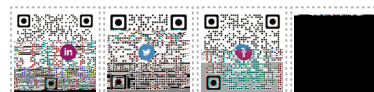


## SELECTION BROCHURE



Q Megmeet



Shenzhen Megmeet Electrical Co., Ltd.(Stock Code:002851) is a one-stop solution provider for the R&D,

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.

control and energy saving.



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# MTC/MTCW/MTCV

## Series

### Product Overview

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



### Model 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, current output, voltage 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<br>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)<br>Current(8-CH 0-20mA or 4-20mA)<br>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)<br>TC, RTD |
| MTCW-08-NTD | 8-CH                | Transistor (8-CH heating, 8-CH cooling) | -                           | TC, RTD                               |

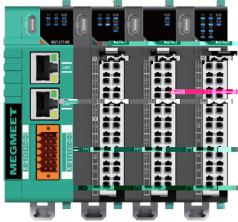
#### MTCV series (Channel isolation RS485)

| 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    |

Product Overview

Product Feature

- High precision
- High performance
- Strong function
- Simple installation
- Complete module



Model 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                                                         |
| Control output      | Sampling cycle                                                                                           | 25ms/channel 100ms/8 channels 100ms/4 channels                                             |
|                     | Output form                                                                                              | Transistor output (SSR drive output), relay output, current output, voltage output         |
| Alarm 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.                 |
|                     | 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                                             |                                                                                            |

Product 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                                          | Transistor(4-CH) | TC                  |
| MQT-2RT-ET                 | 2-CH                | EtherCAT                                          | 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)    | -                   |

MTCE

Series



Product Overview

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



Model Specification

| Item                | Description                                                                                              |                                                                                            |
|---------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Power supply        | 24VDC -15% ~ 20%                                                                                         |                                                                                            |
| Signal input        | Input type                                                                                               | Thermocouple K J E N T R B For all channel                                                 |
|                     | Precision                                                                                                | Thermal resistance Pt100 JPt100 Cu100 Ni120 For all channel                                |
|                     | Sampling cycle                                                                                           | Thermocouple 0.2% Full scale + cold compensation Thermal resistance 0.3% Full scale        |
| Control output      | Output form                                                                                              | 25ms/channel 100ms/8 channels 100ms/4 channels                                             |
|                     | Output channel                                                                                           | Transistor output (SSR drive output), relay output                                         |
|                     | Control action                                                                                           | 1 channel / 2 channels                                                                     |
| Alarm output        | Alarm form                                                                                               | Manual, ON / OFF, single PID, heating & cooling PID, position proportional PID             |
|                     | Output form                                                                                              | 14 alarms, such as upper and lower limit alarm, deviation alarm and so on.                 |
|                     | Output channel                                                                                           | Transistor and relay output (output state can be directly controlled by writing registers) |
| Control cycle       | 1 channel / 2 channels                                                                                   |                                                                                            |
| Acquisition channel | 0.1s - 10s or 1s - 100s                                                                                  |                                                                                            |
| Isolation           | 1 channel / 2 channels                                                                                   |                                                                                            |
| Communication port  | Exist between power and communication, power and channel, communication and channel, channel and channel |                                                                                            |
| Generals            | One isolated RS485 serial port; support MODBUS slave and MCBUS protocol                                  |                                                                                            |
|                     | 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                                                                                |
| C & S               | Protection level                                                                                         | IP20                                                                                       |
|                     | Conform to IEC/EN 61326-1 For use in industrial locations CE                                             |                                                                                            |

Product 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         |

Applications

