As a professional HVAC Temperature Control manufacturer,
We devote to create the most comfortable environment

2013 PRODUCT CATALOGUE

Our products have been included in National Quality Supervision and Security system. You could call our toll-free telephone **800 808 1315** or visit our website www.elsonic.com.cn and input the password to check the authenticity.

Due to our company's development, the trademark of ELEX group updates to **Elsonic** instead of **ElеX**. If there is any question, please contact our headquarter.

Brief Introdrction

located in Xiamen Hi-tech Soft Park, is a high-tech enterprise integrating with research, production and selling, specializing in manufacturing Central Air Condition Control products, Heating Control products and Building Automation products. Our company not only provides cost-effective products for customers, but also ideal system solution for all kinds of Automation and HVAC Engineering project, and become one of automation-control companies with the strongest comprehensive strength. Company attends Germany IKK, America AHR, Asia Refrigeration & Air-conditioning exhibition and other kinds of international trade fairs every year. It is the member of China Refrigeration Association, China Floor Heating Association, and was named "China Top Ten Best New Company in HVAC Field", "Top 100 Enterprises of China Refrigeration" and "Xiamen Faithful Enterprise". Products used in main buildings of Beijing Olympic Games, company has more than twenty national patents, several automatic control software gain copyright registration certificate from Software Industry Association, and our branch company has got "double-soft enterprise" certification. Product market share is in the front row of the same industry.

Our main products: Thermostat, Motorized Zone Valve, Electric Modulating Valve, Damper Actuator, Balancing Valve, Temperature Sensor and Radiator Valve.

Elsonic has powerful research foundation, excellent experiment environment, precise testing and good manufacturing bases. Our Industry Garden covers 28

Acres with a total construction area of 15280 square Acres with a total construction area of 15280 square meters. We own more than RMB 40,000,000 net asset and 500 staffs. Elsonic has advanced automatic production lines and thermostat research laboratory, and obtained the Certificates of ISO9001:2000. And our thermostats got the certificates of CE, RoHS, UL, CCEE and so on. Now, we have yearly capacity of 5,000,000 pcs of Thermostats, 400,000 sets of Motorized Valve, 20,000 sets of Electro-thermal Actuator, 100,000 sets of separator and etc, and

Elsonic has outstanding technical talent and well-trained producing staffs, and wins the trust of customers with our dedicated service. Now We have extended our business range throughout the whole China and some countries overseas, including Europe, USA, Middle East, South America and Asia. Elsonic will keep taking active part in industrial competition with honest and pragmatic enterprise spirit, technical innovation, operation innovation, strong financial capacity and human resources, and continue to maintain the domestic leading position of researching and producing HVAC Automation Controll products. Welcome to discuss about OEM/ODM and Agency cooperation issues.
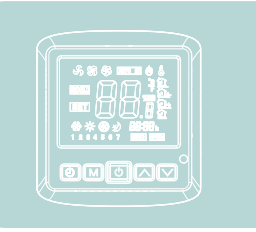
HVAC Automation Control Products

FCU Thermostat Series

FCU Thermostat is used to control temperature in the industry, commercial and household. By comparing room temperature with setpoint, it can control Fan Coil Unit, Motorized Valve, Motorized Ball Valve or Damper to reach comfortable room temperature and meet the purpose of energy saving. It applies to air-conditioning 2-pipe/4-pipe configuration water system or ventilation system.

AC210 Touch Screen Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC100 ~ 240V, 50/60Hz
- Power Consumption: < 1.5W

AC208 Touch Screen Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC220V ± 10%, 50/60Hz
- Power Consumption: < 1.5W

AC215 Touch Screen Thermostat
- Sensor: NTC
- Temperature Range:10℃ ~ 30℃
- Voltage: AC100 ~ 240V, 50/60Hz
- Power Consumption: < 1.5W

AC212 Series LCD Thermostat
- Sensor: NTC
- Temperature Range:10℃ ~ 30℃
- Voltage: AC100 ~ 240V, 50/60Hz
- Power Consumption: < 1.5W

AC811 Series LCD Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC100 ~ 240V, 50/60Hz
- Power Consumption: < 1.5W

AC810 Series LCD Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC100 ~ 240V, 50/60Hz
- Power Consumption: < 1.5W

AC813 Series LCD Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC100 ~ 240V, 50/60Hz
- Power Consumption: < 1.5W

AC808 Series LCD Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC220V ± 10%, 50/60Hz
- Power Consumption: < 1.5W

AC803 Series LCD Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC220V ± 10%, 50/60Hz
- Power Consumption: < 1.5W

AC806 Series LCD Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC220V ± 10%, 50/60Hz
- Power Consumption: < 1.5W

AC209 Series LCD Thermostat
- Sensor: mechanical charging bellow
- Voltage: AC220V ± 10%, 50/60Hz
- Load Current: 1A(Inductive Load) 2A(Resistive Load)

AC205 Wireless Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 0.5℃
- Voltage: 2 × AA Alkaline Batteries
- Power Consumption: < 1.5W

AC809 Remote-controller Thermostat
- Sensor: NTC
- Temperature Range:10℃ ~ 30℃
- Voltage: AC220V ± 10%, 50/60Hz
- Power Consumption: < 1.5W

AC801C Electronic Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: AC220V ± 10%, 50/60Hz
- Power Consumption: < 1.5W

AC801A Mechanical Thermostat
- Sensor: mechanical charging bellow
- Voltage: AC220V ± 10%, 50/60Hz
- Load Current: 1A(Inductive Load) 2A(Resistive Load)

AC206 Series LCD Thermostat
- Sensor: NTC
- Temperature Accuracy: ± 1℃
- Voltage: 24VAC or 220VAC
- Power Consumption: < 1.5W

AC315 Series Linear Controller
- Sensor: NTC
- Power Consumption: < 1W
- Materials: PC+ABS anti-fire
- Power:10 ~ 16V

T6000 Mechanical Thermostat
- Sensor: mechanical charging bellow
- Accuracy: ± 1℃
- Voltage: AC220V ± 10%, 50/60Hz
- Output Power: AC220 3A

AS101 Three Speed Switch
- Indicator: Knob switch with light
- Thermostat Contact: More than 150000 times
- Voltage: AC220V, 50/60Hz
- Rated Current: 2A

AS102 Three Speed Switch
- Indicator: Knob switch with green display
- Thermostat Contact: More than 150000 times
- Voltage: AC220V, 50/60Hz
- Power Consumption: < 1.5W

ISO 9001

CE

HVAC Automation Control Products
Valve Series

V2016 Stainless Motorized Valve
- Valve Body: Forged Brass
- Sealing Material: Nitrile-butadiene rubber
- Drive Chassis: Stainless Steel
- Drive Cover: Aluminum alloy

V4016 Three-line Motorized Valve
- Rated Voltage: AC220V, 110V, 24V
- Power: 6W
- Drive Mode: Bi-directional reversible motor
- Liquid Temperature: 1～95℃

V6016 Switch-Mode Motorized Valve
- Valve Body: Forged Brass
- Power: 7W
- Drive: single direction reversible motor drive
- Liquid Temperature: 2～94℃

V8016 Three-line Motorized Valve
- Valve Body: Forged Brass
- Liquid Temperature: 2～95℃
- Voltage: AC220V, 50/60Hz
- Pressure: < 2.5MPa

DV220 Motorized Ball Valve
- Control Characteristic: Motor-driven return
- Motor: Bi-directional synchronous motor
- Running Time: 15s(on→off)
- Nominal Pressure: 1.6MPa

DV310 Motorized Ball Valve
- AC voltage bi-directional synchronous motor
- Adapt to the ball valve DN15～150
- Built-in switch with 10℃ adjustable precision
- Provide DC0～10V feedback signal output

TD/TA Motorized Ball Valve
- Output torque: 10 Nm
- Voltage: AC220 or ACDC24V
- overload Protection: automatic protection
- Protection Level: IP54

TF...DV Motorized Butterfly Valve
- Medium Temperature: +10℃～+30℃
- Rated Voltage: 1600V Pa (Pa16)
- Operating Power Consumption: 30～150VA
- Voltage: AC220V or AC 360V

VB3000 Series Copper Valve
- Medium Temperature: +10～+100℃
- Diameter: DN15～DN65
- Flow Coefficient: 10KV～63KV
- Pressure: 16Bar

VB7000 Series Iron Cast Valve
- Medium Temperature: +10℃～+180℃
- Diameter: DN80～DN200
- Flow Coefficient: 100KV～360KV
- Pressure: 16Bar

Comprehensive Water Pressure Balance Products

Company dedicate to researching and manufacturing energy-saving valve of high technical in flow and pressure control, and is professional in researching hydraulic regime analysis and applied technology of differential pressure regulating valve, Product Series includes Static Balancing Valve, Dynamic Balancing Valve, Two-way Dynamic Balancing Valve, Self-operated Flow Control Valve, etc.

ELVA Static Balancing Valve
- Diameter: DN20～DN50
- Connection: Thread DIN2999
- Max Work Pressure: PN16
- Fluid Error: ±5%

ELVA Static Balancing Valve
- Diameter: DN65～DN150
- Connection: Thread DIN2999
- Nominal Pressure: 16Bar/25Bar
- Fluid Error: ±5%

ELVB Dynamic Flux Balancing Valve
- Diameter: DN50～DN200
- Nominal Pressure: 16Bar/25Bar
- Fluid Error: ±5%
- Work Temperature: 0～120℃

ELVCA Static Motorized Balancing Valve
- Diameter: DN20
- Work Pressure: PN16
- Fluid Error: 5%
- Differential shut-off pressure: 4Bar

ELVCB Dynamic Motorized Balancing Valve
- Diameter: DN20
- Work Pressure: PN16
- Fluid Error: 5%
- Differential shut-off pressure: 4Bar

ELVDA Dynamic Motorized Balancing Valve
- Diameter: DN32～DN150
- Work Pressure: PN16
- Fluid Error: ±5%
- Protection Grade: IP67

ELVDB Dynamic Modulating Balancing Valve
- Diameter: DN20～DN200
- Work Pressure: PN16
- Fluid Error: ≤5%
- Valve Body: Gray Iron Casting

ZLF Self-operated Flow Control Valve
- Max Temperature: 100℃
- Nominal Pressure: 16MPa
- Differential Pressure Range: 20～300kPa
- Optional DN15～25 Balancing Valve

ZYC Differential Pressure Control Valve
- Diameter: DN25～350
- Max Pressure: 1.6MPa
- Applicable Medium: Water
- Medium Temperature: 0～100℃

Energy-saving Control Products for Heating
Heating Thermostats

Heating Room Thermostat, with comparing room temperature with setpoint, it can control on/off heating equipment by relay to meet the purpose of constant room temperature. It applies to water heating system, heating cable or radiation film heating system.

R8800 Heating Thermostat
- Sensor: NTC
- Temperature Accuracy: ±1℃
- Temperature Range: 5～35℃
- Voltage: AC220V ±10%,50/60Hz

R8600 Heating Thermostat
- Sensor: NTC
- Temperature Accuracy: ±1℃
- Temperature Range: 5～35℃
- Voltage: AC220V ±10%,50/60Hz

R8000 Touch Screen Thermostat
- Sensor: NTC
- Temperature Accuracy: ±1℃
- Temperature Range: 5～35℃
- Voltage: AC220V ±10%,50/60Hz

R310 Touch Screen Thermostat
- Sensor: NTC
- Temperature Accuracy: ±1℃
- Temperature Range: 5～35℃
- Voltage: AC220V ±10%,50/60Hz

R312 Heating Thermostat
- Sensor: NTC
- Temperature Accuracy: ±1℃
- Temperature Range: 5～35℃
- Voltage: AC220V ±10%,50/60Hz

R6000 Network Heating Thermostat
- Sensor: NTC
- Voltage: AC220V ±10%
- Temperature Accuracy: ±1℃
- Voltage: AC220V or AC360V

R6500 Heating Thermostat
- 25A high-power relay
- Sensor: NTC
- Temperature Accuracy: ±1℃
- Temperature Range: 5～35℃
- Voltage: AC220V ±10%,50/60Hz

RE001 Heating Thermostat
- Sensor: NTC
- Temperature Accuracy: ±1℃
- Temperature Range: 5～35℃
- Power Consumption: < 1W

RW7000 Boiler thermostat
- Wall mounted
- White backlight
- Hint interface for each operation
- Luxury design

R205 Wireless Heating Thermostat
- Power Supply: 2 x AA Alkaline Batteries
- Working Humidity: ≤95%RH
- Temperature Sensor: NTC
- Work Temperature: 0～50℃

R6800 Electronic Heating Thermostat
- Status Indicator: LED
- Voltage: AC220V ±10%, 50/60Hz
- Out Power: 2A(Resistive Load) for water heating 16A(Resistive Load) for electric heating

Energy-saving Control Products for Heating
Electro Thermal Valve Series
Thermostatic Radiator Valve Series

E30 Series Electro Thermal Valve
- Power Consumption: 2VA
- Thrust: 110N
- Stroke: 3.5mm
- Full travel time: 5～8Min

Thermostatic Radiator Valve
- Control section with LCD display
- Schedule programming for heating and low temperature
- Temperature Setting Range: 5～30℃

ECK Thermostatic Radiator Valve
- Temperature Set-point Range: 7～28℃
- Temperature Control Range: 0～50℃
- Max. Heat Medium: 120℃
- Sensor: Liquid Feeling Bag/ Acetic Ester

Energy-saving Control Products for Heating
Manifold Series

Manifold connects with every heating branch pipes, it is used to collect and distribute water in water system.

EL200 Series Manifold
- Nominal Pressure: 1.0Mpa
- Branch Centre Distance: 50mm
- Quantity of Branch Pipe:module structure
- Main Pipe Diameter: DN24(1"), DN32(1 1/4")

EI800 Series Intelligent Manifold
- Applicable Medium: Water, Glycol solution
- Branch Centre Distance: 50mm
- Branch Pipe Diameter: 3/4", 1/2"
- Main Pipe Diameter: 1", 1 1/4"

EL128 Thermal Valve Manifold
- Nominal Pressure: 1.0Mpa
- Branch Centre Distance: 50mm
- Quantity of Branch Pipe: 2～12 pipes
- Main Pipe Diameter: DN25(1"), DN32(1 1/4")

EL129 Water-mixing Heating Centre
- Use Three-way Regulating Valve
- Advanced PID Control
- On-demand Remote control in Real Time
- PC Remote Control by Network

Building Automation Products
Sensor \ DDC controller

Sensor is mainly used for temperature & humidity measurement of indoor, outdoor or pipe; Temperature output provides signal types of NTC, platinum resistance, voltage, current, etc.; Humidity output provides signal types of voltage, current, and so on, able to meet the different requirements of all kinds of control system.

TS-8000 Temperature Sensor
- Sensor Element: Imported NTC
- Temperature Range: 0～120℃
- Material: Threaded, Copper Shell
- Protection Grade: IP54

CHT-D/N TemP. & Humi. Sensor
- Temperature Range: 0～50℃ or +20～80℃
- Humidity Range: 10%～100%RH
- Material: Plastic Shell
- Humidity Output Signal: 0～5V, 4～20Ma

TP33 Differential Air Pressure Switch
- Measuring Range: 30～1000Pa
- Max Pressure of Medium: 5000Pa
- Temp, Limitation of Medium: -40℃～+85℃
- Voltage: 5A 250VAC

WNS Differential Pressure Controller
- Measuring Range: 0～60PSI
- Operation Differential Pressure: 2PSI
- Max differential pressure between bellows: 120PSI

Humidity & Temperature Indicator
- Measuring Range: -40～190℃, 0～100%RH
- Temp: AC24V ±10%, 50/60Hz
- Temperature Value: 3 Channels
- Humidity Value: 3 Channels

Building Automation Products
Damper Actuator Series

CA/CD Series Damper Actuator
- Output Torque: 5Nm, 10Nm, 20Nm
- Running Time: 150s
- Position Indication: Mechanical indicator
- Voltage: 24VAC or 110～220VAC

ERD 10/12 Damper Actuator
- Specification: 4Nm, 6Nm, 8Nm, 10Nm, 15Nm, 20Nm, 25Nm, 30Nm
- Angle of rotation: 90° (95° Max)
- Protection Class: IP42

GA/GD Series Damper Actuator
- Rotating Angle: 0～90°
- Life: 60,000 times rotation
- Ambient Temperature: -20～+50℃
- Ambient Humidity: 5～95%RH

TA/TD Series Damper Actuator
- Output Torque: 2Nm, 4Nm
- Running Time: 80～150Sec
- Running Power Consumption: 4VA
- Net Weight: 0.6～0.8Kg

Building Automation Products
Flow Switch Series

TA/TD Series Damper Actuator
- Output Torque: 6Nm, 10Nm
- Running Time: 30～150Sec
- Running Power Consumption: 4VA
- Net Weight: 0.8～1.2Kg

TA/TD Series Damper Actuator
- Output Torque: 16Nm, 25Nm, 40Nm
- Running Time: 80～150Sec
- Running Power Consumption: 6～8VA
- Net Weight: 1.4～1.9Kg

TA/TD Spring -return Damper Actuator
- Output Torque: 8Nm, 15Nm
- Running Time: 70～150Sec
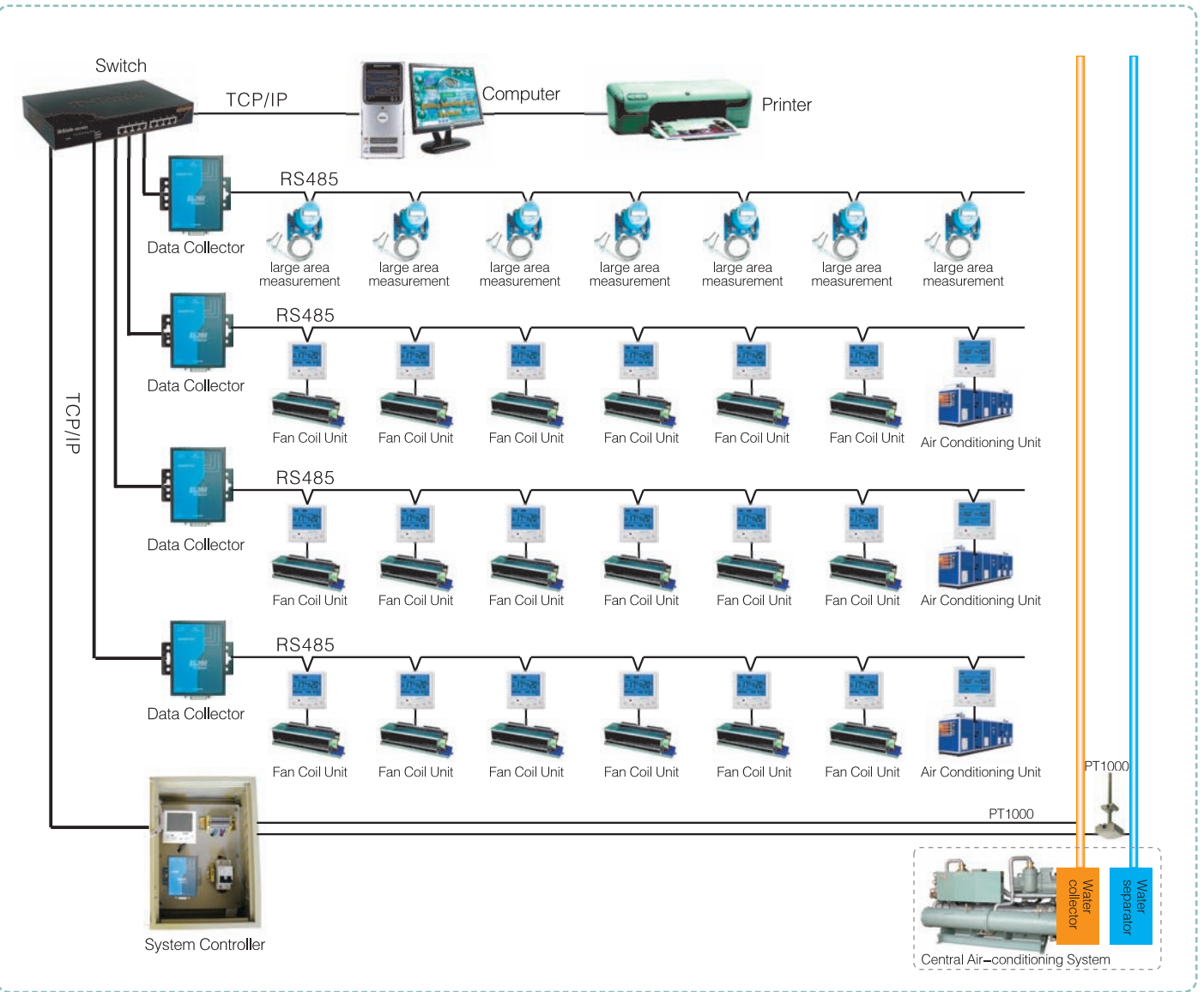- Running Power Consumption: 6～8VA
- Net Weight: 1.8～2.2Kg

YF61KB Flow Switch
- Liquid Temperature: -20～120℃
- Connection Material: Brass
- Max Pressure: 1.6Mpa
- Protection Class: IP53

Building Automation Products
Temperature Controller Control Box

TC8800F Proportional & Integral Control
- Temperature Range: 7～120℃
- Input Control Signal: Temperature Sensor
- Mode of Control: Three floating-point
- Voltage: 24VAC ± 15%, 50/60Hz

TC8800Z Proportional & Integral Control
- Temperature Range: 7～60℃
- Humidity Range: 0～100% RH
- External Sensor: NTC 10K
- Control Signal: three floating-point

Temp. & Humi. Control Box
- Voltage: 220 ±10%, 50/40Hz
- Current Consumption: <0.5A
- Control Range: 0～120℃, 0～100%RH
- Temperature Accuracy: ±1℃

Differential Pressure Control Box
- Voltage: 220V ±10%, 50/60Hz
- Current Consumption: <0.5A
- Control Range: 55～414KPa
- Control Mode: Switch

Central airconditioning billing monitoring system

EL8000 Central Air-conditioning Billing Monitoring System integrates automation control technology and computer network technology, can simultaneously centralized control or independently control the open/close of several terminal equipments, temperature control, open/close of valve, etc. On colored dynamic interface, you can see the running status of every terminal equipment, manual or automatic on/off and cumulative run-time, and then control these statuses so as to realize energy-saving. This system not only can measure HVAC System and Heating System, but also can collect, operate, analyze and process data from meters of water, electric, gas, domestic hot water, purified water, etc. and manage the running equipment high efficiently and economically.

EL360 Data Collector
- Build-in network adapter
- Connect with computer by RJ45 interface
- Communicate with terminal instrument by RS485 bus
- Communication Distance: with terminal instrument > 1000m

JHM Mechanical Energy Meter
- Advanced Nonmagnetic Technology
- Standard core with multi-steams
- Pressure: 1.6MPa
- Temperature Range: 4～95℃
- Temperature Resolution: 0.1℃

JHM Ultrasonic Energy Meter
- Ultrasonic time-difference measurement with high accuracy
- Temperature Range: 4～95℃
- Power Supply: Internal lithium battery
- Protection Class: IP52

EL361 System Controller
- With real-time temperature collection function
- With real-time data analysis function
- With Heating/Cooling quality inspection function
- With the function of uploading terminal data
- Real-time response to control demand of PC

Central Air-conditioning billing monitoring system diagram: Switch, TCP/IP, Computer, Printer, RS485, Data Collector, large area measurement, Fan Coil Unit, Air Conditioning Unit, PT1000, System Controller, Central Air-conditioning System.