

Temperature controller/Temperature and humidity controller

The temperature controller is a digital instrument developed by our company according to international DIN standard. It has stable performance, clear and accurate reading, high precision, vibration resistance, strong electromagnetic compatibility, and it is easy to observe at night. The control Alarm modes are diverse, and it has the level of current international similar products. Equipped with corresponding sensor, it can measure and control parameters such as temperature, pressure, flow rate, and liquid level in industrial processes. The product is widely used in industries such as chemical, textile, papermaking, petroleum, rubber, packaging machinery, food ovens and heat treatment.

HY101 Series
Intelligent temperature controller
Multiple sensor inputs for users to set freely



Input signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs
Supply voltage	AC100~240V
Dimension	48×48×78mm
Hole size	45×45mm
Typical application	Used in applications such as extruders, reflow soldering machines, shoe machines, etc

HB101 Series
Intelligent temperature controller
Multiple sensor inputs for users to set freely



Input signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs
Supply voltage	AC100~240V
Dimension	48×48×78mm
Hole size	45×45mm
Additional function	RS485 communication
Typical application	Used in applications such as extruders, reflow soldering machines, shoe machines, etc

HY401 Series
Intelligent temperature controller
Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC100~240V
Dimension	48×96×78mm
Hole size	45×92mm
Typical application	Used in applications such as extruders, reflow soldering machines, shoe machines, etc

HB401 Series
Intelligent temperature controller
Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC100~240V
Dimension	48×96×78mm
Hole size	45×92mm
Additional function	Communication, transmission function
Typical application	Used in applications such as extruders, reflow soldering machines, shoe machines, etc

HY701 Series
Intelligent temperature controller
Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC100~240V
Dimension	72×72×78mm
Hole size	68×68mm
Typical application	Used in applications such as extruders, reflow soldering machines, shoe machines, etc

HB701 Series
Intelligent temperature controller
Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC100~240V
Dimension	72×72×78mm
Hole size	68×68mm
Additional function	Communication, transmission function
Typical application	Used in applications such as extruders, reflow soldering machines, shoe machines, etc

HB901 Series

Intelligent temperature controller
 Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC100~240V
Dimension	96×96×78mm
Hole size	92×92mm
Additional function	Communication, transmission function
Typical application	Used for temperature control applications such as extruders, reflow soldering machines, shoe machines, etc

XMTG-5000 Series

Intelligent temperature controller
 Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs
Supply voltage	AC220V
Dimension	48×48×107mm
Hole size	45×45mm
Installation method	Panel type
Typical application	Used for heating equipment such as drying boxes, ovens, plastic machines, etc

HR101 Series

Intelligent temperature controller
 Multiple sensor inputs for users to set freely



Input signal	Thermocouple: K, E, J Thermal resistance: Pt100
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	ALM1 and ALM2 relays
Supply voltage	AC100~240V
Dimension	48×48×78mm
Hole size	45×45mm
Installation method	Panel type
Typical application	Used for temperature control applications such as extruders, reflow soldering machines, shoe machines, etc

XMTD-5000 Series

Intelligent temperature controller
 Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC220V
Dimension	72×72×91mm
Hole size	68×68mm
Installation method	Panel type
Typical application	Used for heating equipment such as drying boxes, ovens, plastic machines, etc

HR401 Series

Intelligent temperature controller
 Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	ALM1 and ALM2 relays
Supply voltage	AC100~240V
Dimension	48×96×78mm
Hole size	45×92mm
Installation method	Panel type
Typical application	Used for temperature control applications such as extruders, reflow soldering machines, shoe machines, etc

XMTA-5000 Series

Intelligent temperature controller
 Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC220V
Dimension	96×96×91mm
Hole size	92×92mm
Installation method	Panel type
Typical application	Used for heating equipment such as drying boxes, ovens, plastic machines, etc

HR701 Series

Intelligent temperature controller
 Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	ALM1 and ALM2 relays
Supply voltage	AC100~240V
Dimension	72×72×78mm
Hole size	68×68mm
Installation method	Panel type
Typical application	Used for temperature control applications such as extruders, reflow soldering machines, shoe machines, etc

XMTE-5000 Series

Intelligent temperature controller
 Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC220V
Dimension	48×96×91mm
Hole size	45×92mm
Installation method	Panel type
Typical application	Used for heating equipment such as drying boxes, ovens, plastic machines, etc

RELAY SERIES

SWITCH SERIES

ELECTRIC DRIVE AND CONTROL SERIES

INSTRUMENT & METER SERIES

DISTRIBUTION CONTROL SERIES

AUTOMATION INDUSTRY APPLICATION

POWER SUPPLY AND OTHERS

XMTF-5000 Series

Intelligent temperature controller
Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC220V
Dimension	96×48×90mm
Hole size	92×44mm
Installation method	Panel type
Typical application	Used for heating equipment such as drying boxes, ovens, plastic machines, etc

HH-1

Heating and cooling controller



Input signal	Thermal resistance (specialized sensor, wiring)
Resolution	±0.1°C
Control mode	P1: Single limit, P2: Double limit
Range	-40~99.9°C
Supply voltage	AC220V/50Hz
Dimension	72×120×46mm
Installation method	DIN rail type, wall-mounted type, hanging type
Typical application	Culturing farm, hatching, water temperature control, switchgear assembly

XMT-5000 Series

Intelligent temperature controller
Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: K, E, J Thermal resistance: Pt100, Cu50
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	1 set of alarm relay contact outputs 2 set of alarm relay contact outputs
Supply voltage	AC220V
Dimension	160×80×94mm
Hole size	152×76mm
Additional function	RS485 communication
Typical application	Used for heating equipment such as drying boxes, ovens, plastic machines, etc

HWP-C703 Series

Single-circuit intelligent meter



Measurement signal	Thermocouples, Thermal resistances Standard current, voltage, and resistance signal
Transmission output	0~5V (load RL ≥ 250KΩ); 0~10mA (≤ 750Ω); 4~20mA (≤ 500Ω)
Output method	① Relay output ② 4~20mA
Alarm mode	2-circuit relay contact control (C703) 4-circuit relay contact control (C704)
Feed output	24VDC(30mA)
Dimension	72×72×112mm
Hole size	68×68mm
Supply voltage	AC220V
Installation method	Panel type

XMTE-7000 Series

Intelligent temperature controller
Multiple sensor inputs for users to set freely



Measurement signal	Thermocouple: : K, E, J
Control mode	Two-position relay on-off control; PID regulation relay on-off control; PID regulation drive SSR voltage control
Alarm mode	ALM1 and ALM2 relays
Supply voltage	AC110~240V
Dimension	48×48×78mm
Hole size	45×92mm
Installation method	Panel type
Typical application	Used for temperature control applications such as extruders, reflow soldering machines, shoe machines, etc

HWP-C803 Series

Single-circuit intelligent meter



Measurement signal	Thermocouples, Thermal resistances Standard current, voltage, and resistance signal
Transmission output	0~5V (load RL ≥ 250KΩ); 0~10mA (≤ 750Ω); 4~20mA (≤ 500Ω)
Output method	① Relay output ② 4~20mA
Alarm mode	2-circuit relay contact control (C803) 4-circuit relay contact control (C804)
Feed output	24VDC(30mA)
Dimension	160×80×94mm
Hole size	152×76mm
Supply voltage	AC220V
Installation method	Panel type

HD-C800 Series

Intelligent temperature itinerant detector



Measurement signal	Thermocouple: : K, E Thermal resistance: Pt100, Cu50
Itinerant detecting point circuit	1~8 circuit
Itinerant detecting method	Automatic and manual
Itinerant detecting time	Automatic itinerant detecting time 0~100s
Alarm mode	Upper limit alarm, lower limit alarm
Alarm output	Relay contact (control hysteresis adjustable)
Contact capacity	Passive AC 220V 3A (resistive load)
Comm. interface	RS485 (optional)
Supply voltage	AC 220V
Dimension	160×80×103.5mm
Hole size	152×76mm
Installation method	Panel type
Typical application	Multi-point temperature monitoring for grain depots, switchgear assemblies, motor protection places etc.

HWP-C903 Series

Single-circuit intelligent meter



Measurement signal	Thermocouple: : S, B, K, E, T, J etc Thermal resistance: Pt100, Cu50 etc Current signal: 0~10mA, 4~20mA Resistance signal: 0~400Ω Voltage signal: 0~5V, 0~10V
Control mode	Relay contact on-off control
Supply voltage	AC90~265V
Transmission output (optional)	0~5V (load RL ≥ 250KΩ); 0~10mA (≤ 750Ω); 4~20mA (≤ 500Ω)
Feed output	24VDC(30mA)
Dimension	96×96×112mm
Hole size	92×92mm
Installation method	Panel type

XMTG-1000
 Temperature controller



Measurement signal	Cu50, Pt100, K, E
Control mode	Relay contact on-off control (hysteresis adjustable)
Supply voltage	AC220V 50/60Hz
Contact capacity	Passive AC220V 3A (resistive load)
Dimension	48×48×90mm
Hole size	45×45mm
Installation method	Panel type
Typical application	Used for heating equipment such as water heaters, incubators and heaters with general temperature control requirements

XMTD-3001/3002 (Improved)
 Digital temperature controller
 Replace for dialing setting



Input signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Adjustment mode	Two-position relay contact on-off control; Time proportional relay contact on-off control;
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	72×72×90mm
Hole size	68×68mm
Installation method	Panel type
Typical application	Used for drying boxes, ovens, plastic machines etc.

HH48-N-101, HH48-N-131
 Digital temperature controller



Input signal	Thermocouple: K, J
Measurement error	≤ 1.0 class
Control mode	Two-position relay contact on-off control; Time proportional relay contact on-off control;
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	48×48×95mm
Hole size	45×45mm
Installation method	Panel type, DIN rail type
Typical application	Used for heating equipment with general temperature control requirements such as drying ovens, ovens and plastic machines etc.

XMTD-2201/2202/2201F /2202F (Improved)
 Digital temperature controller
 Replace for potentiometer setting



Input signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Adjustment mode	Three-position relay contact on-off control; Hysteresis control (heating or cooling mode);
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	72×72×90mm
Hole size	68×68mm
Installation method	Panel type
Typical application	Used for heating equipment with general temperature control requirements such as drying ovens, ovens and plastic machines etc.

XMTG-3001/3002 (Improved)
 Digital temperature controller
 Economical type



Measurement signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Control mode	Two-position relay contact on-off control; Time proportional relay contact on-off control;
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	48×48×90mm
Hole size	45×45mm
Installation method	Panel type
Typical application	Used for heating equipment with general temperature control requirements such as drying ovens, ovens and plastic machines etc.

XMTA-2201/2202/2201F /2202F (Improved)
 Digital temperature controller
 Replace for potentiometer setting



Input signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Adjustment mode	Three-position relay contact on-off control; Hysteresis control (heating or cooling mode);
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	96×96×97mm
Hole size	92×92mm
Installation method	Panel type
Typical application	Used for heating equipment with general temperature control requirements such as drying ovens, ovens and plastic machines etc.

XMTD-D Series
 Digital temperature controller
 Good-looking, economical and practical



Measurement signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Control mode	Two-position relay contact on-off control; Time proportional relay contact on-off control;
Supply voltage	AC220V, AC380V
Dimension	72×72×72mm
Hole size	68×68mm
Installation method	Panel type
Typical application	Used for heating equipment with general temperature control requirements such as drying ovens, ovens and plastic machines etc.

XMTA-3001/3002 (Improved)
 Digital temperature controller
 Replace for dialing setting



Input signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Adjustment mode	Two-position relay contact on-off control; Time proportional relay contact on-off control;
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	96×96×99mm
Hole size	92×92mm
Installation method	Panel type
Typical application	Used for heating equipment with general temperature control requirements such as drying ovens, ovens and plastic machines etc.

RELAY SERIES

SWITCH SERIES

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INSTRUMENT & METER SERIES

DISTRIBUTION CONTROL SERIES

AUTOMATION INDUSTRY APPLICATION

POWER SUPPLY AND OTHERS

XMT-3001/3002 (Improved)
Digital temperature controller



Input signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Adjustment mode	Two-position relay contact on-off control Time proportional relay contact on-off control
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	48×96×82mm
Hole size	45×92mm
Installation method	Panel type
Typical application	Used for drying boxes, ovens, plastic machines etc.

TED Series
Temperature indication controller



Input signal	Thermocouple: K, E Thermal resistance: Cu50
Measurement error	≤ 1.5 class
Adjustment mode	Two-position relay contact on-off control Time proportional relay contact on-off control
Setting mode	Potentiometer setting
Supply voltage	AC220V, AC380V
Dimension	72×72×110mm
Hole size	68×68
Installation method	Panel type

XMT-101/102 (Improved)
Digital temperature controller



Input signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Adjustment mode	Two-position relay contact on-off control Time proportional relay contact on-off control
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	160×80×92mm
Hole size	151×75mm
Installation method	Panel type
Typical application	Used for drying boxes, ovens, plastic machines etc.

TEG Series
Temperature indication controller
Economical type



Input signal	Thermocouple: K, E Thermal resistance: Cu50
Measurement error	≤ 2.5 class
Vontrol mode	Two-position relay contact on-off control
Setting mode	Potentiometer setting
Supply voltage	AC220V (other power supplies customizable)
Dimension	48×48×106mm
Hole size	45×45mm
Installation method	Panel type
Typical application	Plastic packaging machine, sealing machine

XMT-121/122/121F/122F (Improved)
Digital temperature controller



Input signal	Thermocouple: K, E Thermal resistance: Pt100, Cu50
Measurement error	≤ 1.0 class
Adjustment mode	Three-position relay contact on-off control; Hysteresis control (heating or cooling mode);
Setting mode	Touch switch setting
Supply voltage	AC220V, AC380V
Dimension	160×80×92mm
Hole size	151×75mm
Installation method	Panel type
Typical application	Used for drying boxes, ovens, plastic machines etc.

TDA Series
Temperature indication controller



Input signal	Thermocouple: K, E Thermal resistance: Cu50
Measurement error	≤ 2.5 class
Adjustment mode	Two-position relay contact on-off control Time proportional relay contact on-off control
Setting mode	Potentiometer setting
Supply voltage	AC220V, AC380V
Dimension	60×120×90mm
Hole size	55×115
Installation method	Panel type

HH48-M
Non-indication temperature controller



Input signal	Thermocouple: K
Display mode	Non-indication
Adjustment mode	Two-position relay contact on-off control
Setting mode	Potentiometer setting
Supply voltage	AC220V, AC380V
Dimension	48×48×107mm
Hole size	45×45mm
Installation method	Panel type, DIN rail type
Typical application	Used for sealing machine

HCS-15
Intelligent dehumidifier



Input spec.	1-circuit temperature and humidity input module (built-in)
Measuring range	Temp.: -19°C~ 99°C Humidity: 0%~ 99% RH
Basic error	Temp.: ±1.5°C (0°C~ 100°C), Humidity: +5% RH(10%~99%)
Resolution	Temp.: 1°C, Humidity: 1%RH
Supply voltage	20VAC, 50/60Hz, default dehumidification power 15W, please specify for any other power
Recommended dehumidification space	0.5 ~ 1m ³
Work environment	Non-corrosive environment with temperature of 0-50°C and humidity ≤ 85% RH
Pipe length	High temperature resistant silicone hose, 1m standard length, please specify for any other size

TDK0302
 Intelligent temperature and humidity controller



Temperature measurement	-40~99.9°C
Humidity measurement	0~99.9%RH
Measurement error	Temperature ($\leq \pm 0.5\%$ FS) Humidity ($\leq \pm 4.5\%$ FS)
control mode	Heating and humidification mode, heating and dehumidification mode Cooling and humidification mode, cooling and dehumidification mode
Control output	One-circuit temperature and one-circuit humidity relay contact
Contact capacity	3A AC250V(resistive)
Supply voltage	AC/DC 100-240V
Dimension	72×72×78mm
Hole size	68×68mm
Additional function	RS485 communication, transmission output

HH-1DG
 Temperature and humidity (condensation) controller



Supply voltage	AC220V power consumption $\leq 2W$
Control mode	Heating and dehumidification, cooling and dehumidification
Control range	Dehumidification start for ambient humidity $\geq 93\%$ RH Dehumidification stop for ambient humidity $\leq 75\%$ RH Temperature can be set through potentiometer (hysteresis 5°C)
Contact capacity	5A AC220V (resistive)
Dimension	48×48×114mm
Hole size	45×45mm
Installation method	Panel type, DIN rail type
Typical application	Used for temperature and humidity control of distribution cabinets, substations and switchgear assemblies etc.

HCS-30
 Intelligent dehumidifier (30W)



Supply voltage	220VAC, 50Hz, standby power consumption 5VA
Measuring range	Temp.: -19°C~ 99°C Humidity: 0%~ 99% RH
Basic error	Temp.: $\pm 0.5^\circ\text{C}$ (10°C~50°C) $\pm 1.5^\circ\text{C}$ (0°C~99°C) Humidity: $\pm 3\%$ RH(10% RH ~ 90% RH) $\pm 5\%$ RH(0% RH ~ 99% RH)
Resolution	Temp.: 1°C, humidity: 1% RH
Control mode	Humidity: high humidity control; temperature: low or high temperature control (optional); temperature output: 1-circuit relay output (passive), 250VAC/3A or 30VDC/3A
Fault output	One-circuit passive fault output
Comm. mode	RS485 comm. (Modbus protocol)
Work environment	Non-corrosive environment with temperature of 0~50°C and humidity $\leq 85\%$ RH
Working condition water output	Default dehumidification power 30W, please specify for any other power
Recommended dehumidification space	1 ~ 2 m ³
Pipe length	High temperature resistant silicone hose, 1m standard length, please specify for any other size

RELAY SERIES

SWITCH SERIES

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POWER SUPPLY AND OTHERS