

## About Elitech

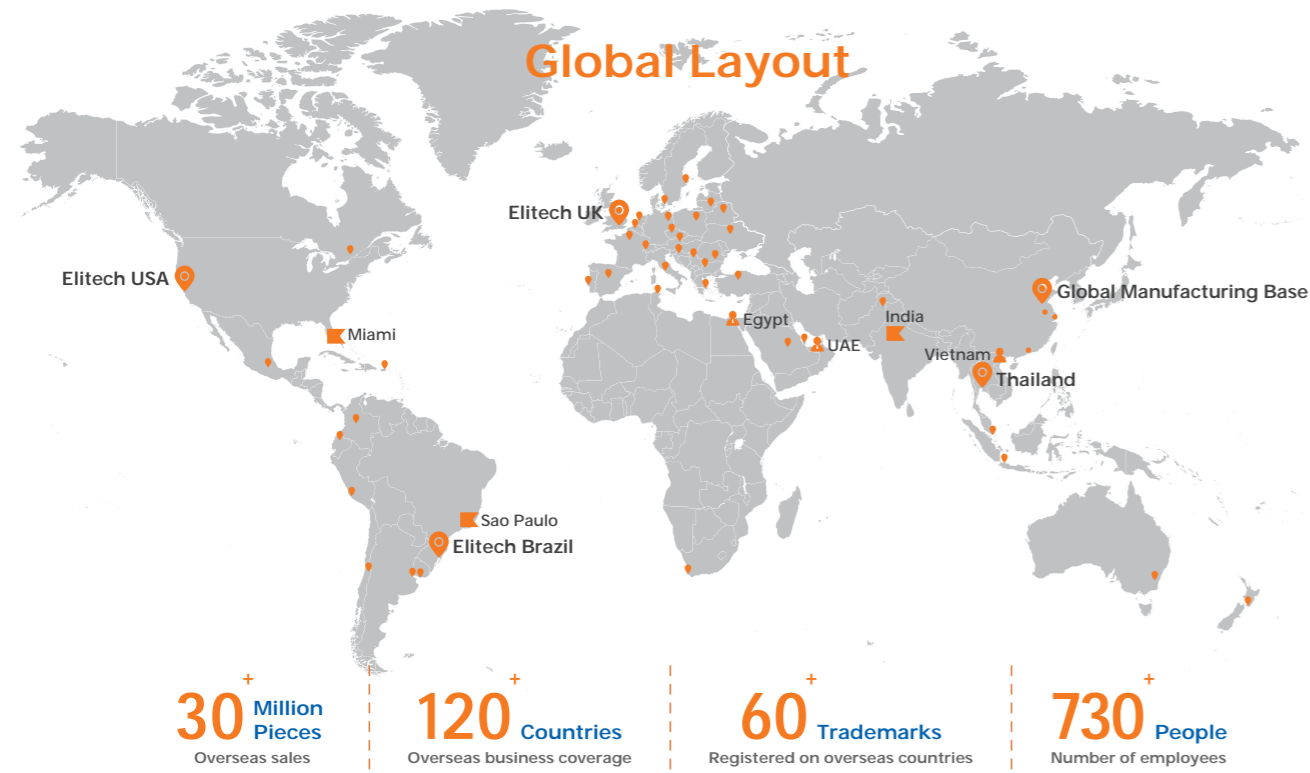
Elitech is an innovative company specializing in the R&D and manufacturing of instruments and control systems. We focus on technologies such as temperature measurement and control, industrial leak detection and vacuum systems, multi-parameter data loggers, and particulate monitoring. Elitech also provides cloud-based system integration and AI-driven industry solutions. Our products are widely used in commercial and industrial refrigeration, heat pumps, food and pharmaceutical cold chain, light commercial applications, environmental monitoring, and new energy sectors. We are committed to global expansion.

# Digital Temperature Controller PRODUCT SELECTION GUIDE

## JOIN OUR DISTRIBUTOR CHANNEL !



**SPECIALIZING IN  
REFRIGERATION CONTROL SINCE 1996**



### Megafactory



**21 Thousand<sup>+</sup>** Square meters  
Factory area

**7.6 Million<sup>+</sup>** Pieces  
Annual producing capacity

**200<sup>+</sup>** Sets  
Various automation equipment



### R&D Strength



**160<sup>+</sup>** People  
R&D engineer

**7%** Sales Revenue  
R&D investment

**200<sup>+</sup>** Items  
International patents

**3** Major R&D Centers  
USA, China

### Laboratory



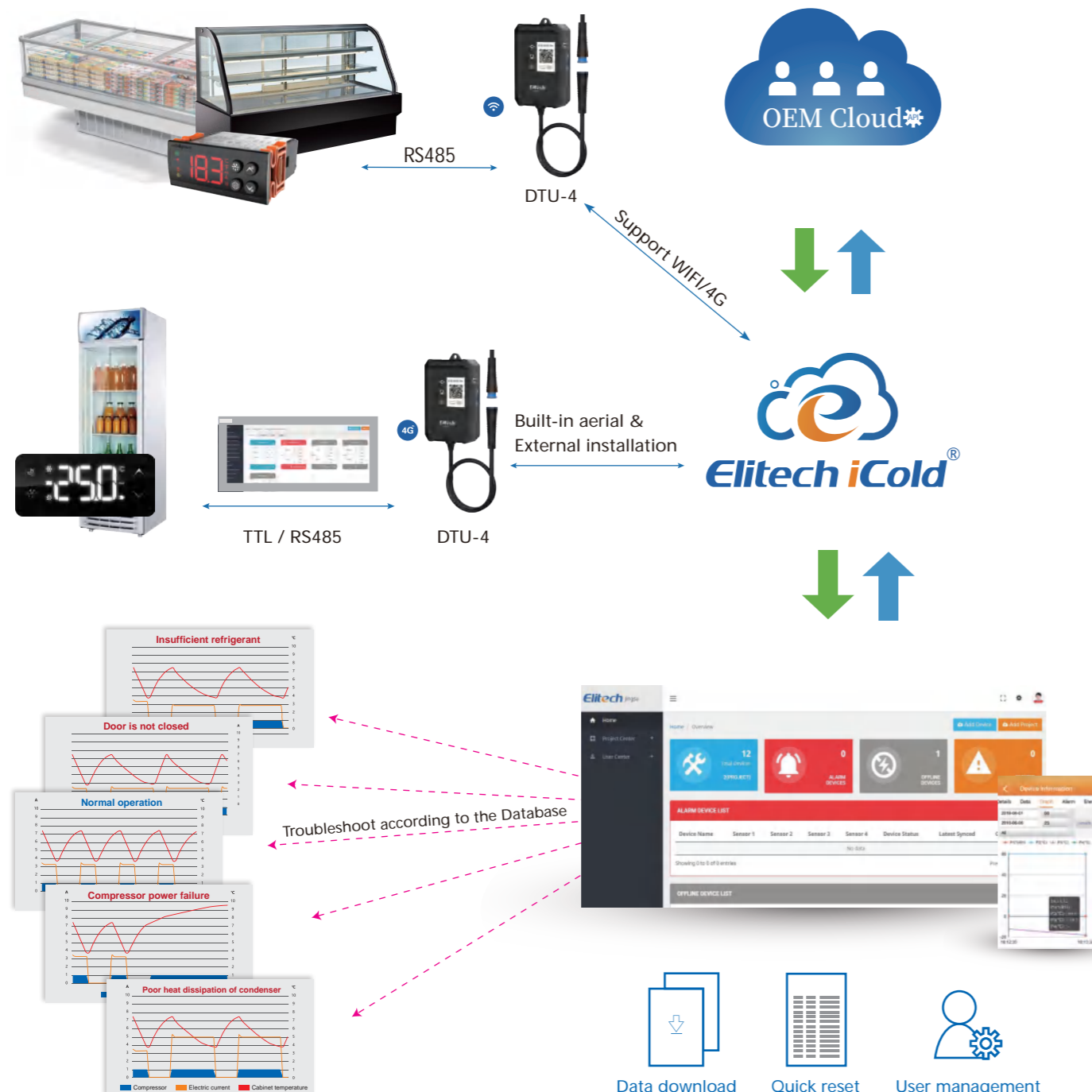
**300<sup>+</sup>** Sets  
Inspection & Laboratory equipment

**8** Pieces  
Functional area

**CNAS**  
Accreditation

# Commercial Display Cabinet Temperature Controller Solutions

Temperature Controller + Router + Elitech iCold Cloud Platform



# Smart Retail ALL IN ONE Solutions

Shelf display recognition sales movement management

Provide commercial analysis based on behavioral data

- Asset Location
- Customer Flow Analysis
- Merchandising Display
- Conversion Rate Improvement
- Restock Reminder

Smarter IoT Controller 4G

Motion Sensor  
Passenger flow analysis  
Automatic recognition of business mode












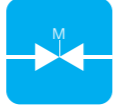






















Integrated Camera  
SKU identification of goods

Compressor Overcurrent Protector  
Fault Diagnosis

UPS Battery  
Power outage alarm



## Product Overview & Key Features

 Cooling	 Defrost	 Fan	 Light	 Alarm	 Demist	 4G
 Cooling/Heating Switch	 One-Key Reset	 Heating Switch	 PDF Report	 Solenoid Valve	 Humidify	 camera
 3 Sensors	 Temperature Calibration	 °C/°F	 RS-485 Communication	 Copy Card	 ECO Mode	 Wifi
 Door Switch	 CQC Certification	 UL Certification	 CE Certification	 Cloud Platform	 Printer	 Bluetooth
 human detection	 PID	 frequency conversion	 NFC	 HZ Certification	 CB Certification	

## Product Overview & Key Features

NGS-20 EMS-60B EPS-180 EK-610/ EK-630 EK-3010/3020/3030/3030E	ECS-180PRO/PW ECS-02CX/ECS-06CX ECS-16CX ECS-961NEO ECS-974NEO ETC-902/961/961E/974/974E	STC-1000HX ECS-180EZ ECS-2012neo DHC-100+	<b>Universal Controller</b>	1
LTW-200pro LTW-90 LTC-90PLUS LTW-300 LTW-202D LTW-51	STC-1PLUS LTW-100-S1 LTW-100-S2 LTC-70/70PLUS LTC-50/50D		<b>Split controller</b>	2
EMC-3000			<b>Medical controller</b>	3
DST-30 TPM10/TPM30 TPM-910+ TPM950/960			<b>Digital Thermometer</b>	4
DTU-4 CPK-4 CPK-30 CPK-30 CPK-50	JTH-PT1000CSF4.3*50-2m5TFH-1A KWCT-047-133-2.0m JTH-NSBR103B0T5*6*15-2m0BD-1A [JXW-0221-100A103] JTH-NSBR103B0T5*6*20-2m5BD-S2YBK-1A		<b>Accessories Sensors</b>	5
CoolRobot 1 LS-200/ECB-LS230 ECB-1000/ECB-4000 ECB-5060s/5080s/6030S	<b>Cold Room Controller</b>	EAB-80	<b>Trapped Person Alarm</b>	6

Universal Controller

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Universal Controller



IOT Controller NGS-20

Highlight

- Supporting Wi-Fi connectivity with Bluetooth and NFC parameter configuration
- Rapid parameter configuration via NFC improves production and after-sales efficiency
- Supporting OTA firmware upgrade on APP side to achieve efficient remote after-sales service
- Supporting RS-485 communication for reading/writing controller parameters and status via Pc software
- Equipping with large white digital display with IP65 front panel waterproof rating



IOT Controller EMS-60B

Highlight

- Analyze user behavior data to respond to market changes in real time
- Pyroelectric infrared sensor built-in accurately captures passenger flow dynamics
- Analyze and track door opening frequency and duration across different time periods
- Eco-door mode adjusts temperature setpoints based on business hours to save energy
- Perform OTA (Firmware update) for devices through the APP, enabling more efficient remote after-sales service



EPS-180

Highlight

- IP65 waterproof rating, suitable for humid environments and easy cleaning
- New exterior design with enhanced texture
- Touchscreen buttons for long-lasting durability
- Supports 485 communication (expandable for external networking)



EK-610/630

Highlight

- Touch screen buttons for durability and better waterproof performance
- Supports 485 communication (expandable for external networking)
- Dual power supply (110V/220V) for broader application scenarios
- ECO day/night energy-saving mode for cost efficiency



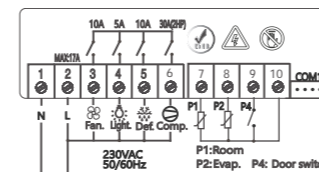
Product Parameter

Model	NGS-20	EMS-60B	EPS-180	EK-610/630
product image				
Power supply	110~220VAC 50/60HZ	220VAC±10% 50/60HZ 90~253VAC 50/60HZ	220VAC±10% 50/60HZ	110/220 VAC±10% 50/60HZ
Overall power consumption	< 5W	<10W	< 5W	<5W
Measuring range	-50°C~85°C	-40°C~90°C	-50°C~99°C	-50°C~105°C
Accuracy	±1°C	±1°C	±1°C	±1°C
Resolution	0.1°C	0.1°C	0.1°C	0.1°C / 1°C
Temperature control range	-50°C~90°C	-40°C~50°C	-50°C~99°C	-50°C~105°C
Product size(mm)	84.5×34.5×79.5	100×43×85	76×34×65	78.5×34.5×64
Mounting size(mm)	71×29	86×33×85	71×29	71×29

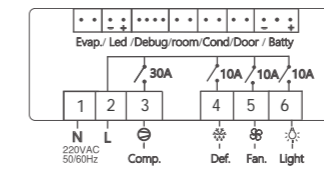
Product Model	Product Series	Control Output				Signal Input				Communication method	other	
		Cooling	Defrost	Fan	Light	Cabinet Temp	Evaporation	Condensation	Door Switch	RS-485 Communication/Wifi Bluetooth/NFC	Copy Card	Power Input
NGS-20	Configuration 1	30A	10A	10A	5A	•	•	•	•	RS-485、Wifi、Bluetooth、NFC	•	110-220V
	Configuration 2	25A	10A	10A	5A	•	•	•	•	RS-485、Wifi、Bluetooth、NFC	•	110-220V
EMS-60B	Configuration 1	30A	10A	10A	10A	•	•	•	•	RS-485、4G	•	110-220V
EPS-180	Configuration 1	30A	10A	7A	/	•	•	•	•	RS-485	•	220V
	Configuration 2	30A	10A	/	/	•	•	•	•	RS-485	•	220V
EK-610	Configuration 1	30A	/	/	/	•	/	/	/	RS-485	/	110/220V
EK-630	Configuration 1	16A	10A	10A	/	•	•	/	•	/	•	110/220V

Product wiring diagram

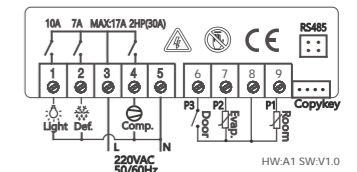
NGS-20



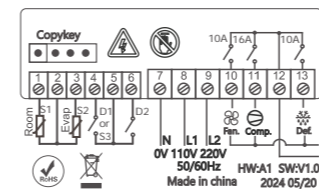
EMS-60B



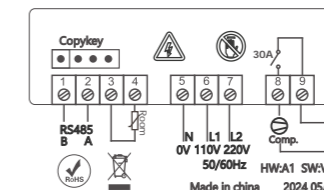
EPS-180



EK-630



EK-610



1

Universal Controller



**EK-3010/3020/3030/3030E**

**Highlight**

- Touchscreen buttons for durability and better waterproof performance
- One-key restore function for preset parameters (reverts to previous settings) for easy debugging
- Key lock function to prevent accidental touches for safety and convenience
- Optional cooling/heating output mode for flexible applications (available only on 3010)



**ECS-180pro/PW**

**Highlight**

- Secondary molding for seamless and reliable waterproofing, easy cleaning, and extended service life
- Standard 485 communication, compatible with various control systems for easy expansion
- Supports multiple driving modes to adapt to different working conditions, multi-functional
- Optional condensation sensing and current detection for real-time monitoring of key operational status, proactive prevention of faults
- Optional rear waterproof cover for comprehensive moisture resistance



**ECS-02CX/06CX**

**Highlight**

- One-key restore function for preset parameters (factory reset) for easy debugging
- Copy card function enables fast batch parameter configuration and efficient installation
- Self-diagnosis for temperature sensors and multiple alarm modes for enhanced safety
- Excellent cost-effectiveness

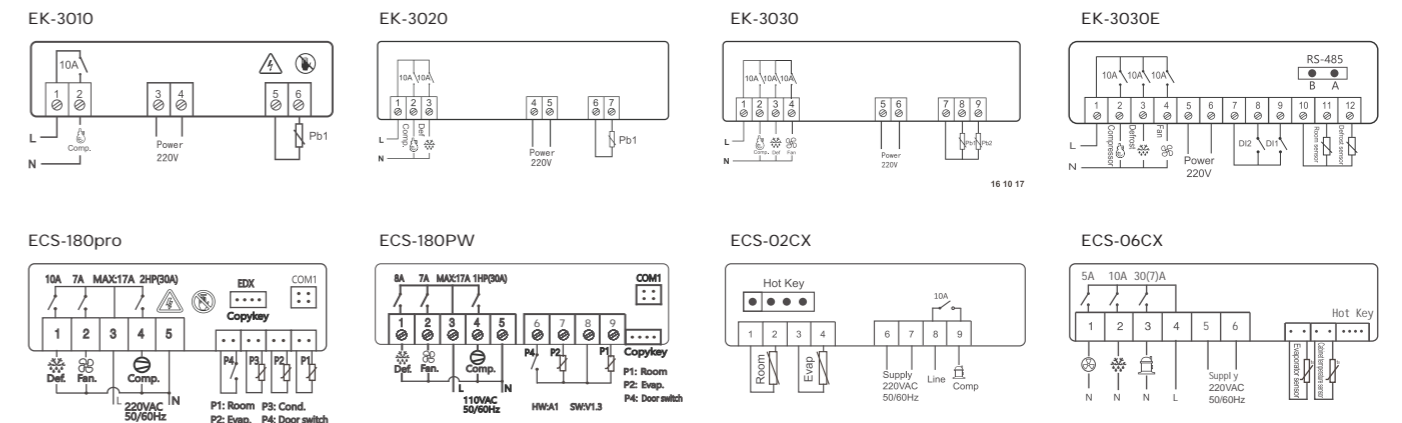


**Product Parameter**

Model	EK-3010/3020/3030/3030E	ECS-180PRO/180PW	ECS-02CX/6CX
product image			
Power supply	220VAC±10% 50/60HZ	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz
Overall power consumption	< 5W	< 5W	< 3W
Measuring range	-40°C~ 85°C	-49°C~119°C	-50°C~99°C
Accuracy	±1°C (-30°C~ 50°C) , Others±2°C	±1°C	±1°C
Resolution	1°C/0.1°C	1°C / 0.1 °C	0.1°C
Temperature control range	-40°C~ 99°C	-49°C~119°C	-50°C~99°C
Product size(mm)	85.0×35.0×63.8	78.5×34.5×64	78.5×34.5×64
Mounting size(mm)	71×29	71×29	71×29

Product Model	Product Series	Control Output				Signal Input				Communication method		other
		Cooling	Defrost	Fan	Light	Cabinet Temp	Evaporation	Condensation	Door Switch	RS-485 Communication/Wifi Bluetooth/NFC	Copy Card	Power Input
EK-3010	Configuration 1	10A	/	/	/	•	/	/	/	/	/	220V
	Configuration 2	25A	/	/	/	•	/	/	/	/	/	220V
EK-3020	Configuration 1	10A	10A	/	/	•	/	/	/	/	/	220V
	Configuration 2	25A	10A	/	/	•	/	/	/	/	/	220V
EK-3030	Configuration 1	10A	10A	10A	/	•	/	/	/	/	/	220V
	Configuration 2	10A	10A	10A	/	•	/	/	/	/	/	110V
EK-3030E	Configuration 1	10A	10A	10A	/	•	/	/	/	RS-485	/	220V
	Configuration 2	10A	10A	10A	/	•	/	/	/	RS-485	/	110V
ECS-180 PRO	Configuration 1	25A (explosion-proof)	8A (explosion-proof)	8A (explosion-proof)	/	•	•	•	•	RS-485	•	110V
	Configuration 2	30A (explosion-proof)	8A (explosion-proof)	7A (explosion-proof)	/	•	•	•	•	RS-485	•	110V
	Configuration 3	16A (explosion-proof)	10A (explosion-proof)	7A (explosion-proof)	7A (explosion-proof)	•	•	•	•	RS-485	•	220V
	Configuration 4	25A	10A	10A	/	•	•	•	•	RS-485	•	220V
	Configuration 5	30A	10A	7A	/	•	•	•	•	RS-485	•	220V
ECS-180 PW	Configuration 1	30A (explosion-proof)	8A (explosion-proof)	7A (explosion-proof)	/	•	•	•	•	RS-485	•	110V
	Configuration 2	30A	10A	7A	/	•	•	•	•	RS-485	•	220V
	Configuration 3	16A (explosion-proof)	10A (explosion-proof)	7A (explosion-proof)	10A (explosion-proof)	•	•	•	•	RS-485	•	220V
ECS-02CX	Configuration 1	10A	/	/	/	•	/	/	•	/	/	220V
ECS-06CX	Configuration 1	30A	10A	5A	/	•	•	/	/	/	/	110V
	Configuration 2	20A	10A	10A	/	•	•	/	/	/	/	220V

**Product wiring diagram**





ESC-16CX

Highlight

- Secondary molding for seamless and reliable waterproofing, easy cleaning, and extended service life
- Optional rear waterproof cover for comprehensive moisture resistance
- Copy card function enables fast batch parameter configuration and efficient installation
- Self-diagnosis for temperature sensors and multiple alarm modes for enhanced safety



ECS-961NEO

Highlight

- Copy card function enables fast batch parameter configuration and efficient installation
- One-key restore function for preset parameters (factory reset) for easy debugging
- Proven in long-term large-scale market applications with mature technology and reliable quality



ECS-974NEO

Highlight

- Copy card function enables fast batch parameter configuration and efficient installation
- Proven in long-term large-scale market applications with mature technology and reliable quality
- High versatility, compatible with various product types



ETC-902/961/961E/974/974E

Highlight

- Copy card function enables fast batch parameter configuration and efficient installation
- One-key restore function for preset parameters (factory reset) for easy debugging
- High versatility, compatible with various product types

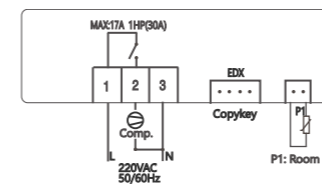
Product Parameter

Model	ESC-16CX	ECS-961NEO	ECS-974NEO	ETC-902/961/961E/974/974E
product image				
Power supply	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz	230VAC±10% 50/60Hz
Overall power consumption	<3W	<3W	<3W	<3W
Measuring range	-50°C~90°C	-50°C~55°C	-50°C~55°C	-50°C~120°C
Accuracy	±1°C (-40°C~50°C) ±2°C (-51°C~70°C) Other±3°C	±1°C	±1°C	±1°C (-30°C~50°C), Other ±2°C
Resolution	1°C	1°C/0.1°C	1°C/0.1°C	1°C/0.1°C
Temperature control range	-50°C~90°C	-50°C~110°C	-50°C~110°C	-50°C~110°C
Product size(mm)	78.5×34.5×82	74.5×34.5×64	74.5×34.5×64	77×34.5×58
Mounting size(mm)	71×29	71×29	71×29	71×29

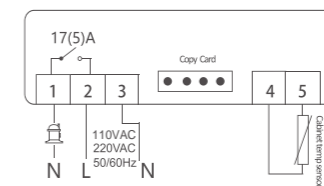
Product Model	Product Series	Control Output			Signal Input		other	
		Cooling	Defrost	Fan	Cabinet Temp	Evaporation	Copy Card	Power Input
ECS-16CX	Configuration 1	30A	/	/	•	/	•	220V
ECS-961NEO	Configuration 1	16A	/	/	•	/	•	220V
ECS-974NEO	Configuration 1	16A	10A	10A	•	•	•	220V
	Configuration 2	30A	10A	7A	•	•	•	220V
ETC-902	Configuration 1	10A	/	/	•	/	•	220V
ETC-961	Configuration 1	10A	/	/	•	/	•	220V
ETC-961E	Configuration 1	10A	/	/	•	/	•	220V
ETC-974	Configuration 1	10A	10A	10A	•	•	•	220V/24V
ETC-974E	Configuration 1	16A	10A	10A	•	•	•	220V

Product wiring diagram

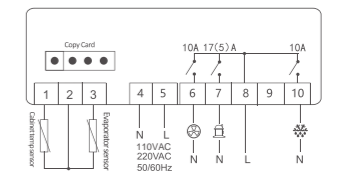
ECS-16CX



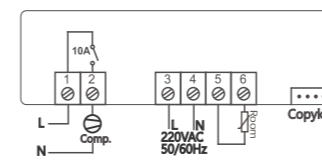
ECS-961NEO



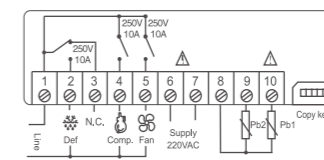
ECS-974NEO



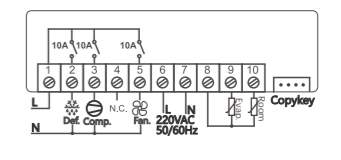
ETC-961



ETC-974



ETC-974E





### STC-1000HX

#### Highlight

- Supports both cooling and heating modes
- Simple operation, easy to use
- Precise temperature control



### ECS-180EZ

#### Highlight

- Secondary molding for seamless and reliable waterproofing, easy cleaning, and extended service life
- Standard 485 communication, compatible with various control systems for easy expansion
- Supports multiple driving modes to adapt to different working conditions, multi-functional
- Optional condensation sensing and current detection for real-time monitoring of key operational status, proactive prevention of faults
- Optional rear waterproof cover for comprehensive moisture resistance



### ECS-2012neo

#### Highlight

- Precise and stable temperature control, safe and reliable
- Uses renowned brand sensors, capable of temperatures as low as -100°C
- Copy card function enables fast batch parameter configuration and efficient installation
- Multiple protection and alarm functions



### DHC-100+

#### Highlight

- Supports proportional start/stop during sensor failure
- Key lock function to prevent accidental touches
- Optional humidification or dehumidification function

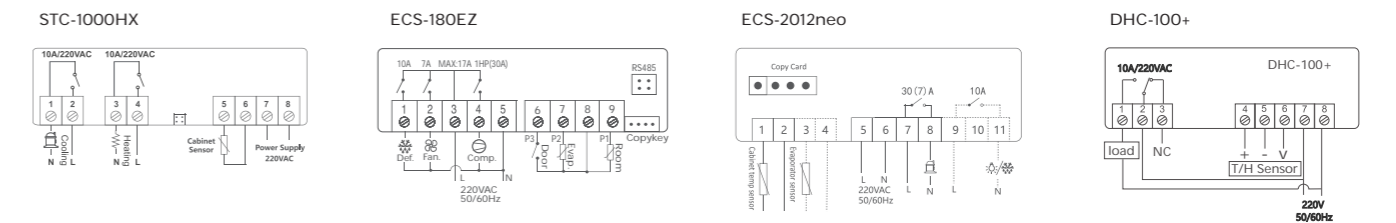
### Product Parameter

Model	STC-1000HX	ECS-180EZ	ECS-2012neo	DHC-100+
product image				
Power supply	220VAC±10% 50/60HZ	220VAC±10% 50/60HZ	220VAC±10% 50/60HZ	220VAC±10% 50/60HZ
Overall power consumption	< 3W	< 5W	< 3W	< 3W
Measuring range	-50°C~120°C	-49°C~119°C	-150°C~50°C	0%RH~99%RH
Accuracy	±1°C (-20°C~ 50°C) Other ±1.5°C	±1°C	±1°C	1%RH
Resolution	0.1°C	1°C/0.1°C	1°C	10°C~40°C, 0%RH~59%RH± (6%RH+0.5); Others±(8%RH+0.5)
Temperature control range	-49°C~ 109°C	-49°C~119°C	-150°C~50°C	10%RH~99%RH
Product size(mm)	80×35×66	78.5×34.5×74	78.5×34.5×74	75×34.5×85
Mounting size(mm)	71×29	71×29	71×29	71×29

Product Model	Product Series	Control Output			Signal Input		Communication method	other	
		Cooling	Defrost	Fan	Cabinet Temp	Door Switch	RS-485 Communication/Wifi Bluetooth/NFC	Copy Card	Power Input
ECS-180EZ	Configuration 1	30A	10A	7A	•	•	RS-485	•	220V
ECS-2012neo	Configuration 1	30A	/	/	•	/	/	•	220V
	Configuration 2	10A (explosion-proof)	/	/	•	/	/	/	220V
DHC-100+	Configuration 1	10A (explosion-proof)	/	/	•	/	/	/	220V
	Configuration 2	16A	/	/	•	/	/	/	220V

Product Model	Product Series	Control Output		Signal Input		other				
		Cooling	heating	Signal Input	Power Input	Cooling	heating			
STC-1000HX	Configuration 1	10A	10A	•	110V	Configuration 2	10A	10A	•	220V

### Product wiring diagram



Split Controller



LTW-200pro

Highlight

- Separate high and low voltage circuits for safety, easy maintenance, and user-friendly operation
- IP65 waterproof rating, suitable for humid environments and easy cleaning
- Compatible with multiple power supply boxes and certifications (CB, CE, UL) for wider adaptability
- Built-in networking for lower cost



LTW-90

Highlight

- Separate high and low voltage circuits for safety, easy maintenance, and user-friendly operation
- IP65 waterproof rating, suitable for humid environments and easy cleaning
- Compatible with multiple power supply boxes and certifications (CB, CE, UL) for wider adaptability
- Built-in networking for lower cost



LTC-90PLUS

Highlight

- Separate high and low voltage circuits for safety, easy maintenance, and user-friendly operation
- IP65 waterproof rating, suitable for humid environments and easy cleaning
- Compatible with multiple power supply boxes and certifications (CB, CE, UL) for wider adaptability
- Copy card function enables fast batch parameter configuration and efficient installation
- Self-diagnosis for temperature sensors and multiple alarm modes for enhanced safety



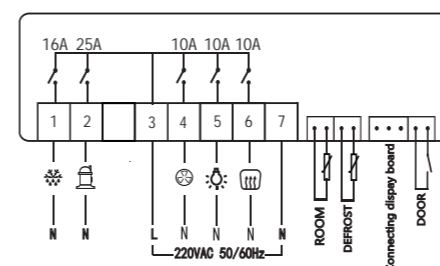
Product Parameter

Model	LTW-200pro	LTW-90	LTC-90PLUS
product image			
Power supply	220VAC±10% 50/60HZ	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz
Overall power consumption	<5W	<5W	<5W
Measuring range	-40°C~99°C	-50°C~99°C	-50°C~90°C/-58°C~194°C
Accuracy	1°C/0.1°C	±1°C	-40°C~-50°C±1°C 50°C~-70°C±2°C other ±3°C
Resolution	1°C/0.1°C	0.1°C	0.1°C
Temperature control range	-40°C~85°C	-50°C~99°C	-50°C~85°C/-58°C~185°C
Product size(mm)	180×65×19 139×133×40 (miniBox) 85×63×33 (μBox)	180×30×17.5 139×133×40 (miniBox) 85×63×33 (μBox)	180×30×17.5 139×133×40 (miniBox) 85×63×33 (μBox)
Mounting size(mm)	171×56	172×25	172×25

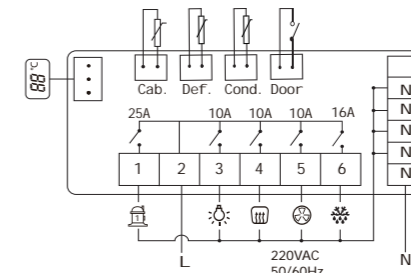
Product Model	Product Series	Control Output							Signal Input			Communication method		other	
		Cooling	Defrost	Fan	Light	Demis	Cabinet Temp	Evaporation	Condensation	Door Switch	RS-485 Communication Wifi	Copy Card	Power Input	Use with a pwr box	
LTW-200 pro	Configuration 1	25A	16A	10A	10A	10A	•	•	•	•	RS-485、Wifi	•	220V	√	
	Configuration 2	25A	16A	10A	10A	/	•	•	•	•	RS-485、Wifi	•	220V	√	
	Configuration 3	25A	16A	10A	10A	10A	•	•	/	•	RS-485、Wifi	•	100-240VAC	√	
	Configuration 4	30A	16A	10A	10A	10A	•	•	/	•	RS-485、Wifi	•	100-240VAC	√	
LTW-90	Configuration 1	25A	16A	10A	10A	10A	•	•	•	•	RS-485、Wifi	•	220V	√	
	Configuration 2	25A	16A	10A	10A	/	•	•	•	•	RS-485、Wifi	•	220V	√	
	Configuration 3	25A	16A	10A	10A	10A	•	•	/	•	RS-485、Wifi	•	100-240VAC	√	
	Configuration 4	30A	16A	10A	10A	10A	•	•	/	•	RS-485、Wifi	•	100-240VAC	√	
LTW-90 PLUS	Configuration 1	25A	16A	10A	10A	10A	•	•	•	•	RS-485、Wifi	•	220V	√	
	Configuration 2	25A	16A	10A	10A	/	•	•	•	•	RS-485、Wifi	•	100-240VAC	√	
	Configuration 3	25A	16A	10A	10A	10A	•	•	/	•	RS-485、Wifi	•	100-240VAC	√	
	Configuration 4	30A	16A	10A	10A	10A	•	•	/	•	RS-485、Wifi	•	100-240VAC	√	

Product wiring diagram

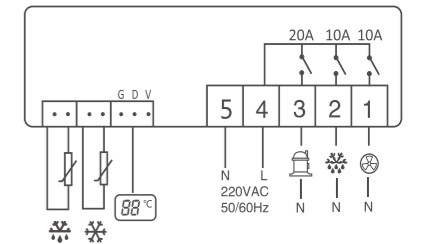
MINIBOX-1A



MINIBOX-2A



μBox-1A





**LTW-300**

**Highlight**

- Separate high and low voltage circuits for safety, easy maintenance, and user-friendly operation
- IP65 waterproof rating, suitable for humid environments and easy cleaning
- Compatible with multiple power supply boxes and certifications (CB, CE, UL) for wider adaptability
- Built-in networking for lower cost



**LTW-202D**

**Highlight**

- Separate high and low voltage circuits for safety, easy maintenance, and user-friendly operation
- IP65 waterproof rating, suitable for humid environments and easy cleaning
- Compatible with multiple power supply boxes and certifications (CB, CE, UL) for wider adaptability
- Built-in networking for lower cost



**LTW-51**

**Highlight**

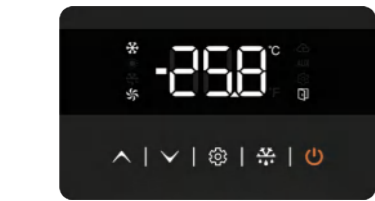
- Separate high and low voltage circuits for safety, easy maintenance, and user-friendly operation
- IP65 waterproof rating, suitable for humid environments and easy cleaning
- Compatible with multiple power supply boxes and certifications (CB, CE, UL) for wider adaptability
- Built-in networking for lower cost



**STC-1PLUS**

**Highlight**

- Separate high and low voltage circuits for safety and easy maintenance
- One-key operation for simple use
- Copy card function enables fast batch parameter configuration and efficient installation
- Low cost

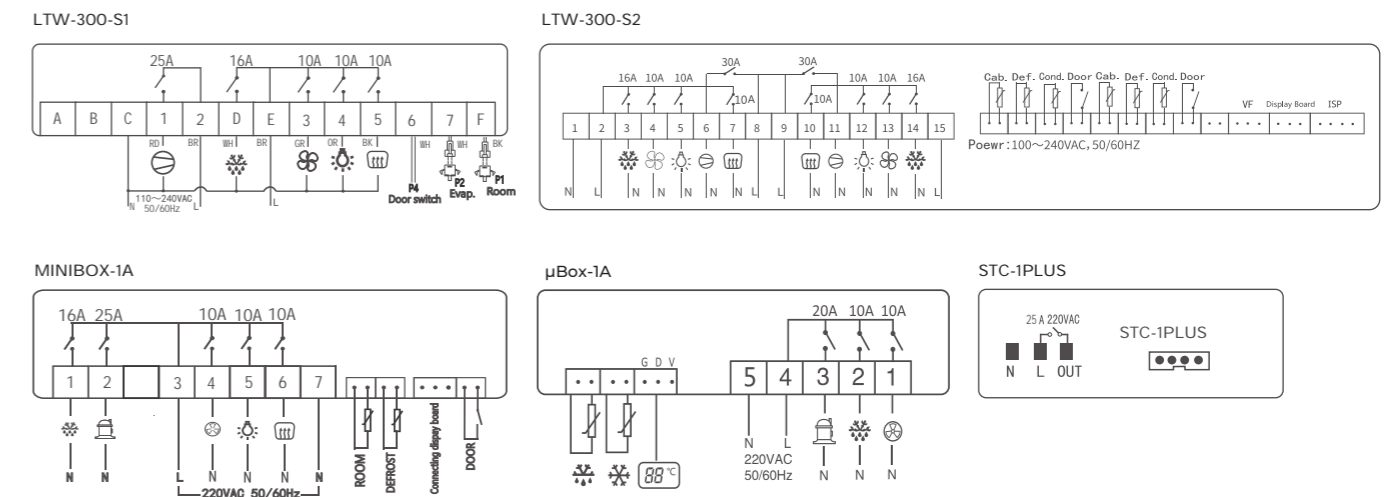


**Product Parameter**

Model	LTW-300	LTW-202D	LTW-51	STC-1plus
product image				
Power supply	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz
Overall power consumption	<5W	<5W	<5W	<5W
Measuring range	-40°C~ 99°C	-40°C~ 99°C	-50°C~ 90°C	-50°C~99°C
Accuracy	±1°C	±1°C	±1°C	±1°C
Resolution	0.1°C	0.1°C	1°C	1°C / 0.1°C
Temperature control range	-40°C~ 85°C	-40°C~ 85°C	-50°C~ 85°C	-50°C~99°C
Product size(mm)	207×64×39.8	150×92.7×25.8	132.6×43.6×25.2	78.5×34.5×64
Mounting size(mm)	190.5×56.5	141.5×84.5	112×38.2	71×29

Product Model	Product Series	Control Output										Signal Input			Communication method		other	
		Cooling	Defrost	Fan	Light	Demis	Cabinet Temp	Evaporation	Condensation	Door Switch	RS-485 Communication	Wifi	Copy Card	Power Input	Use with a pwr box			
LTW-300	Configuration (s1)	30A/30A	16A/16A	10A/10A	10A/10A	10A/10A	••	••	••	•	RS-485	Wifi	/	100~240VAC	✓			
	Configuration (s2)	25A/25A	16A	10A	10A	10A	••	•	•	•	RS-485	Wifi	/	100~240VAC	✓			
LTW-202D	Configuration 1	30A	16A	10A	10A	10A	•	•	•	•	RS-486	Wifi	•	100~240VAC	✓			
LTW-51	Configuration 1	16A	/	/	/	/	•	/	/	/	RS-487	Wifi	•	220V	✓			
	Configuration 2	16A	16A	/	/	/	•	/	/	/	RS-488	Wifi	•	220V	✓			
	Configuration 3	20A	10A	10A	/	/	•	/	/	/	RS-489	Wifi	•	220V	✓			
STC-1 PLUS	Configuration 1	25A	/	/	/	/	•	/	/	/	/	/	•	220V	✓			
	Configuration 2	10A	/	/	/	/	•	/	/	/	/	/	•	220V	✓			

**Product wiring diagram**





### LTW-100-S1

#### Highlight

- Separate high and low voltage circuits for safety, easy maintenance, and user-friendly operation
- IP65 waterproof rating, suitable for humid environments and easy cleaning



### LTW-100-S2

#### Highlight

- Separate high and low voltage circuits for safety, easy maintenance, and user-friendly operation
- IP65 waterproof rating, suitable for humid environments and easy cleaning



### LTC-70/70PLUS

#### Highlight

- Fully waterproof design for stronger protection
- Ultra-thin front panel for seamless integration with cabinets
- Self-diagnosis for temperature sensors and multiple alarm modes for enhanced safety



### LTC-50/50D

#### Highlight

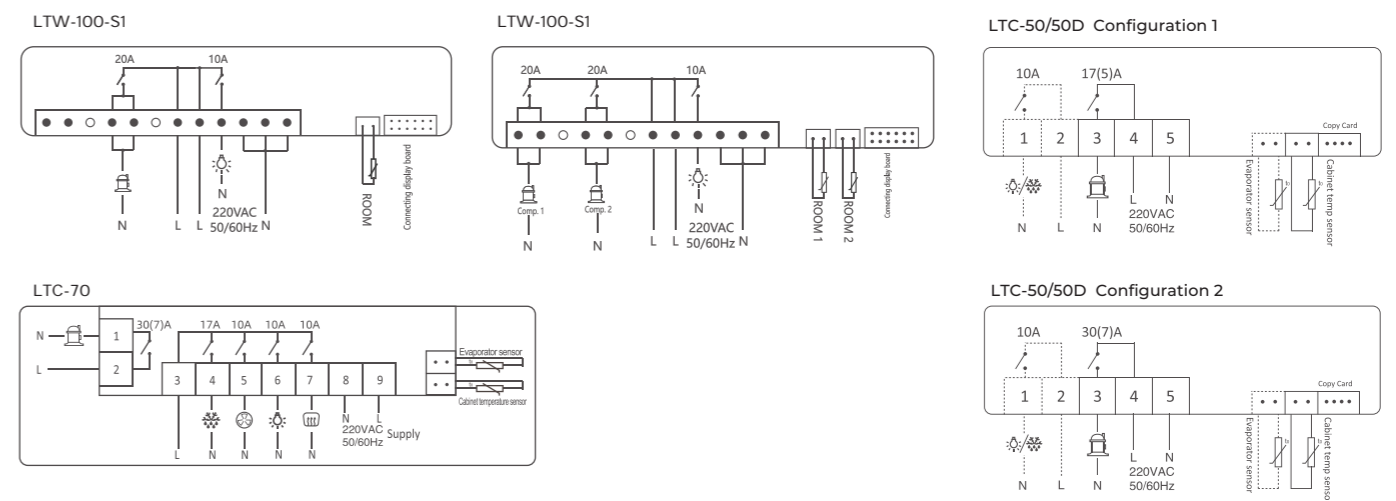
- Optional waterproof casing for improved protection.
- Six temperature buttons for convenient temperature setting.
- Copy card function enables fast batch parameter configuration and efficient installation.

### Product Parameter

Model	LTW-100-S1	LTW-100-S2	LTC-70/70PLUS	LTC-50/50D
product image				
Power supply	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz	220VAC±10% 50/60Hz
Overall power consumption	<3W	<3W	<5W	<3W
Measuring range	-50.0°C~50.0°C	-50.0°C~50.0°C	-50°C~90°C	-40°C~90°C
Accuracy	(-40°C~50°C) ±1°C, Other ±2°C	(-40°C~50°C) ±1°C, Other ±2°C	(-20°C~50°C) ±1°C, Other ±1.5°C	±1°C
Resolution	0.1°C	0.1°C	0.1°C	0.1°C
Temperature control range	-50.0°C~50.0°C	-50.0°C~50.0°C	-50°C~85°C	-30°C~20°C
Product size(mm)	180×65×19	180×65×19	148×43.5×47.5	132×43×61.5
Mounting size(mm)	171×55.9	171×55.9	137.5×33	112×39

Product Model	Product Series	Control Output					Signal Input			Communication method	other	
		Cooling	Defrost	Fan	Light	Demis	Cabinet Temp	Evaporation	Door Switch	Copy Card	Power Input	Use with a pwr box
LTW-100	Configuration (s1)	20A	/	/	10A	/	••	/	/	•	220V	√
	Configuration (s2)	20A/20A	/	/	10A	/	••	/	/	•	220V	√
LTC-70/70PLUS	Configuration 1	30A	16A	10A	10A	10A	•	•	•	/	100-240VAC	×
	Configuration 2	30A	16A	10A	10A	/	•	•	•	/	100-240VAC	×
	Configuration 3	30A	/	/	10A	/	•	/	•		220V	×
LTC-50/50D	Configuration 1	30A	10A	/	/	/	•	/	/	•	220V	×
	Configuration 2	16A	10A	/	/	/	•	/	/	•	220V	×

### Product wiring diagram



Medical controller



EMC-3000

Highlight

- Multiple alarm modes for enhanced safety
- Connectable to backup power for outage alarms and temperature display
- Real-time temperature recording, exportable to PDF via USB
- Modular design for expandable functions, including temperature recorder connectable to mini printer, touchscreen, IOT module, and more



Product Parameter

Model	EMC-3000/3100/3200/3300/3400/3000PT	
product image		
Power supply	12VDC±10%	
Overall power consumption	<1W	
Measuring range	-50°C~50°C	
Accuracy	±1°C(-40°C~50°C); ±2°C(51°C~70°C); ±3°C(Others) ±1°C(Only EMC-3100)	
Resolution	0.1°C/1°C(Other) (EMC-3000)	
Temperature control range	-200°C~50°C (EMC-3100)	
Product size(mm)	284.5x36.6	
Mounting size(mm)	160 x 100	

Model	Input Port							
	Cooling 1	Cooling 2	Condenser fan	Evaporator Fan	Heater	Solenoid Valve	External Alarm	Light
EMC-3000	20A	×	10A	10A	10A	×	5A	12V/6W
EMC-3100	20A	×	10A	×	12V/12W	10A	5A	×
EMC-3200	20A	×	10A	10A	10A	×	5A	12V/6W
EMC-3300	20A	20A	10A	10A	10A	×	5A	12V/6W
EMC-3400	20A	×	10A	×	10A	×	5A	12V/6W
EMC-3000PT	20A	×	×	10A	×	×	5A	12V/6W

Model	Output Port						
	Cabinet Temp	Evaporator	Condenser	Environment	Display	Pressure	Door Switch
EMC-3000	•	•	•	•	•	•	•
EMC-3100	×	×	×	×	×	×	×
EMC-3200	•	•	•	•	•	•	•
EMC-3300	•	•	•	•	•	•	•
EMC-3400	×	×	×	×	×	×	×
EMC-3000PT	•	•	•	•	•	•	•

Digital Thermometer



DST-30



TPM 10



TPM 30



TPM-900+



TPM-910+



TPM-950



TPM-960

DST-30

Highlight

- IPX4 waterproof rating, suitable for humid environments and easy cleaning
- Easy installation

TPM10/TPM30

Highlight

- Drawer-type structure provides users more convenience to change and use the battery by drawing the battery compartment
- High accuracy sensor is more stable and recognized by the market
- It passes CE and ROHS certifications, so it is safe and reliable

TPM-900/910+

Highlight

- Fully waterproof design
- Quick-connect terminals

TPM-950/960

Highlight

- Fully waterproof design
- Customizable front panel printing

Product Parameter

Model	DST-30	TPM10	TPM30	TPM-900/910+	TPM-950	TPM-960
product image						
Power supply	Solar panel	110~220VAC±10%, 50/60Hz	one button battery (LR44, 1.5V)	220VAC±10% 50/60Hz	5VDC±10%	10~220VAC±10%, 50/60Hz
Overall power consumption	/	/	/	< 3W	<1W	<1W
Measuring range	-50°C~150°C (>80°C or < -20°C, needs to be tailored)	-50°C~80°C	-50°C~70°C	-50°C~120°C	-99°C~99.9°C or -99°F~999°F	-50°C~120°C or -58°F~248°F
Accuracy	±1°C(-20°C~80°C), ±2°C(Other)	0.1°C(<100°C), 1°C(≥100°C)	0.1°C(> -20°C), 1°C(≤-20°C)	±1°C	/	±1°C(-40°C~50°C); ±2°C(51°C~70°C); ±3°C(others)
Resolution	0.1	±1°C(-20°C~70°C), ±2°C(Other)	±1°C(-20°C~70°C), ±2°C(Other)	1°C	1°C(-99°C~-10°C), 0.1°C(-9.9°C~99.9°C), 1°F	1/0.1°C/°F
Calibration temperature	/	/	/	/	/	-5~5°C
Product size(mm)	66 x 30 x 11.6	62.5 x 29.5 x 19	58.4 x 25.7	64x31mm	70 x 23.5 x 17.2	70 x 23.5 x 34.2
Mounting size(mm)	59.5 x 26	59.5 x 25	64 x 31	58.4x25.7	65.5 x 19	65.5 x 19

Accessories/Sensors

DTU-4

Highlight

- DTU-4 Series IoT pipeline modules, paired with Elitech thermostats and other terminals, enable remote control/monitoring via "Elitech Cold Cloud" APP and cloud platform. Features: remote alarm SMS alerts, multi-transmission (2G, CAT1, 4G, WIFI), real-time operation monitoring. Modular-sized with versatile installation (fixing holes, magnet, foam adhesive) for easy integration



Model	DTU-3
Operating Voltage	9~24V ±10% DC
Ambient Temperature	-10°C ~ +65°C
SIM Card Type	Nano SIM card, (Multi-carrier compatibility)
Data Upload Interval	Default: 2 minutes
Load Capacity	1 module supports up to 3 devices for network connection
Antenna Type	On-board antenna or external rubber antenna
Transmission Mode	2G, CAT1, 4G, WIFI
Connection Interface	RS-485 waterproof connector, max extension 50m
Status Indication	LED indicator lights
Overall Dimension (mm)	71×46×19.5 mm

CPK-4

Highlight

- Eases production & after-sales for manufacturers/distributors
- Dedicated software: USB-connected PC for quick data configuration/copy
- File-based parameter management for all cabinet controllers
- Bilingual (Chinese/English) software, compatible with WIN XP/7/8/10
- For ECS Brilliant Series controllers: batch rapid parameter modification/management



CPK-30

Highlight

- IPX4 waterproof rating, suitable for humid environments and easy cleaning
- Easy installation



CPK-50

Highlight

- Standard front panel transparent protective cover
- Easy installation and removal
- Rear upper baffle prevents condensation drip, enhancing protection



Metal sensor

- High precision, minimal annual drift, and long service life
- Sensor withstands 3,000 thermal shock cycles with reliable packaging for durable performance
- Temperature sensors available in multiple cable lengths (1.5m, 2.0m, 2.5m, 3m, etc.)



Fully potted sensor

- Double-layer protected wiring harness: outer layer made of TPE, inner layer of PTFE
- TPE material: high elasticity, high strength, low-temperature resistance, and environmentally compliant
- High precision, minimal annual drift, and long service life
- Protection class: IP68
- Optional sensor lengths: 0.5m, 1.0m, 1.5m, 2.0m, 2.5m, 3.0m, 3.5m, 4.0m, 4.5m, 5.0m, 5.5m, 6.0m



Product Parameter

Description	Measuring Range	Protection Class
NTC Sensor: Probe size: Φ5x25 stainless steel; PE cable	-50°C ~ +125°C	IP67
NTC Sensor: Probe size: Φ5x30 stainless steel; PTFE-sheathed cable	-70°C ~ +125°C	IP67
PT1000 (Deep Temperature) Sensor: Probe size: Φ5x30 stainless steel; PTFE cable	-70°C ~ +105°C	IP67
PT1000 Sensor: Probe size: Φ5x30 stainless steel; PTFE cable	-200°C ~ +105°C	IP67

Ultra-low temperature sensor

- Widely used in quick-freezing cabinets
- Food-grade, energy-saving & eco-friendly
- Easy installation, tensile & bending resistant
- Insert-type probe: direct internal access, fast & accurate temperature sensing



Product Parameter

Description	Measuring Range	Protection Class	Maximum Heater Voltage	Heater Resistance
NTC Penetration Sensor (L-shaped Handle)	-50°C ~ +150°C	IP67	x	x
NTC Penetration Sensor (L-shaped Handle with Heating Element)	-50°C ~ +150°C	IP67	24VDC	7.2Ω, 10.8Ω
PTC Penetration Sensor (L-shaped Handle)	-50°C ~ +150°C	IP67	x	x

Temperature and humidity sensor

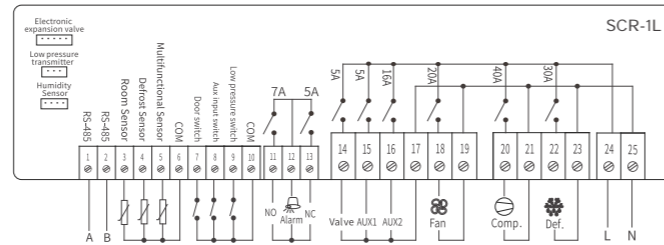
- Proportional voltage signal output
- Low power consumption, high precision, excellent long-term stability
- Waterproof design, compact size
- Temp & humidity measurement: cold chain, power industry, refrigerators, etc



Cold Room Controller

CoolRobot 1 Highlight

- **Extreme Appearance:** Lightweight, slim design with a 10.5-inch display and real-time status lighting
- **Extreme Convenience:** NFC for quick parameter setup
- **Extreme Efficiency:** Electronic expansion valve for fast response and higher efficiency
- **Energy Management:** Real-time monitoring for clear energy use and cost savings
- **Smart After-Sales Service:** OTA (Firmware update) via app for efficient remote support



Product Parameter

Voltage	220VAC±10% 50/60HZ
power consumption	Less than 9W
Working temperature	-10°C~65°C
Storage temperature	-20°C~75°C
Measurement temperature range	-50°C~99.9°C
Temperature measurement accuracy	-20°C~50°C precision ± 1°C, and the rest is ± 1.5°C
Control temperature range	-49.9°C~99.9°C
Temperature resolution	0.1°C
Current measurement range	0A~20A
Current measurement accuracy	±0.5A
Sensor type	Temperature probe NTC - plastic sealing (10 KΩ / 25°C, B value 3435K)
Sensor wire length	2m (including probe length)
COMP	4HP
DEF	30A
FAN	20A

Model	SCR-1-Base	SCR-1-Pro	SCR-1-Max
Product image			
Air switch	×	√	√
Smart status light	×	√	√
WIFI networking module	√	√	√
NFC near-field intelligent device interconnection and communication function	√	√	√
ECO <sup>2</sup> energy-saving	×	√	√
Equipment intelligent agent AI Q&A	×	×	√
User operation records	×	×	√
Maintenance and repair information reminder	×	×	√
Cold storage system self-check	×	×	√
Scene-based control for setting temperature/humidity	×	√	√
OTA (Firmware update)	√	√	√
Value-added service	Value-added services can be purchased via the APP to upgrade device functions		/

Trapped Person Alarm

EAB-80

EAB-80-D Highlight

- Integrated relay design supports alarm signal reception in control room and external audible-visual alarm expansion
- Equipped with APP, email push, display panel, buzzer for multiple alarms
- Has probe expansion interface, accepts R290 refrigerant, CO<sub>2</sub>, NH<sub>3</sub> gas concentration detection modules
- Complies with EN-378-1 international standard, power - off endurance approximately 14 hours
- Supports dual - band WiFi and MODBUS communication protocols

EAB-80-P Highlight

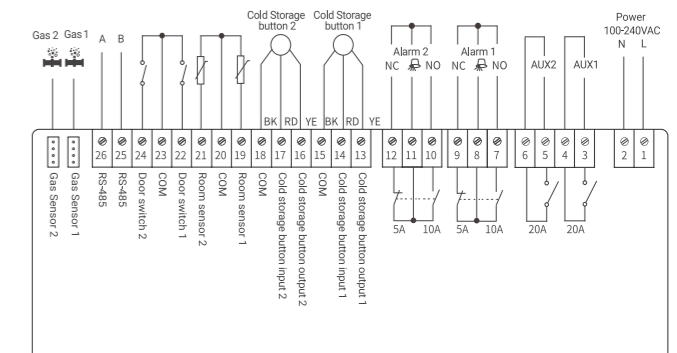
- Equipped with a green indicator light, easy to quickly locate the position of the equipment when people are trapped
- Working temperature -40°C
- Protection class IP65



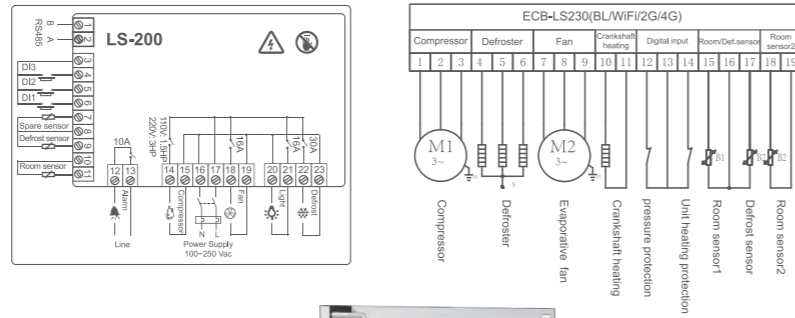
Product Parameter

Power supply	100~240VAC 50/60Hz
Power consumption	Less than 10W
Measurement temperature range	-49~119°C/56~246°F
Temperature resolution	The accuracy is ±1°C within the range of -20 to 50°C, and ±1.5°C for the rest
Gas concentration resolution	1ppm
Battery capacity	3000mAh
Sensor type	NTC (10KΩ/25°C, B value : 3435K)
Sensor wire length	2 meters (including the length of the probe)
Relay output	Relay1: 10A 220V(NO)/5A 220V(NC) Relay2: 20A 220V(NO)
The continuous working duration of the battery	Approximately 14 hours (In networked status, no alarm, no relay output, gas sensor not installed)
Storage temperature	-10°C~75°C
Working environment temperature	-10°C~65°C
OTA (Firmware update)	Enabling more efficient remote after-sales service
Size	250×120×62mm

Model	EAB-80-Base	EAB-80-Pro
Product image		
Order no.	1102 0400 90	1102 0401 06
Cold Room Smart Monitor	EAB-80-D	EAB-80-D
Cold Room Smart Alarm	EAB-80-P	EAB-80-P(2 pcs)



Cold Room Controller



LS-200/ECB-LS230 Highlight

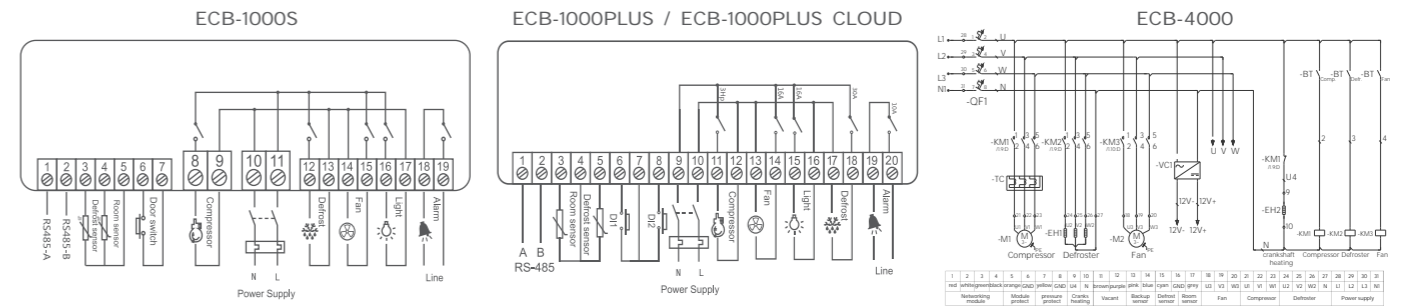
- Beautiful design subverts tradition
- With the electric control box, the effective distance can reach 200 meters
- Large panel LED screen, clear and intuitive, touch buttons
- The control panel is separated from the electric control box and can be installed arbitrarily within 200 meters to easily reach the district city
- The installation of the electric control box and the unit nearby greatly saves power lines and wiring costs
- Separation of strong and weak electricity makes the controller far win the traditional strong electricity working environment, safer
- Bluetooth, Wifi, 2G, 4G, multiple network connection mobile phone control, remote monitoring
- Siemens Certified Partner of Electronic Control System for Freezing and Refrigeration Industry

Cold Room Controller



ECB-1000/ECB-4000

- Multiple functions: refrigeration, defrost, fan and light
- Compact clamshell with ABS flame retardant material
- Waterproof, dustproof, quakeproof
- High/Low temperature alarm, sensor fault alarm
- Manual on/off, real-time view and change of parameters, clock display
- Modbus-RTU communication
- Internet access: WiFi (ECB-1000PLUS CLOUD/ECB-4000)
- Much safer with more stability and reliability
- Big output capacity, strong load capacity



One Machine for One Storage		Split Type Electric Control System Specification	
Overview	Description	LS-200(BL/WIFI/2G/4G)	ECB-LS230(BL/WIFI/2G/4G)
	Control load	Compressor, defroster, air cooler	Compressor, defroster, air cooler
Unit	Supply voltage	220VAC±10% 50/60HZ	3-phase 5-wire or 3-phase 4-wire 380VAC±10% 50/60HZ
	Applicable compressor type	Piston compressors and scroll compressors	Piston compressors and scroll compressors
	Applicable compressor power	3HP	5HP, 10HP, 15HP
	Compressor contactor size	3HP	18A(5HP), 25A(10HP), 32A(15HP)
	Compressor start mode	Direct start	Direct start
	Condenser type	Air cooled	Air cooled
	Storehouse	Cold storage type	Calandria/Fan cold storage
Temperature control	Defrost mode	Electric	Electric
	Thermostat model	LS-200	LS-230
	Control range	-40°C ~ 119°C	
	Control accuracy	±1°C	
	Display resolution	0.1°C	
	Temperature sensor type	NTC (10KΩ/25°C, B value 3435K) (5HP product defrost sensor length 5m, other products 8m)	
	Number of temperature sensors	Three lines of temperature sensors (two for storage temperature, and one for defrost temperature)	
	Compressor protection output delay	1~120 min, adjustable	
	Defrost start mode	Cyclic defrost and clock defrost, optional	
	External signal protection input:	Two lines of external signal input	
Protection	Motor protector	The thermostat is self-contained (with phase missing, phase sequence, overload, three-phase unbalance and inverse time limit protection functions, among others)	
	Current measuring range	0~80A	
	Current measuring accuracy	±3% (within nominal range of the transformer) and ±2A (0 - 30A)	
	Current display resolution:	1A	
Body	5-15HP dimensions (W*H*D)	261x167.5x95mm	260x320x135mm
	Color	White	Orange door and blue body
Networking	Remote monitoring	Bluetooth/WIFI/2G/4G	
	Networking module	RCW-3	
Others	Service environment	Temperature: -10°C ~ 60°C; Humidity: 20% ~ 90%RH, condensation prevention; Designed to be placed in a ventilated and dry environment away from heat sources and direct sunlight	

One Machine for One Storage		ECB-1000 Series Plastic Electric Cabinet Products Specification			
		ECB-1000PLUS	ECB-1000PLUS CLOUD	ECB-1000S	ECB-4000
Function		Cooling	Cooling	Cooling	Cooling
Measuring range		-49 ~ 119 °C	-49 ~ 119 °C	-45 ~ 99 °C	-49 ~ 119 °C
Control range		-40 ~ 99 °C	-40 ~ 99 °C	-40 ~ 90 °C	-49 ~ 119 °C
Measuring accuracy		±1°C (-20 - 50°C) ; ±1.5°C (Others)	±1°C (-20 - 50°C) ; ±1.5°C (Others)	±1°C	±1°C (-20 ~ 50°C) ; ±1.5°C (Others)
Voltage range		100 - 256VAC 50/60Hz	100 - 256VAC 50/60Hz	100 - 240VAC 50/60Hz	380VAC±10% 50/60Hz
Overall power consumption		7W	12W	5W	12W
Analog input	Temperature probe	●	●	●	●
	Defrost probe	●	●	●	●
Digital input	Door switch	—	—	●	●
	Multi-function 1(1)	●	●	—	●
	Multi-function 2(2)	●	●	—	●
Digital output	Compressor	3HP	3HP	3HP	5HP, 10HP, 15HP
	Defrost	30A	30A	8A	17A, 25A, 32A
	Fan	16A	16A	5A	9A, 9A, 9A
	Light	16A	16A	5A	5A (reserve)
	Alarm	10A	10A	5A	5A (reserve)
Defrost type	Electric	●	●	●	●
	Hot gas	●	●	●	●
	Shutdown	—	—	—	●
Defrost mode	Cyclic	●	●	●	●
	Real-time clock	●	●	●	●
Other features	Clock mode	●	●	●	●
	Buzzer alarm	●	●	●	●
	HACCP function	—	—	●	—
	High/low temp alarm	●	●	●	●
	Temperature unit CF	●	●	●	●
	ECO mode	●	●	●	●
Communication interface	RS-485	●	●	●	●
Networking function	WiFi(2.4GHz)	—	●	—	●
Operating temperature		-10°C ~ 65°C	-10°C ~ 65°C	-5°C ~ 60°C	-10°C ~ 65°C
Storage temperature		-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C	-20°C ~ 75°C
Dimensions (mm)		261x167.5x95	261x167.5x95	261x167.5x95	420x275x105

## Cold Room Controller



ECB-5060S(SN/SW)



ECB-5080S(SN/SW)

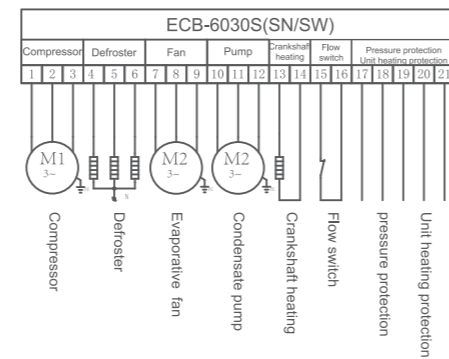
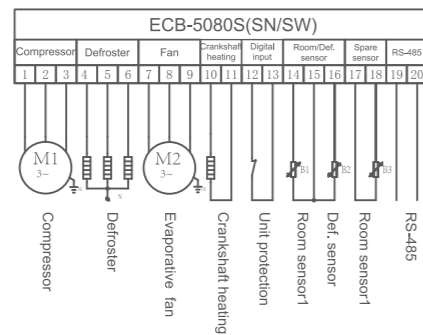
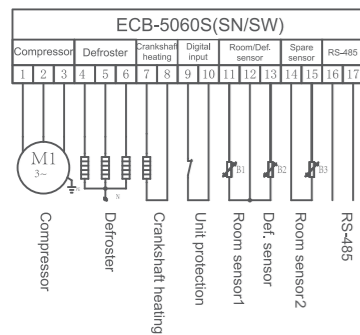


ECB-6030S(SN/SW)

### ECB-5060s/ECB-5080s

- This series of electric cabinets are suitable for the control of medium and low temperature cold storage and quick freezers
- The LTC-500B large screen controller is used for visual view of the current storage temperature and set temperature, and the multilingual operating system can be operated without instructions, which is convenient for customers to debug and use
- With the function of IoT, it can remotely view and modify unit parameters and record and save temperature data in real time on PC and mobile phone APP to realize remote centralized monitoring of the cold storage
- It has a variety of protection functions such as compressor high-pressure protection, low-pressure protection, module protection, overload protection, phase sequence protection, phase missing protection, three-phase unbalance protection and inverse time limit protection

### Product wiring diagram



One Machine for One Storage		ECB-6000N IOT Series Electric Cabinet Products Specification		
Overview	Description	ECB-5060S(SN/SW)	ECB-5080S(SN/SW)	ECB-6030S(SN/SW)
	Control load	Compressor, defroster	Compressor, defroster, air cooler	Compressor, defroster, air cooler, condensate pump
Unit	Supply voltage	3-phase 5-wire or 3-phase 4-wire 380VAC±10% 50/60HZ (single-phase product supply voltage 220VAC±10% 50/60HZ)		
	Applicable compressor type	Piston compressors and scroll compressors		
	Applicable compressor power	5HP, 10HP, 15HP, 20HP, 25HP, 30HP (it is recommended to use one specification larger when using medium and high temperature cold storage)		
	Compressor contactor size	18A(5HP),25A(10HP),32A(15HP),40A(20HP),50A(25HP),65A(30HP)		
	Compressor start mode	Direct start	Direct start	Direct start
Storehouse	Condenser type	Air cooled	Air cooled	Water cooling
	Cold storage type	Fan cold storage	Fan cold storage	Fan cold storage
	Defrost mode	Electric	Electric	Electric
Temperature control	Thermostat model	MTC-6000N	MTC-6000N	MTC-6000N
	Control range	-50°C~50°C		
	Control accuracy	±1°C		
	Display resolution	0.1°C		
	Temperature sensor type	NTC (10KΩ/25°C, B value 3435K) (5HP product defrost sensor length 5m, other products 8m)		
	Number of temperature sensors	Three lines of temperature sensors (two for storage temperature, and one for defrost temperature)		
	Compressor protection output delay	1~120 min, adjustable		
Protection	Motor protector	0~80A		
	Current measuring range	±3% (within nominal range of the transformer) and ±2A (0 - 30A)		
	Current measuring accuracy	1A		
	Current display resolution	CP-6000N (with phase missing, phase sequence, overload, three-phase unbalance and inverse time limit protection functions, among others)		
Body	5-15HP dimensions (W*H*D)	340×420×135mm	340×420×135mm	400×550×180mm
	20-30HP dimensions (W*H*D)	350×470×180mm	400×550×180mm	400×550×180mm
	Color	Blue door and white body		
Networking	Remote monitoring	None for S series; 4G networking module for SN series; WIFI networking module for SW series		
	Networking module	RCW-2S		
Others	Service environment	Temperature:-10°C - 60°C; Humidity: 20% - 90%RH, condensation prevention; Designed to be placed in a ventilated and dry environment away from heat sources and direct sunlight		