function Module Applicable to the basic modules of MU300/MU200 series PLC

Model	Description	Dimensions(mm) LxWxH
MU200-4AD	4-channel analog quantity input	60x90x85
MU200-8AD	8-channel analog quantity input	
MU200-4DA	4-channel analog quantity output	
MU200-8TC	8-channel thermocouple	
MU200-4PT	4-channel thermal resistance	

Expansion Card Applicable to the basic modules of MU300/MU200 series PLC

Model	Description	Dimensions(mm) LxWxH
MUE-4X	4-point input	38x46.4x11.5
MUE-4Y	4-point output	
MUE-4XY	2-point input and 2-point output	
MUE-2AD	2-channel analog quantity input	
MUE-2DA	2-channel analog quantity output	
MUE-2AM	1-channel analog quantity input and 1-channel analog quantity output	
MUE-RS232	RS232 communication	
MUE-RS485	RS485 communication	
MUE-CAN	CAN communication	

MC700 Series Motion Controller

MC700 series product is a high-performance and high-reliability motion controller, which supports multi-axis EtherCat control, C language programming, linear interpolation, circular interpolation, spiral interpolation, E-gear, high-speed pulse capture and pulse output. It is widely used in industrial robots, special machine tool equipment, cutting equipment, electronic processing equipment, etc.

Product Feature

Strong motion control: Support EtherCAT motion control
6-channel 2M differential pulse output, 2-channel 2M differential encoder input
6-channel 200K high-speed pulse inputs and 6-channel 200K pulse output
Support E-CAM, interpolation, synchronization scheme, CAD import and dynamic update data

Rich interface: Ethernet, 2*RS485, RS232, SD card, etc.

Large capacity: 320K-step program capacity, 2M Byte C language, 2M Byte data capacity

Model and Specification

Item		MC700P6	MC700E
Hardware specification	Dimensions(L*W*H) (mm)	260*140*27	
	Power supply voltage	24V	
Communication	Ethernet	2 × GbE	
	RS485 port	2	
	RS232 port	1	
High-speed IO	High-speed output channel	6 (2M differential output)	4 (200KHz output)
	High-speed count channel(200KHz)	6	6
Common IO	Input channel	26	24
	Output channel	22	26
Servo axis interface	Servo axis interface	6-channel differential pulse output 2-channel differential encoder input	EtherCAT
Pulse axis interface	Level standard	EIA/TIA-485	-
	Pulse speed	4MHz	-
	Control mode	AB phase/ pulse+direction	-
EtherCAT		Support COE protocol, remote IO, 250us synchronization time	
Program capacity	Ladder diagram	320K step	
	User C language	2M byte	
	User Data (excluding SD card)	2M byte	
Execution speed	Ladder diagram	2ms/100K step	
	C language	2400dmips	
Motion Control	Supported motion axis	32	
	Interpolation algorithm	Linear interpolation, circular interpolation, spiral interpolation	
	E-CAM	Tracking shear CAM, flying shear CAM, custom CAM	
	E-gear	Supported	
	G-code import	Supported	
	CAD file import	Supported	
C Language	Standard C	Supported	
	Operation mode	Mixed programming with ladder diagram/Independent C-programming	
	Function library	Provide rich standard function library and motion control library	
	User-defined library	Users can encapsulate private function library, and support the import, export, encryption functions	

MC280/MC200E Series PLC

MC280/ MC200E series products are integrated motion PLCs developed by MEGMEET, which use dual-core processor of ARM+FPGA with multi-task parallel processing in 0.065μs program execution speed. They support interpolation, electronic gear, electronic CAM and other motion control functions, to fully meet the needs of municipal equipment, textile, printing, HVAC, and others.

Product Feature

Ultra-large capacity

- Program capacity: 32K
- R element capacity: 32K, four times that of the D element

Pulse counting input performance

- 8-channel unidirectional high-speed count, up to 100KHz
- 4 channels of AB phase count, up to 100KHz, support quadruple frequency
- 5V differential signal conversion accessory providing differential counting

Pulse Transmission performance

- Electronic gear, gear ratio is dynamically variable
- 8-axis pulse outputs up to 200KHz
- Support AB phase pulse
- Support interrupt fixed length
- Support the target position changing during operation
- Position closed-loop control; Position interrupt
- Support symmetrical trapezoid, sub-symmetric trapezoid and S-curve acceleration / deceleration
- Variable frequency during pulse transmission with acceleration and deceleration

Superb motion control function※

- Linear interpolation and circular interpolation
- Continuous interpolation
- Synchronous follow, hand wheel function
- Normal and tangent interpolation, spiral interpolation
- Electronic CAM, supports 4 1024-curve tables
- Support simple G code and CAD graphics import

※MC280-specific function

Basic Module

Model	Specification	Dimensions(mm) LxWxH
MC280-1616BTA4	16-point 24VDC input, 16-point transistor output, 4-axis pulse output	170x90x82
MC280-1616BTA6	16-point 24VDC input, 16-point transistor output，6-axis pulse output	
MC280-1616BTA8	16-point 24VDC input, 16-point transistor output，8-axis pulse output	
MC280-1616BTA8-C	16-point 24VDC input, 16-point transistor output，8-axis pulse output	
MC280-3624BTD4A	36-point 24VDC input, 24-point transistor output，4-axis pulse output，4-point analog quantity input, 2-point analog quantity output	275x90x82
MC280-3624BTD6A	36-point 24VDC input, 24-point transistor output，6-axis pulse output，4-point analog quantity input, 2-point analog quantity output	
MC280-3624BTD8A	36-point 24VDC input, 24-point transistor output，8-axis pulse output，4-point analog quantity input, 2-point analog quantity output	
MC280-4040BTA4	40-point 24VDC input, 40-point transistor output，4-axis pulse output	
MC280-4040BTA6	40-point 24VDC input, 40-point transistor output，6-axis pulse output	
MC280-4040BTA8	40-point 24VDC input, 40-point transistor output，8-axis pulse output	
MC200E-1616BTA4	16-point 24VDC input, 16-point transistor output，4-axis pulse output	170x90x82
MC200E-1616BTA6	16-point 24VDC input, 16-point transistor output，6-axis pulse output	
MC200E-1616BTA8	16-point 24VDC input, 16-point transistor output，8-axis pulse output	
MC200E-3624BTD4A	36-point 24VDC input, 24-point transistor output，4-axis pulse output，4-point analog quantity input, 2-point analog quantity output	275x90x82
MC200E-3624BTD6A	36-point 24VDC input, 24-point transistor output，6-axis pulse output，4-point analog quantity input, 2-point analog quantity output	
MC200E-3624BTD8A	36-point 24VDC input, 24-point transistor output，8-axis pulse output，4-point analog quantity input, 2-point analog quantity output	
MC200E-4040BTA4	40-point 24VDC input, 40-point transistor output，4-axis pulse output	
MC200E-4040BTA6	40-point 24VDC input, 40-point transistor output，6-axis pulse output	
MC200E-4040BTA8	40-point 24VDC input, 40-point transistor output，8-axis pulse output	

Motion Control Function

Model	G Code	Plane Interpolation		Space Interpolation				Interpolation Axis/Speed	E-CAM	E-gear
		Circular	Linear	3-axis linear	4-axis linear	Helical line	Normal/Tangent			
MC280-1616BTA4 MC280-1616BTA6 MC280-1616BTA8	Supported	1	1	1	1	1	1	100KHZ	-	1
MC280-1616BTA8-C	-	-	-	-	-	-	-		2	1
MC280-3624BTD4A MC280-3624BTD6A MC280-3624BTD8A	Supported	2	2	2	2	2	2	100KHZ	4	8
MC280-4040BTA4 MC280-4040BTA6 MC280-4040BTA8	Supported	2	2	2	2	2	2	100KHZ	4	8
MC200E-1616BTA4 MC200E-1616BTA6 MC200E-1616BTA8	-	-	-	-	-	-	-	-	-	1
MC200E-3624BTD4A MC200E-3624BTD6A MC200E-3624BTD8A	-	-	-	-	-	-	-	-	-	1
MC200E-4040BTA4 MC200E-4040BTA6 MC200E-4040BTA8	-	-	-	-	-	-	-	-	-	1

MC200 Series Small PLC

MC200 series PLC is a high stability and high reliability product, with fast instruction processing speed and large program capacity based on its built-in high-performance microprocessor and core computing control system. Itsultra-wide voltage range and excellent networking capability make it widely used in municipal equipment, textile, printing, HVAC, and others.

Product Feature

High speed and large capacity

- Program capacity: 12K
- Basic instruction speeds up to 0.09μs

High stability and reliability

- Ultra-wide voltage range: 85V~280V
- Input filter protection and power loss protection
- Strict three - defense protection processing

Reliable program security

- 8-bit password protection, can be set to prohibit program upload and prevent unauthorized program replication

Strong expansion capability

- IO expands up to 512 points
- Special function module can extend up to 8 modules
- Provide IO module with power supply

Excellent communication networking

- Support MCBUS network communication protocol, MODBUS protocol, and OPC service
- Support CAN free protocol, CANopen protocol
- Support Ethernet, MODBUS TCP/IP protocols

Basic Module (AC Power)

Model	Specification	Dimensions(mm) LxWxH
MC200-2012BRA	20-point 24VDC input, 12-point relay output	158x90x82
MC200-2012BTA	20-point 24VDC input, 12-point transistor output	
MC200-3232BRA	32-point 24VDC input, 32-point relay output	228x90x82
MC200-3232BTA	32-point 24VDC input, 32-point transistor output	
MC200-4040BRA	40-point 24VDC input, 40-point relay output	275x90x82
MC200-4040BTA	40-point 24VDC input, 40-point transistor output	

IO Expansion Module Applicable to the basic modules of MC280/MC200E/MC200 series PLC

Model	Specification	Dimensions(mm) LxWxH
MC200-0800ENN	8-point 24VDC input	58x90x82
MC200-1600ENN	16-point 24VDC input	
MC200-0008ERN	8-point relay output	
MC200-0008ETN	8-point transistor output	
MC200-0808ERN	8-point 24VDC input, 8-point relay output	
MC200-0808ETN	8-point 24VDC input, 8-point transistor output	
MC200-0016ERN	16-point relay output	
MC200-0016ETN	16-point transistor output	
MC200-1616ERN	20-point 24VDC input, 12-point relay output	158x90x82
MC200-1616ETN	16-point 24VDC input, 16-point transistor output(Active)	
MC200-1616ERA	16-point 24VDC input, 16-point relay output(Active)	
MC200-1616ETA	16-point 24VDC input, 16-point transistor output(Active)	

Special Function Module Applicable to the basic modules of MC280/MC200E/MC200 series PLC

Model	Specification	Dimensions(mm) LxWxH
MC200-2AD、MC200-4AD	2-point, 4-point analog quantity input	58x90x82
MC200-2DA、MC200-4DA	2-point, 4-point analog quantity output	
MC200-8AD	8-point analog quantity input	
MC200-4AM	2-point analog quantity input, 2-point analog quantity output	
MC200-5AM	4-point analog quantity input, 1-point analog quantity output	
MC200-2TC、MC200-4TC	2-point, 4-point thermocouple	
MC200-8TC	8-point thermocouple	
MC200-2PT、MC200-4PT	2-point, 4-point thermal resistance	
MC200-2HC	2-channel high-speed count module: single-phase 200K; bi-directional phase 100K; 1-channel pulse following output 20K	

Communication Module Applicable to the basic modules of MC280/MC200E/MC200 series PLC

Model	Specification	Dimensions(mm) LxWxH
MC200-CPM	CANopen master communication module	58x90x82
MC200-CAN	CAN communication module	
MC200-RS485	RS485 communication module	
MC200-WEN	Ethernet communication module	

MC100 Series Small PLC

MC100 series PLC owns the characteristics of small size, large capacity, high configuration and high speed. Based on its powerful positioning and high-speed processing functions, MC100 realizes the control of servo or stepper motor. This series of PLC points cover 16~60, with rich interrupt resources and strong networking capability to fully meet the needs of municipal equipment, textile, printing, HVAC, and others.

Product Feature

Large capacity and high speed

- Program capacity: 16K, Basic instruction: 0.3μs
- Can be extended up to 4 modules
- Integrated input and output of analog quantity

Powerful positioning and processing

- Variable speed pulse output and envelope pulse output, to achieve the servo or stepper motor multi-speed control
- 6-channel high speed pulse input, Max. frequency 50KHz; 2-channel 100KHz high speed pulse output

Abundant interrupt resources

- Support communication interruption, pulse interruption, power loss interruption, and interrupt priority setting

Strong networking capability

- Support MCBUS network communication protocol, MODBUS protocol, and OPC service

Reliable program security

- 8-bit password protection, can be set to prohibit program upload and prevent unauthorized program replication

Basic Module (AC Power)

Model	Specification	Dimensions(mm) LxWxH
MC100-1006BRA	10-point 24VDC input, 6-point relay output	135x90x79.2
MC100-1006BTA	10-point 24VDC input, 6-point transistor output	
MC100-1410BRA	14-point 24VDC input, 10-point relay output	
MC100-1410BTA	14-point 24VDC input, 10-point transistor output	
MC100-1614BRA	16-point 24VDC input, 14-point relay output	150x90x79.2
MC100-1614BTA	16-point 24VDC input, 14-point transistor output	
MC100-1614BRA1	16-point 24VDC input, 14-point relay output 2-point analog quantity input and 1-point analog quantity output	182x90x79.2
MC100-1614BTA1	16-point 24VDC input, 14-point transistor output 2-point analog quantity input and 1-point analog quantity output	
MC100-2416BRA	24-point 24VDC input, 16-point relay output	182x90x79.2
MC100-2416BTA	24-point 24VDC input, 16-point transistor output	
MC100-3624BRA	36-point 24VDC input, 24-point relay output	224.5x90x79.2
MC100-3624BTA	36-point 24VDC input, 24-point transistor output	

Basic Module (AC Power)

Model	Specification	Dimensions(mm) LxWxH
MC100-1006BRD	10-point 24VDC input, 6-point relay output	135x90x79.2
MC100-1006BTD	10-point 24VDC input, 6-point transistor output	
MC100-1410BRD	14-point 24VDC input, 10-point relay output	
MC100-1410BTD	14-point 24VDC input, 10-point transistor output	
MC100-1614BRD	16-point 24VDC input, 14-point relay output	150x90x79.2
MC100-1614BTD	16-point 24VDC input, 14-point transistor output	
MC100-2416BRD	24-point 24VDC input, 16-point relay output	182x90x79.2
MC100-2416BTD	24-point 24VDC input, 16-point transistor output	
MC100-3624BRD	36-point 24VDC input, 24-point relay output	224.5x90x79.2
MC100-3624BTD	36-point 24VDC input, 24-point transistor output	

IO Expansion Module

Model	Specification	Dimensions(mm) LxWxH
MC100-0800ENN	8-point 24VDC input	61x90x73.1
MC100-1600ENN	16-point 24VDC input	
MC100-0008ERN	8-point relay output	
MC100-0008ETN	8-point transistor output	
MC100-0016ERN	16-point relay output	
MC100-0016ETN	16-point transistor output	
MC100-0808ERN	8-point 24VDC input, 8-point relay output	
MC100-0808ETN	8-point 24VDC input, 8-point transistor output	

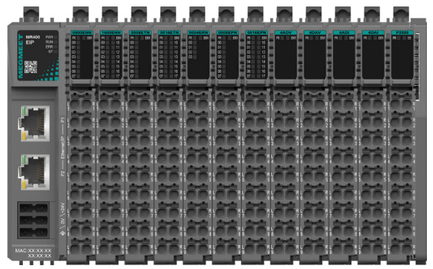
Special Function Module

Model	Specification	Dimensions(mm) LxWxH
MC100-2AD	2-point analog quantity input	61x90x73.1
MC100-2DA	2-point analog quantity output	
MC100-4AD	4-point analog quantity input	
MC100-4DA	4-point analog quantity output	
MC100-5AM	4-point analog quantity input and 1-point analog quantity output	
MC100-2TC、MC100-4TC	2, 4 points thermocouple	
MC100-2PT、MC100-4PT	2, 4 points thermal resistance	
MC100-1WT、MC100-2WT	1-channel and 2-channel weighing	

MR400 Series Remote I/O Module

MR400 series remote I/O module is a new generation of adapters launched by MEGMEET. It adopts modular design, supports a variety of communication buses, adapts to mainstream manufacturers, and seamlessly accesses mainstream protocols. The width of the 32-point module is only 22.5 mm, occupying less space; flexible expansion of IO to meet the needs of customers with more solutions.

Product Feature



Various modules

- Digital, analog, temperature and other modules can be configured arbitrarily.

Multi-protocol compatibility

- Conform to the industrial Ethernet communication standard and supports various mainstream industrial protocols (Profinet, Ether-CAT, EtherNet/IP)

Flexible expansion

- Support up to 32 expansion modules, to extend the system composition.

Intelligent MAD

- Redundant architecture, millisecond fault self-healing
- Powerful module and channel diagnosis

Fast installation

- PUSH in terminal, tool-free disassembly and installation

Model and Specification

Item	MR400-ET	MR400-EIP	MR400-PN
Power supply voltage	24VDC (18V ~ 36V)		
Dimensions (L x W x H)	88mm x 25.55mm x 107mm		
Adaptive IO module	32		
Local expansion	Digital quantity interface: Supported		
	Analog quantity interface: Supported		
	Refresh rate:0.5ms		
Bus protocol	EtherCAT (Slave)	Ethernet/IP (Slave)	Profinet (Slave)
Slave station quantity	Depended on the slave quantity supported by the master	Depended on the slave quantity supported by the master	Depended on the slave quantity supported by the master
Bus frequency	100Mbps		
Transmission distance	⩽100M (Station-Station)		
Min. communication cycle	250us	1ms	1ms
Application	● MC8000、MU400 series PLC; ● Beckhoff、Siemens series PLC; ● Mitsubishi、KEYENCE、Omron and other Japanese PLC; ● Other PLCs supporting Codesys system		

MC5000S Series Remote I/O Module

MC5000S series product is a new generation of adapter developed by MEGMEET, which adopts the modular and industrial design concept. Its communication interface conforms to the industrial bus standard network protocol, and MC5000S can communicate with a variety of mainstream controller and master station at home and abroad, to meet the diversified choices of customers.

Product Feature

Diverse configuration: Digital quantity, analog quantity, temperature and other modules can be configured randomly

Flexible expansion: Support up to 12 expansion modules to extend the system composition

Strong compatibility: The communication interface conforms to industrial Ethernet communication standards and supports various mainstream master stations

Easy to diagnose: Indicator design for channel detection and maintenance conveniently

Fewer nodes: A node consists of an adapter, 1 to 12 MC5000 series expansion modules, and an end cover

Easy operation: Support parameter configuration, automatic saving

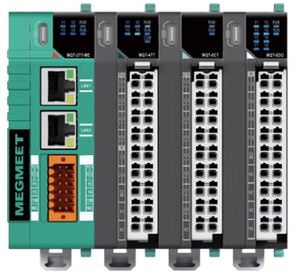
Model and Specification

Item	MC5000S-ET	MC5000S-EIP	MC5000S-PN
Power supply voltage	24VDC (-15%~+20%)		
Dimensions(HxLxW)	113x100x34(mm)	110.5x102x52.2(mm)	110.5x102x52.2(mm)
Adaptive IO module	12 modules		
Local expansion	Digital quantity interface: Supported		
	Analog quantity interface: Supported		
	Refresh rate:0.5ms		
Bus protocol	EtherCAT(Slave)	Ethernet/IP(Slave)	Profinet(Slave)
Slave station quantity	Depended on the node quantity supported by the master station	Depended on the node quantity supported by the master station	Depended on the node quantity supported by the master station
Bus frequency	100Mbps	100Mbps	100Mbps
Transmission distance	< 100M (Station - Station)	< 100M (Station - Station)	< 100M (Station - Station)
Min. communication cycle	1ms		
Application	·MC5000, MC6000 series PLC ·Beckhoff, Siemens PLC ·Mitsubishi, KEYENCE, Omron and other Japanese PLC ·Other PLCs supporting Codesys system		

MQT Series Temperature Controller

MQT series product, a new generation cascade temperature controller, is composed of communication module, temperature control module and expansion module, realizing high-precision temperature control by matching modules flexibly and integrating internal intelligent PID algorithm; it has the advantages of cascade, high precision, multi-point temperature control, background upgrade, free combination, small size and so on.

Product Feature



High precision: Measure precision: full scale of ± 0.15 %

High performance: 0.1s sampling cycle and perfect PID self-tuning function, to achieve multi-channel cascade control

Strong function: A single module can operate PID control and simple logic operation, and monitor analog value

Simple installation: PUSH IN terminal, different terminals connection can be realized only need to gently push into

Complete module: Digital I/O, analog I/O, CT input, temperature input, communication and others

Specification

Item		Description
Power supply		24VDC (-15% ~ 20%)
Signal input	Input type	Thermocouple：K、J、E、N、T、R、B (For all channel)
		Thermal resistance：Pt100、JPt100、Cu100、Ni120 (For all channel)
	Precision	Thermocouple：0.15% (Full scale) + cold compensation
		Thermal resistance：0.3% (Full scale)
	Sampling cycle	25ms/channel，100ms/8 channels，100ms/4 channels
Control output	Output form	Transistor output (SSR drive output), relay output, current output, voltage output
	Control action	Manual, ON / OFF, single PID, heating & cooling PID, position proportional PID
Alarm output	Alarm form	14 alarms, such as upper and lower limit alarm, deviation alarm and so on.
	Output form	Transistor and relay output (output state can be directly controlled by writing registers)
	Output channel	8 channels
Digital input	Input form	Transistor input
	Input channel	4 channels
Control cycle		0.1s - 10s or 1s - 100s
Acquisition channel		4 channels and 8 channels
Isolation		Exist between power and communication, power and channel, communication and channel, channel and channel
Communication port		RS485/Modbus-TCP/EtherNet/EtherCAT/Profinet
Generals	Ambient temperature	Working: -20 ~ 60 °C, storage: -40 ~ 70 °C
	Ambient humidity	Working: 10 ~ 90 % RH (no condensation), keeping: 5 ~ 95 % RH (no condensation)
	Altitude	Below 2000m
	Protection level	IP20
C & S		Conform to IEC/EN 61326-1 (For use in industrial locations) ; CE

Model

Model	Acquisition channel	Temperature control output	Alarm output	Input type
Communication module				
MQT-2TT-ME	2-CH	Modbus TCP/IP/Ethernet	Transistor(4-CH)	TC
MQT-2RT-ME	2-CH	Modbus TCP/IP/Ethernet	Transistor(4-CH)	RTD
MQT-2TT-ET	2-CH	EtherCAT从站	Transistor(4-CH)	TC
MQT-2RT-ET	2-CH	EtherCAT从站	Transistor(4-CH)	RTD
MQT-2TT-RS	2-CH	Modbus RS485	Transistor(4-CH)	TC
MQT-2RT-RS	2-CH	Modbus RS485	Transistor(4-CH)	RTD
MQT-2TT-PN	2-CH	Profinet	Transistor(4-CH)	TC
MQT-2RT-PN	2-CH	Profinet	Transistor(4-CH)	RTD
Temperature control module				
MQT-4TT	4-CH	Modbus RS485	Transistor(4-CH)	TC
MQT-4TA	4-CH	Modbus RS485	Analog(4-CH)	TC
MQT-4TR	4-CH	Modbus RS485	Relay(4-CH)	TC
MQT-4RT	4-CH	Modbus RS485	Transistor(4-CH)	RTD
MQT-4RA	4-CH	Modbus RS485	Analog(4-CH)	RTD
MQT-4RR	4-CH	Modbus RS485	Relay(4-CH)	RTD
Expansion module				
MQT-8DI	8-CH	8-channel digital input	-	Digital (8-CH)
MQT-8DO	8-CH	8-channel digital output	Digital (8-CH)	-
MQT-8CT	8-CH	8-channel current detection	-	Transformer current
MQT-8DM	8-CH	4-channel digital input, 4-channel digital output	Digital (4-CH)	Digital (4-CH)
MQT-8AI	8-CH	8-channel analog current input	-	Analog (8-CH)
MQT-8AV	8-CH	8-channel analog voltage input	-	Analog (8-CH)
MQT-8AO	8-CH	8-channel analog output	Analog (8-CH)	-

MTC/MTCW/MTCV Series Temperature Controller

MTC/MTCW/MTCV series products are multi-channel and high-precision temperature controllers, which are suitable for various occasions of temperature control. Its main feature is compatible with TC and RTD, high measure accuracy; high integration (one module supports up to 12 channels of temperature control and 16 channels of measurement), space saving, easy data exchange, remote monitoring, and high cost performance.

Product Feature

Dedicated software: Provide special software - MtcCompanion

Dual-PID function: Heating&cooling dual-PID control function,
14 alarms like upper and lower limits, deviation, etc

High precision: Intelligent self-tuning and multi-stage temperature setting functions to achieve high-precision temperature control

Multi-way control: Integrated multi-channel temperature control to centralize data management

Easy exchange: Data exchange easily between thermostat and PLC, thermostat and HMI, thermostat and computer through Ethernet and serial port

Specification

Item		Description
Power supply		24VDC (-15% ~ 20%)
Signal input	Input type	Thermocouple：K、J、E、N、T、R、B (For all channel)
		Thermal resistance：Pt100、JPt100、Cu100、Ni120 (For all channel)
	Precision	Thermocouple：0.2% (Full scale) + cold compensation　Thermal resistance：0.3% (Full scale)
	Sampling cycle	25ms/channel，100ms/8 channels，100ms/4 channels
	Output form	Transistor output (SSR drive output), relay output, current output, voltage output
Control output	Control action	Manual, ON / OFF, single PID, heating & cooling PID, position proportional PID
	Alarm form	14 alarms, such as upper and lower limit alarm, deviation alarm and so on.
Alarm output	Output form	Transistor and relay output (output state can be directly controlled by writing registers)
	Output channel	8 channels
IO input	Input form	Transistor input
	Input channel	4 channels
Control cycle		0.1s - 10s or 1s - 100s
Acquisition channel		4 channels and 8 channels
Isolation		Exist between power and communication, power and channel, communication and channel, (MTCV)channel and channel
Communication port		MTC/MTCV: One isolated RS485 serial port; support MODBUS slave and MCBUS slave protocol MTCW: One isolated + one non-isolated RS485 serial port, one Ethernet port; support MODBUS slave protocol
Generals	Ambient temperature	Working: -20 ~ 60 °C, storage: -40 ~ 70 °C
	Ambient humidity	Working: 10 ~ 90 % RH (no condensation), keeping: 5 ~ 95 % RH (no condensation)
	Altitude	Below 2000m
	Protection level	IP20
C & S		Conform to IEC/EN 61326-1 (For use in industrial locations)、UL61010-1；CE、UL

Product model

MTC series

Model	Acquisition channel	Temperature control output	Alarm output	Input type
MTC-04-NT	4-CH	Transistor (4-CH)	Flag bit	TC, RTD
MTC-08-NT	8-CH	Transistor (8-CH)	Flag bit	TC, RTD
MTC-04-NTT	4-CH	Transistor (4-CH)	Transistor(8-CH), flag bit	TC, RTD
MTC-04-NTR	4-CH	Transistor (4-CH)，Relay (8-CH)	Relay(8-CH), flag bit	TC, RTD
MTC-04-NVT	4-CH	Transistor (4-CH) Current(8-CH，0-20mA or 4-20mA) Voltage(8-CH，0-1V，0-5V，0-10V or 1-5V)	Transistor (4-CH)	TC, RTD

MTCW series (Ethernet，2*RS485)

Model	Acquisition channel	Temperature control output	Alarm output	Input type
MTCW-04-NTT	4-CH	Transistor (4-CH)	Transistor (4-CH), flag bit	TC, RTD
MTCW-04-NI	4-CH	Current (4-CH，0-20mA or 4-20mA)	Flag bit	TC, RTD
MTCW-04-NV	4-CH	Voltage (4-CH，0-1V，0-5V，0-10V or 1-5V)	Flag bit	TC, RTD
MTCW-08-NN	8-CH	-	Flag bit	TC, RTD
MTCW-08-NI	8-CH	Current (8-CH，0-20mA or 4-20mA)	Flag bit	TC, RTD
MTCW-08-NV	8-CH	Voltage(8-CH，0-1V，0-5V，0-10V or 1-5V)	Flag bit	TC, RTD
MTCW-08-NTT	8-CH	Transistor (8-CH)	Transistor (8-CH), flag bit	TC, RTD
MTCW-12-NT	12-CH	Transistor (12-CH)	Flag bit	TC, RTD
MTCW-16-NN	16-CH	-	Flag bit	TC, RTD
MTCW-08-CT	8-CH	Transistor (8-CH)	Flag bit	Current transformer (8-CH) TC, RTD
MTCW-08-NTD	8-CH	Transistor (8-CH heating, 8-CH cooling)	-	TC, RTD

MTCV series (Channel isolation，RS485)

Model	Acquisition channel	Temperature control output	Alarm output	Input type
MTCV-16-NT	16-CH	Transistor (16-CH)	Flag bit	TC, RTD
MTCV-08-NT	8-CH	Transistor (8-CH)	Flag bit	TC, RTD

MTCE Series Temperature Controller

MTCE series product, as a multi-channel high-precision EtherCAT temperature controller, are adapted to various mainstream master stations. Its main feature is compatible with thermocouples and thermal resistors, high measurement accuracy, feature-rich, user-friendly. It has the characteristics of high integration, space saving, easy data exchange, remote monitoring, and high cost performance.

Product Feature

Networking capacity: EtherCAT

High precision: Measure accuracy: full scale of ±0.15 % ; control accuracy: ±0.2°C

High performance: 0.1s sampling cycle, and 1ms synchronization cycle; a single module can operate PID control and simple logic operation, and monitor analog value

Specification

Item	Description	
Power supply	24VDC (-15% ~ 20%)	
Signal input	Input type	Thermocouple：K、J、E、N、T、R、B (For all channel)
		Thermal resistance：Pt100、JPt100、Cu100、Ni120 (For all channel)
	Precision	Thermocouple：0.15% (Full scale) + cold compensation
		Thermal resistance：0.3% (Full scale)
	Sampling cycle	25ms/channel，100ms/8 channels，100ms/4 channels
Control output	Output form	Transistor output (SSR drive output)
	Output channel	10 channels
	Control action	Manual, ON / OFF, single PID, heating & cooling PID, position proportional PID
Alarm output	Alarm form	14 alarms, such as upper and lower limit alarm, deviation alarm and so on.
	Output form	Transistor output (SSR drive output)
	Output channel	10 channels
Control cycle	0.1s - 10s or 1s - 100s	
Acquisition channel	10 channels	
Isolation	Exist between power and communication, power and channel, communication and channel, channel and channel	
Communication port	EtherCAT	
Generals	Ambient temperature	Working: -20 ~ 60 °C, storage: -40 ~ 70 °C
	Ambient humidity	Working: 10 ~ 90 % RH (no condensation), keeping: 5 ~ 95 % RH (no condensation)
	Altitude	Below 2000m
	Protection level	IP20
C & S	Conform to IEC/EN 61326-1 (For use in industrial locations) ;CE	

Product model

Model	Acquisition channel	Temperature control output	Alarm output	Input type
MTCE-10T-NT	10-CH	Transistor	Flag bit	TC
MTCE-10R-NT	10-CH	Transistor	Flag bit	RTD

MCAS Series Temperature Controller

MCAS series temperature controller takes the lead in realizing the self-tuning PID and calibration parameters of cascade control in the industry based on the advanced self-tuning and self-learning control algorithm, which greatly simplifies the debugging of complex cascade control.

Product Feature

Cascade control: A single module supports 4-channel cascade temperature control

High performance: 0.1s sampling cycle

High precision: Measure accuracy: full scale of ±0.15 % ;
cascade control accuracy: ±0.5

Specification

Item	Description	
Power supply	24VDC (-15% ~ 20%)	
Signal input	Input type	Thermocouple：K、J、E、N、T、R、B (For all channel)
		Thermal resistance：Pt100、JPt100、Cu100、Ni120 (For all channel)
	Precision	TC：0.15% (Full scale) + cold compensation RTD：0.3% (Full scale)
	Sampling cycle	25ms/channel，100ms/8 channels，100ms/4 channels
Control output	Output form	Transistor output (SSR drive output)
	Output channel	4/8 channels
	Control action	Manual, ON / OFF, single PID, heating & cooling PID, position proportional PID
Alarm output	Alarm form	14 alarms, such as upper and lower limit alarm, deviation alarm and so on.
	Output form	Transistor output (SSR drive output)
	Output channel	4/8 channels (Transistor)
Control cycle	0.1s - 10s or 1s - 100s	
Acquisition channel	6/8 channels	
Isolation	Exist between power and communication, power and channel, communication and channel, channel and channel	
Communication port	One isolated + one non-isolated RS485 serial port, one Ethernet port; support MODBUS slave protocol	
Generals	Ambient temperature	Working: -20 ~ 60 °C, storage: -40 ~ 70 °C
	Ambient humidity	Working: 10 ~ 90 % RH (no condensation), keeping: 5 ~ 95 % RH (no condensation)
	Altitude	Below 2000m
	Protection level	IP20
C & S	Conform to IEC/EN 61326-1 (For use in industrial locations)、UL61010-1；CE、UL	

Product model

Model	Acquisition channel	Temperature control output	Alarm output	Input type
MCAS-06-NI	6-CH	Current (6-CH，0-20mA or 4-20mA)	Flag bit	TC, RTD
MCAS-06-NV	6-CH	Voltage (6-CH，0-1V，0-5V，0-10V or 1-5V)	Flag bit	TC, RTD
MCAS-08-NI	8-CH	Current (6-CH，0-20mA or 4-20mA)	Flag bit	TC, RTD
MCAS-08-NV	8-CH	Voltage (8-CH，0-1V，0-5V，0-10V or 1-5V)	Flag bit	TC, RTD
MCAS-08-NTT	8-CH	Transistor (8-CH)	Transistor (8-CH), flag bit	TC, RTD

MDT Series Temperature Controller

MDT series product with high-brightness LED display function is cost-effective for occasions with few temperature control channels (the module supports up to 2 channels). It has the characteristics of low temperature drift coefficient and 50Hz/60Hz interference suppression, supports two input isolation, and the isolation withstand voltage is up to 500VDC.

Product Feature

Dedicated software: Provide special software - MtcCompanion

Easy operation: Digital tube display, support keyboard and software operation

High precision: Support self-tuning and multi-stage temperature setting function

Simple installation: Small size and guide-rail installation

Specification

Item		Description
Power supply		24VDC (-15% ~ 20%)
Signal input	Input type	Thermocouple：K、J、E、N、T、R、B (For all channel)
		Thermal resistance：Pt100、JPt100、Cu100、Ni120 (For all channel)
	Precision	Thermocouple：0.2% (Full scale) + cold compensation Thermal resistance：0.3% (Full scale)
	Sampling cycle	25ms/channel，100ms/8 channels，100ms/4 channels
Control output	Output form	Transistor output (SSR drive output), relay output
	Output channel	1 channel / 2 channels
	Control action	Manual, ON / OFF, single PID, heating & cooling PID, position proportional PID
Alarm output	Alarm form	14 alarms, such as upper and lower limit alarm, deviation alarm and so on.
	Output form	Transistor and relay output (output state can be directly controlled by writing registers)
	Output channel	1 channel / 2 channels
Control cycle		0.1s - 10s or 1s - 100s
Acquisition channel		1 channel / 2 channels
Isolation		Exist between power and communication, power and channel, communication and channel, channel and channel
Communication port		One isolated RS485 serial port; support MODBUS slave and MCBUS protocol
Generals	Ambient temperature	Working: -20 ~ 60 °C, storage: -40 ~ 70 °C
	Ambient humidity	Working: 10 ~ 90 % RH (no condensation), keeping: 5 ~ 95 % RH (no condensation)
	Altitude	Below 2000m
	Protection level	IP20
C & S		Conform to IEC/EN 61326-1 (For use in industrial locations) ;CE

Model

Model	Acquisition channel	Temperature control output	Alarm output	Input type
MDT-01R-R	1-CH	Relay	Relay	RTD
MDT-01R-T	1-CH	Transistor	Transistor	RTD
MDT-01T-R	1-CH	Relay	Relay	TC
MDT-01T-T	1-CH	Transistor	Transistor	TC
MDT-02R-R	2-CH	Relay	Relay	RTD
MDT-02R-T	2-CH	Transistor	Transistor	RTD
MDT-02T-R	2-CH	Relay	Relay	TC
MDT-02T-T	2-CH	Transistor	Transistor	TC

Cable List

Model	Description	Terminal
PLC		
MCA200-CA10	RS232 programming cable for computer USB port and PLC (2m)	USB-MiniDin8
MCA200-CA01	RS232 programming cable for computer and PLC (Non-isolated，2m)	DB9F-MiniDin8
MCA200-CA02	RS232 programming cable for computer and PLC (Isolated，2m)	DB9F-MiniDin8
MCA200-CA17	RS485 communication cable for computer and PLC (2m)(MC280，round-hole)	USB-MiniDin8
MCA200-CA18	RS485 communication cable of PLC	MiniDin8-RS485 terminal
MCA200-CA11	Computer USB port to RS232 cable (2m)(DB9)	USB-DB9M
MCA200-CA04	Extension cable for MC200 expansion module (0.65m)	Cable connector(male)-Cable connector(female)
MCA200-CA05	Extension cable for MC200 expansion module (1m)	Cable connector(male)-Cable connector(female)
HMI and text displayer		
MCA-200-CA09	RS232 communication cable between MZ600 series HMI and PLC (3.5m)	DB9M-MiniDin8
MCA-200-CA14	RS232 communication cable between MZ600 series HMI and PLC (2m)	DB9M-MiniDin8
MCA-200-CA16	RS232 communication cable between MZ800 series HMI and PLC (8m)	DB9M-MiniDin8
MCA-200-CA01	RS232 communication cable between MZ800 series HMI and PLC (2m)	DB9F-MiniDin8
Other		
MCA200-CA12	Download cable between computer and MC120/MC160/ thermostat (2m)	USB-RS485
MCA200-CA13	Download cable between computer and handheld operation box/data record box (2m)	USB-RJ45
MCA200-UDM01SL1	Connection cable between PLC and handheld upload-download program operation box (MCA200-UDM01)	RJ45-MiniDin8

MEGMEET

MZ800 Series Human Machine Interface

MZ800 series HMI seamlessly can support to the G-code function of MEGMEET PLC, which is easy to program, and supports multi-language interface, recipe upload and download, data collection, real-time curve, report function, alarm, etc. MZ800 can communicate with various mainstream PLCs based on the communcation drivers.

Picture					
Model/Series	MZ800-TT05SK30/31	MZ800-TT107SK30	MZ800-TT207SK30/31	MZ800-TT207SK30/31W	MZ800-TT210SK30/31
Display size	4.3'' (16: 9 TFT LCD screen)	7'' (16: 9 TFT LCD screen)	7'' (16: 9 TFT LCD screen)	7'' (16: 9 TFT LCD screen)	10.1'' (16: 9 TFT LCD screen)
Resolution	480x272	800x480	1024x600		
Display material	TFT color touch(LCD screen)				
Effective display size (T/B/L/R)	50'/70'/70'/70'	50'/70'/70'/70'	30: 50'/70'/70'/70' 31: 85'/85'/85'/85	85'/85'/85'/85	85'/85'/85'/85
Brightness	30: 360/31:300	250	30:360/31:450	350	400
Display color	24-bit color	16-bit color	24-bit color		
Touch screen	4-wire industrial resistance touch screen				
CPU	600MHz ARM Cortex-A8	720MHz ARM	4-core 1.2GHz ARMCortex-A7		
Memorizer	128MB Flash+128MB DDR3	64MB RAM+128MB Flash	128MB DDR3+4GB EMMC		
RTC	Built-in real-time clock				
Ethernet	30: None 31: 10M/100M(Adaptive)	None	30: None 31: 1-CH 10M/100M(Adaptive)		
SD card	None		30: None 31: Supported		Supported
USB port	One USB Slave 2.0; One USB Host 2.0				
Serial interface	COM1:RS232/RS485/RS422 COM3:RS232			COM1: RS232/RS485/RS422 COM2: RS485/RS422 COM3: RS232	
Rated power	<5W	<10W			
Rated voltage	DC24V，ranging from DC 9V to 28V				
Power supply protection	Lightning surge protection				
Power-lossing time	<5ms				
CE	Conform to EN61000-6-2:2005，EN61000-6-4:2007 standard; Conform to RoHS，lightning surge±1KV，group pulse±2KV; electrostatic contact 4KV，air discharge 8KV				
Operation temperature	30:-20~50C/31:-25~75℃	0~50℃			
Storage temperature	30:-25~60℃/31:-30~80℃	-20~60℃			
Ambient humidity	10~90%RH (No condensation)				
Shake-resistance	10~25Hz(X、Y、Z direction 2G/30 min)				
Protection grade	The front panel conforms to IP65 (with flat cabinet installation), and the rear cabinet conforms to IP20.				
Mechanical structure	30:Engineering plastic 31:Aluminum alloy+Galvanized sheet, powder-coated surface	Engineering plastic			
Overall dimensions	30:130x104x32/31:130x104x43	204x145x33.8			273x213x36
Hole size	120x93	192x138			260x202

Picture					
Model/Series	MZ800-TT210SK30W	MZ800-TT215SK31	MZ800-TT07SK31M	MZ800-TT210SK31M	MZ800-TT22P
Display size	10.1'' (16: 9 TFT LCD screen)	15.6'' (16: 9 TFT LCD screen)	7'' (16: 9 TFT LCD screen)	10.1'' (16: 9 TFT LCD screen)	22'' (16: 9 TFT LCD screen)
Resolution	1024x600	1920x1080	800x480	1024x600	1920x1080
Display material	TFT color touch(LCD screen)				
Effective display size (T/B/L/R)	85'/85'/85'/85'	85'/85'/85'/85'	50'/70'/70'/70'	85'/85'/85'/85'	85'/85'/80'/80'
Brightness	400	250	360	400	250
Display color	24-bit color	16-bit color	24-bit color		16-bit color
Touch screen	4-wire industrial resistance touch screen				Glass+Glass projected multi-point capacitance touch screen
CPU	4-core 1.2GHz ARMCortex-A7	1G ARM Cortex-A8	600MHz ARM Cortex-A8		800MHz ARM Cortex-A8
Memorizer	128MB DDR3+4GB EMMC	256MB Flash+512MB DDR3	128M Flash+128M DDR3		256MB Flash+256MB DDR3
RTC	Built-in real-time clock				
Ethernet	30: None 31: 1-CH 10M/100M(Adaptive)	2-CH 10M/100M(Adaptive)	10M/100M(Adaptive)		1-CH 10M/100M(Adaptive)
SD card	Supported				
USB port	One USB Slave 2.0; One USB Host 2.0				One USB Device 2.0; One USB Host 2.0
Serial interface	COM1: RS232/RS485/RS422 COM2: RS485/RS422 COM3: RS232	COM3:RS232/RS485/RS422; COM2:RS48	COM1/COM2:RS232/RS485/RS422; COM3/COM4:RS232	COM1:RS232/RS485/RS422; COM2:RS485/RS422 COM3:RS232	COM1/COM2:RS232/RS485/RS422; COM3/COM4:RS232
Rated power	<10W	<18W	<10W		<20W
Rated voltage	DC24V，ranging from DC9V to 28V	DC24V，ranging DC18V to 28V			
Power supply protection	Lightning surge protection				
Power-lossing time	<5ms				
CE	Conform to EN61000-6-2:2005，EN61000-6-4:2007 standard; Conform to RoHS，lightning surge±1KV，group pulse±2KV; electrostatic contact 4KV，air discharge8KV				
Operation temperature	0-50℃	0-50℃	-20-70℃	-10~60℃	-20-70℃
Storage temperature	-20~60℃	-20~60℃	-30-80℃	-20~70℃	-20~60℃
Ambient humidity	10~90%RH (No condensation)				
Shake-resistance	10~25Hz(X、Y、Z direction 2G/30 min)				
Protection grade	The front panel conforms to IP65 (with flat cabinet installation), and the rear cabinet conforms to IP20.				
Mechanical structure	Engineering plastic	Aluminum alloy shell	Aluminum alloy+Galvanized sheet, powder-coated surface	Aluminum alloy shell	Aluminum alloy+Galvanized sheet, powder-coated surface
Overall dimensions	273x213x36	394x256x36	200x146x40	274x214x39	530x338x61
Hole size	260x202	380x245	192x138	260x202	502x302