Temperature and Humidity Data Logger
About Data Logger Business Unit

Data Logger Business Unit is dedicated in R&D of temperature and humidity data loggers. We participated in drafting the five national standards: Cold Chain Temperature Logger, Furnace Temperature Tracker, Service Specification for Catering Cold Chain Logistics, Temperature Measurement in Perishable Food Cold Chain, and Verification Regulation of Temperature Indication Controller.

In the past years, all of our products have won client’s approval, such as GSP temperature and humidity data logger, vaccine data logger, report-auto-generated temperature and humidity data logger, mini temperature and humidity data logger, USB data logger, single-use NFC data logger, single-use USB temperature data logger, temperature and humidity data logger with printer, temperature indicator and logging module, etc.

Our products have been accepted by many well-known enterprises at home and abroad. They are now widely used in the fields of medicine, food, life science, flowers and plants, breeding industry, cooler boxes, cooler bags, containers, cool cabinets, medical cabinets, fresh food cabinets, freezer cabinets, laboratories, greenhouses, vaccine, fresh food, etc.

Certification

Certification of Quality Management System

Certification of Environmental Management System

Certification of Occupational Safety and Health Management System

Company Profile

Jiangsu Jingchuang Electronics Co., Ltd (also known as Elitech) has experienced 20 year R&D and manufacturing supplies & services in cold chain Internet of Things industry. It has sold more than 10 million cold chain control systems and 2.6 million unit control systems since its foundation. As a leading company in cold chain Internet of things industry of China, Elitech now enjoys great popularity in R&D, promotion and application of Internet of things technology.

Elitech is a national high-tech enterprise. We own 80 authorized patents (including 11 patents for invention), 59 provincial high-tech products, 11 provincial software products and 27 national computer software copyrights. Our company has passed certifications of ISO9001:2008, ISO14001:2004, OHSAS18001:2011 and TS16949:2009. Export products have passed CE, UL and ETL certification. We are qualified to produce environment-friendly products completely in compliance with EU RoHS directive.

Elitech has established four branches: ELITECH TECHNOLOGY Inc (in US Silicon Valley), ELITECH (UK) LIMITED (in London), Jiangsu Jingchuang Internet of Things Technology Co., Ltd (in Nanjing) and JoyControl (Shanghai) Environment Technology Co., Ltd (in Shanghai Free Trade Zone).
Our Test Lab
We established an EMC test laboratory of provincial level. It can carry out a full range of tests, including environment test, vibration test, waterproof test, safety test, property parameter test, environment protection test, EMC anti-interference test, etc.

EMC Test
Lightening surge generator is used to simulate the situation in which our products are under surge voltage and current so as to guarantee the anti-interference property.

Electrostatic discharge tester simulates electrostatic charge carried by human body when touching product surface or surrounding metallic articles. The test will ensure the reliability of our products.

Cycle sag simulator is used to test product anti-interference in case of voltage sags, short interruption and change. The test will ensure the qualified products have good anti-interference capability.

Group impulse generator is used to test the anti-interference capability of power line, control line and signal line to ensure the products can work normally in harsh environment.

QA for Large Quantity Supply
We have a thorough quality control system to guarantee the quality of products in mass production. The system is reusable with high stability. Elitech is capable of undertaking the responsibility caused by systematic risks.

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Double-Channel Remote Monitor (3G+WiFi)

**RCW-200**

RCW-200 remote humidity and temperature monitor is a high-tech product based on Internet of Things technology. The monitor transmits data to cold chain network platform via 3G network in WCDMA system and WiFi so that users can achieve real-time monitoring, remote view and management of data online through browser or smart phone terminal.

Users can select two channel temperature and humidity sensor. GPS module is optional. The built-in rechargeable lithium battery can provide real-time data uploading and SMS alarm service even in case of cold storage power cut.

**Application**

Cold chain transportation, ambient temperature and humidity gathering, medical and healthcare industry, agriculture greenhouses, computer rooms, intelligent buildings, public places, such as subway/market/library, museum/archive, etc.

**Features**

- Multiple alarm mode in case of over temperature and humidity
- Flexible switch between communication modes: WiFi and 3G
- The monitor record capacity is 10000 points, which are not restricted in cloud.
- Flexible export of data via USB, cloud, etc.

**Parameters**

- Power supply: 5V/2A(DC)
- Temperature measuring range: -40 ℃ ~ +70 ℃
- Temperature measuring accuracy: ±2℃ (±40±5℃); ±1℃ (others)
  (Sensor wire is not longer than 10m.)
- Humidity measuring range: 10~90%RH
- Humidity accuracy: ±5%RH
- Sensor: Sensirion SHT30
- Record capacity: 10,000 points
- Data export: via USB in csv or txt
- Battery life: above 24 hr
- Communication interface: 3G(WCDMA) + WiFi
- Alarm output: buzzer; SMS and APP push
- Standby battery: 3.7V lithium battery
Four-Channel Remote Monitor (3G)

RCW-400A

RCW-400A is a four-channel temperature and humidity data logger with wide temperature range and high precision. Segment LCD screen can display the system clock, current running status, record capacity and record data. It can transmit data wirelessly by 3G to our cold chain cloud platform, and users can check real-time temperature/humidity data through internet terminals and receive SMS (short message service) alarms by GSM. Users can view, manage and monitor data online remotely by browser or smart phone APP.

Application

Industrial/chemical industry, food industry (sterilization certification, food workshop, warehouse), brewing industry, pharmaceutical warehouses, computer rooms/workshops, tobacco storerooms, barns, etc.

Features

- Monitor cold storage status
- Monitor and record temperature and humidity data
- Keep running for at least 6 hours after power cut
- Buzzer alarm and relay alarm
- Over temperature/humidity SMS alarm
- Record cycle can be flexibly adjusted.
- The monitor record capacity is 20000 points, which are not restricted in cloud.
- Communicate with Elitech cloud platform, which allows real-time remote monitoring, uploading, printing and managing record data.

Parameters

- Power supply: 12V/2.5A(DC)
- Temperature measuring range: -40 ℃ ~ 70 ℃
- Temperature accuracy: ± 1.0℃ (-25 ℃ ~ 0 ℃); ± 0.5℃ (0 ℃ ~ 40 ℃); ± 2℃ (others)
- Temperature resolution: 0.1℃
- Humidity measuring range: 10~90%RH
- Humidity accuracy: ±5%RH
- Temperature sensor: NTC thermistor
- Humidity sensor: Honeywell
- Record cycle: 1 min to 24 hours continuously settable
- Record capacity: 20,000 points for each channel (Max)
- Applicable environment: temperature -10 ℃ ~ 45 ℃; relative humidity 0 ~ 80%;
- Indoor use only, prohibited from exposure to rain and sun
- Alarm output: buzzer and relay alarm
- Communication interface: 3G, SMS
- Standby battery: 3.7V 2200mAh lithium battery
**RCW-800A**

RCW-800A cold chain safety monitor is a high-tech product based on Internet of Things technology. It completely updates the traditional management style of manual record to a new one that uses a monitor to track, monitor and record data in a real-time and dynamic way. It effectively solves the problems of cold storage temperature and humidity abnormality caused by human monitoring error, thus avoiding economic loss and hidden danger. The monitor completely complies with the latest GSP standard and can be widely used in industries of pharmaceuticals, foodstuffs, catering, logistics, HACCP system certification, etc. The monitor transmits data to cold chain network platform via 3G network in WCDMA system so that users can achieve real-time monitoring, remote view and management of data online through browser or smart phone terminal.

**Features**

- Comply with the latest GSP standard
- Monitor and record the real-time temperature and humidity of cold storage (cabinets)
- SMS, mobile APP and buzzer alarm in case of over temperature and humidity
- Keep running for at least 2 hours after power cut
- Record cycle can be set flexibly based on practical situation
- The monitor record capacity is 20000 points, which are not restricted in cloud. It is very convenient for users to analyze data.

**Parameters**

- **Power supply:** 5V/2.5A(DC)
- **It can connect with power supply of 220V, 50/60HZ by external power adapter**
- **Temperature measuring range:** -40°C ~ 70°C
- **Temperature accuracy:** ±1°C (-25°C ~ 0°C); ±0.5°C (0°C ~ 40°C); ±2°C (others)
  (Sensor wire length: 5m. If sensor wire is longer than 50m, accuracy deviates 1%)
- **Temperature resolution:** 0.1°C
- **Humidity measuring range:** 10 ~ 90%RH
- **Humidity accuracy:** ±5%RH
- **Temperature sensor type:** NTC
- **Humidity sensor type:** Honeywell
- **Record cycle:** 1 min to 24 hours continuously set
- **Record capacity:** 20,000 points for each channel (Max)
- **Applicable environment:** temperature -10°C ~ 45°C; relative humidity 0 ~ 80%
- **Indoor use only, prohibited from exposure to rain and sun**
- **Alarm output:** indicator, short message, phone call and buzzer
- **Communication interface:** 3G, SMS
- **Standby battery:** 3.7V 1100mAh lithium battery
RCW-800WiFi

RCW-800WiFi remote temperature & humidity monitor is a high-tech product based on Internet of Things technology. It can transmit data by WiFi to our cold-chain cloud platform. Users can view, manage and monitor data online remotely via browser or smart phone APP. It can alarm via the cloud platform and buzzer.

RCW-800WiFi is equipped with one temperature-humidity-combined sensor. With a built-in rechargeable lithium battery, it can provide real-time data uploading and platform alarm service even in case of cold storage power cut.

Features
- Adopt the probe with quick response and high sensitivity
- Keep running for at least 6 hours after power cut
- Temperature and humidity alarm threshold can be set. LED blinks and buzzer beeps to indicate alarm in case of exceeding the threshold setpoint.
- Uploading interval can be set to control data records freely.
- The monitor record capacity is 20000 points, which are not restricted in server.
- WiFi access point, data uploaded to the cloud platform in real time

Parameters
- Power supply: 5V/1A(_DC)
- Temperature measuring range: -40°C ~ 80°C
- Temperature accuracy: ± 0.5°C ( -20°C ~ 40°C ); ± 1°C ( others )
- Temperature resolution: 0.1°C
- Temperature sensor type: NTC
- Temperature sensor wire length: 5m
- Humidity measuring range: 10~95%RH
- Humidity accuracy: ±5%RH
- Humidity resolution: 0.1%RH
- Humidity sensor type: Honeywell
- Humidity sensor wire length: 5m
- Data uploading interval: 1 min to 24 hours
- Off-line record capacity: 20,000 points
- Alarm output: LED indicator, buzzer, platform reminder
- Communication port: WiFi
- Standby battery: 3.7V 1100mAh lithium battery

Application
Pharmaceutical warehouses, refrigerated trucks, computer rooms/workshops/warehouses, cold storage/refrigerators, greenhouses, cold chain monitoring in food industry, GSP verification, laboratories, hospitals; bio-pharmaceuticals, laboratories, food processing; electronic workshops, computer rooms, ancient books, cultural relic, photographic film, which require monitoring temperature and humidity.
RCW-600WiFi

RCW-600WiFi remote temperature & humidity monitor Coldwatch is a high-tech product based on Internet of Things technology. It can transmit data by WiFi to our cold-chain cloud platform. Users can view, manage and monitor data online remotely via browser or smart phone APP. It can alarm via the cloud platform and buzzer. RCW-600WiFi is equipped with one dual temperature sensor. With a built-in rechargeable lithium battery, it can provide real-time data uploading and platform alarm service even in case of cold storage power cut.

Application

Pharmaceutical warehouses, refrigerated trucks, computer rooms/workshops/warehouses, cold storage/refrigerators, greenhouses, cold chain monitoring in food industry, GSP verification, laboratories, hospitals; bio-pharmaceuticals, laboratories, food processing; electronic workshops, computer rooms, ancient books, cultural relic, photographic film, which require monitoring temperature and humidity.

Features

- Adopt the probe with quick response and high sensitivity
- Keep running for at least 6 hours after power cut
- Temperature and humidity alarm threshold can be set. LED blinks and buzzer beeps to indicate alarm in case of exceeding the threshold setpoint.
- Uploading interval can be set to control data records freely.
- The monitor record capacity is 20000 points, which are not restricted in server.
- WiFi access point, data uploaded to the cloud platform in real time

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>5V/1A(AC)</td>
</tr>
<tr>
<td>Temperature measuring range</td>
<td>-40℃~60℃</td>
</tr>
<tr>
<td>Temperature accuracy</td>
<td>±0.5℃ (-20℃ ~ 40℃); ±1℃ (others)</td>
</tr>
<tr>
<td>Temperature resolution</td>
<td>0.1℃</td>
</tr>
<tr>
<td>Temperature sensor type</td>
<td>NTC</td>
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<tr>
<td>Temperature sensor wire length</td>
<td>5m</td>
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<tr>
<td>Data uploading interval</td>
<td>1 min to 24 hours</td>
</tr>
<tr>
<td>Off-line record capacity</td>
<td>20,000 points</td>
</tr>
<tr>
<td>Alarm output</td>
<td>LED indicator, buzzer, platform reminder</td>
</tr>
<tr>
<td>Communication port</td>
<td>WiFi</td>
</tr>
<tr>
<td>Standby battery</td>
<td>3.7V 1100mAh lithium battery</td>
</tr>
</tbody>
</table>
ETAG-1
Single-Use NFC Data Logger

**Application**
Medicine, food, life science, modern agriculture, flowers and plants, breeding industry, chemical industry, cooler boxes, refrigerated trucks, cooler bags, containers, cool cabinets, medical cabinets, fresh food cabinets, freezer cabinets, fresh food lockers, incubators, laboratories, cold storage, greenhouses, blood bags, vaccine, fresh food.

**Features**
- Near field reading of data via mobile phone, no need to unpack
- Upload data to cloud platform: convenient for online query and analysis
- Manage and view data report via mobile phone
- Export data report in PDF or Excel format from mobile phone
- Share data report via email, social tools etc.
- Read data via NFC mobile phone in case indicator is power off

**Parameters**
- Temperature measuring range: -25°C ~ 60°C
- Temperature accuracy: ±0.5°C
- Resolution: 0.1°C
- Record interval: 1~240 min
- Memory capacity: 4000 points (MAX)
- Display: indicator
- Operating mode: single button
- Sensor: internal
- Data interface: Near Field Communication (NFC)
- Data management software: supports Android 4.0 and above, and exports reports in PDF and Excel format
- Power supply: 3.0V lithium battery CR2032
- Protection grade: IP67
- Size: 70 (L) * 50 (W) * 24 (H) mm
- Weight: 10g

★ Recommended for vaccine transportation
RC-55
Single-Use Injection Molding
Temperature Data Logger

Application
Medicine, food, life science, flowers and plants, breeding industry, cooler boxes, cooler bags, containers, cool cabinets, medical cabinets, fresh food cabinets, freezer cabinets, laboratories, greenhouses, vaccine, fresh food.

Features
- Automatic generation of data report
- Food grade colloidal injection molding technology, high protection grade
- Double LED indicators
- With better waterproof, dustproof, shockproof and drop resistance properties.
- High protection grade, modern design
- Super-long battery life: 2 years

Parameters
- Temperature measuring range: -30°C ~ 70°C (-22°F ~ 158°F)
- Temperature accuracy: ±0.5°C/0.9°F (-20°C ~ 40°C); ±1°C/1.8°F (other)
- Resolution: 0.1°C
- Memory capacity: 32000 points (MAX)
- Display: indicators
- Operating mode: single button
- Alarm: enabled, via indicators
- Sensor: internal
- Data interface: USB 2.0
- Auto generation of AI report: supports WIN XP/7/8/10 and MAC
- Data management software: none
- Power supply: 3.6V lithium battery (2 year)
- Protection grade: IP67
- Size: 59 (L) * 30 (W) * 14 (H) mm
- Weight: 16g
**RC-12**

*Single-Use USB Temperature Data Logger*

**Application**
Medicine, food, cooler boxes, cooler bags, containers, laboratories, greenhouses, blood bags, vaccine, fresh food.

**Features**
- Direct connection via USB port, plug and play, simple operation, easy installation
- Full auto data management software (auto pop-up, auto uploading data, auto generation of report, autosave data) is equipped with reading PDF report and analyzing data functions
- High protection grade
- Unique design, compact size

**Parameters**
- Temperature measuring range: -30°C~70°C (-22°F~158°F)
- Temperature accuracy: ±0.5°C/0.9°F (-20°C~40°C), ±1°C/1.8°F (other)
- Resolution: 0.1°C
- Memory capacity: 16000 points (MAX)
- Display: indicator
- Operating mode: single button
- Alarm: enabled, via indicator
- Sensor: internal
- Data interface: USB2.0
- Data management software: supports WIN XP/7/8/10 and exports reports in PDF and Excel format
- Power supply: 3.0V lithium battery CR2032
- Protection grade: IP67
- Size: 80 (L) * 48 (W) * 5.8 (H) mm
- Weight: 10g
Single-Use Data Logger

TI-10 press-button start  TI-20 break-tab start

🌟 Recommended for vaccine transportation

**TI-10/TI-20**

*Temperature Indicator*

**Application**

Medicine, food, flowers and plants, cooler boxes, refrigerated trucks, cooler bags, containers, fresh food lockers, incubators, laboratories, blood bags, vaccine, fresh food.

**Features**

- Visual and clear display of over limits situations to indicate blood bags and vaccine safety
- Sense the actual storage temperature and non-environment temperature of blood and vaccine; real and reliable monitoring
- Press-button/break-tab start, easy to operate and use compared with traditional chemical indicators; multiple temperature ranges optional; higher economic benefit
- Barcode on the logger, convenient for users to trace and query
- Protection grade: IP68

**Parameters**

- Temperature measuring range: -10°C ~ 30°C
- Temperature accuracy: ±0.5°C (1°C ~ 5°C); ±1°C (other)
- Record interval: 1 min
- Display: indicator
- Operating mode: single button  break-tab
- Alarm: enabled, via indicator  Sensor: internal
- Data management software: none
- Power supply: 3.0V lithium battery CR2032
- Protection grade: IP68
- Size: TI-10 : 79 * 40 * 4 mm  TI-20 : 58 * 45 * 5 mm
- Weight: 10g
RC-51H
Report-auto-generated Temperature and Humidity Data Logger

Application
Medicine, food, life science, flowers and plants, breeding industry, cooler boxes, containers, cool cabinets, medical cabinets, fresh food cabinets, laboratories, greenhouses.

Features
- Auto generation of temperature/humidity report; read data via USB port
- Support WIN XP/7/8/10 and MAC system
- Record capacity up to 32000 points; record time up to 12 months; support cycled data logging
- Simple and clear LCD and LED alarm indication; multiple alarm settings (high&low/multiple temperature zones)
- Waterproof grade: IP67

Parameters
- Temperature measuring range: -30 °C ~ 70 °C (-22°F ~ 158°F)
- Temperature accuracy: ±0.5°C/0.9°F (-20°C ~ 40°C); ±1°C/1.8°F (other)
- Humidity measuring range: 10%~95%
- Humidity accuracy: ±3%RH (25°C, 20%~90%RH), ±5%RH (other)
- Resolution: 0.1°C (temperature), 0.1%RH (humidity)
- Record interval: 10 sec ~ 12 hr.
- Display: multi-function LCD and indicator
- Alarm: enabled, via LCD and indicator
- Data interface: USB 2.0
- Auto generation of AI report: WIN XP/7/8/10 and MAC
- Data management software: supports WIN XP/7/8/10 and exports reports in AI and Excel format
- Power supply: 3.6V lithium battery (2 year), replaceable
- Size: 131 (L) * 24 (D) mm
- Weight: 60g
Multi-Use Data Logger

RC-51
Report-auto-generated
Temperature Data Logger

Application
Medicine, food, life science, flowers and plants, breeding industry, cooler boxes, cooler bags, containers, cool cabinets, medical cabinets, fresh food cabinets, freezer cabinets, laboratories, greenhouses, vaccine, fresh food.

Features
- Automatic generation of data report
- LCD and LED alarm indication, clear to view
- Special technology to realize quick response to measured temperature
- Super-long battery life: 2 years
- Exquisite structure, high protection grade: IP67

Parameters
- Temperature measuring range: -30°C~70°C (-22°F~158°F)
- Temperature accuracy: ±0.5°C/0.9°F (-20°C~40°C); ±1°C/1.8°F (other)
- Resolution: 0.1°C
- Record interval: 10 sec ~ 12 hr.
- Memory capacity: 32000 points (MAX)
- Display: multi-function LCD and indicator
- Operating mode: single button
- Alarm: enabled, via LCD and indicator
- Sensor: internal
- Data interface: USB 2.0
- Auto generation of AI report: supports WIN XP/7/8/10 and MAC
- Data management software: supports WIN XP/7/8/10 and exports reports in AI and Excel format
- Power supply: 3.6V lithium battery (2 year), replaceable
- Protection grade: IP67
- Size: 131 (L) * 24 (D) mm
- Weight: 60g
Multi-Use Data Logger

RC-61
Big Screen Temperature and Humidity Data Logger

Application
Medicine, food, life science, modern agriculture, flowers and plants, breeding industry, containers, cool cabinets, medicine cabinets, fresh food cabinets, freezer cabinets, incubators, laboratories, cold storage, greenhouses.

Features
- Conform to new GSP standard, auto cut of log interval in case of over limit
- Imported temperature-humidity-combined sensor, much more accurate and stable
- Big multi-function LCD: convenient for view
- Sound-light alarm in case of over limit
- Super-long battery life: 2 years
- External temperature and humidity probe with high precision
- Can be directly attracted on metal materials.

Parameters
- Temperature measuring range: -40°C～85°C (-40°F～185°F)
- Temperature accuracy: ±0.5°C/0.9°F (-20°C～40°C); ±1°C/1.8°F (other)
- Humidity measuring range: 10%～99%
- Humidity accuracy: ±3%RH (25°C, 20%～90%RH), ±5%RH (other)
- Resolution: 0.1°C (temperature), 0.1%RH (humidity)
- Record interval: 10 sec ~ 24 hr.
- Memory capacity: 16000 points (MAX)
- Display: multi-function LCD and indicator
- Operating mode: single button
- Alarm: enabled, via LCD, indicator and buzzer
- Sensor: external temperature and humidity
- Data management software: supports WIN XP/7/8/10 and exports reports in PDF and Excel format
- Power supply: 3.6V lithium battery, replaceable
- Size: 118 (L) * 61.5 (W) * 19 (H) mm
- Data interface: USB
- Weight: 100g
**RC-4**

*Temperature Data Logger*

**Application**

Medicine, food, life science, modern agriculture, flowers and plants, breeding industry, containers, cool cabinets, medical cabinets, incubators, laboratories, cold storage, greenhouses.

**Features**

- Completely conform to GSP standard
- Industrial quality design, professional test equipment and manufacturing technique to ensure accurate calibration of all the loggers with good uniformity, stability and reliability
- High accurate temperature sensor passes repeated high & low temperature impact test. Small drifting rate, strong stability, high accuracy
- Graphical data management software, auto uploading data, auto generation of report, simple operation
- Artistic and elegant design, visual LCD screen, data query at any time

**Parameters**

- Temperature measuring range: \(-30^\circ C \sim 60^\circ C\) (internal sensor), \(-40^\circ C \sim 85^\circ C\) (optional external sensor)
- Temperature accuracy: \(\pm 0.5^\circ C / 0.9^\circ C (-20^\circ C \sim 40^\circ C), \pm 1^\circ C / 1.8^\circ C\) (other)
- Resolution: 0.1°C
- Record interval: 10 sec~24 hr.
- Memory capacity: 16000 points (MAX)
- Display: multi-function LCD
- Operating mode: single button
- Alarm: enabled, via LCD and buzzer
- Sensor: internal, optional external sensor
- Data interface: USB
- Data management software: supports WIN XP/7/8/10 and MAC OSX 1.6 and above, exports reports in PDF and Excel format
- Power supply: 3.0V Lithium battery CR2450, replaceable
- Size: 84 (L) * 44 (W) * 20 (H) mm
- Weight: 35g
Multi-Use Data Logger

RC-4HC
Temperature and Humidity
Data Logger

Application
Medicine, food, life science, modern agriculture, flowers and plants, breeding industry, containers, cool cabinets, medical cabinets, fresh food cabinets, incubators, laboratories, cold storage, greenhouses.

Features
- Imported SENSIRION temperature-humidity-combined sensor passes repeated high & low temperature impact test. Small drifting rate and high accuracy
- Multi-function LCD
- LCD alarm indication, buzzer alarm
- Internal temperature and humidity sensor, optional external temperature sensor
- Support USB power supply; read, save and print data via data management software
- Three ways to mount: by magnet, screws and adhesive Velcro, optional supporting bracket

Parameters
- Temperature measuring range: -30°C ~ 60°C (internal sensor), -40°C ~ 85°C (optional external sensor)
- Temperature accuracy: ±0.5°C / 0.9°F (-20°C ~ 40°C), ±1°C / 1.8°F (other)
- Humidity measuring range: 0%~99%
- Humidity accuracy: ±3%RH (25°C, 20%~90%RH), ±5%RH (other)
- Resolution: 0.1°C (temperature), 0.1%RH (humidity)
- Record interval: 10 sec ~ 24 hr.
- Memory capacity: 16000 points (MAX)
- Display: multi-function LCD
- Operating mode: single button
- Alarm: enabled, via LCD and buzzer
- Sensor: internal temperature and humidity, optional external sensor
- Data interface: USB
- Data management software: supports WIN XP/7/8/10 and MAC OSX 1.6 and above, exports reports in PDF and Excel format
- Power supply: 3.0V lithium battery CR2450, replaceable
- Size: 84 (L) * 44 (W) * 20 (H) mm
- Weight: 35g
Multi-Use Data Logger

RC-5
USB Temperature Data Logger

Application
Medicine, food, life science, flowers and plants, breeding industry, cooler boxes, cooler bags, containers, cool cabinets, medical cabinets, fresh food cabinets, freezer cabinets, laboratories, greenhouses, vaccine, fresh food.

Features
- Conform to GSP standard
- Connect via USB, plug and play
- Support USB power supply; read, save and print data via data management software, convenient for users to query and analyze data
- Large memory capacity, high protection grade, compact size, double buttons
- Protection grade: IP67

Parameters
- Temperature measuring range: -30°C~70°C ( -22°F ~158°F )
- Temperature accuracy: ±0.5°C/0.9°F (-20°C~40°C), ±1°C/1.8°F (other)
- Resolution: 0.1°C
- Record interval: 10 sec~24 hr.
- Memory capacity: 32000 points (MAX)
- Display: multi-function LCD
- Operating mode: double buttons
- Alarm: enabled, via LCD
- Sensor: Internal
- Data interface: USB
- Data management software: supports WIN XP/7/8/10 and MAC OS X 1.6 and above, exports reports in PDF and Excel format
- Power supply: 3.0V lithium battery CR2032, replaceable
- Protection grade: IP67
- Size: 79 (L) * 33.5 (W) * 14 (H) mm
- Weight: 20g
Multifunctional Data Logger

**DR-810**

*Temperature and Humidity Logging Module*

**Application**
Cool cabinets, medical cabinets, fresh food cabinets, freezer cabinets.

**Features**
- Export PDF data report via USB disk
- Ultra-large memory capacity
- Match with controller to realize logging function

**Parameters**
- Temperature: -50°C~120°C
- Humidity: 0%~100%
- Resolution: 0.1°C (temperature), 0.1%RH (humidity)
- Record interval: 10 sec ~ 24 hr.
- Memory capacity: 365448 points (MAX)
- Display: none
- Alarm: enabled, via buzzer
- Data interface: USB2.0
- PDF report exported via USB disk: enabled
- Data management software: no
- Power supply: 5VDC/3.5V lithium battery (rechargeable, optional)
- Size: 137 (L) * 88 (W) * 37 (H) mm
- Weight: 160g

---

**RMS-010**

**Product overview**
You may view real-time data via mobile phone or computer. With big color LCD screen, it is equipped with acoustic, display and SMS alarm functions. The internal thermal or stylus printer allows you to print recorded data in any record interval into tendency chart or humidity list, which can also count and mark alarm data. The data logger can display and print multiple languages, and detect the signal when the door is opened or closed. It is mainly used for real-time monitor of temperature and humidity in refrigerated shipment and storage of medicine, vaccine, biochemical product and fresh food. Its property can completely meet the GSP standard.

**Features**
- 2-channel temperature (included) can be extended to 4-channel temperature or 2-channel temperature and 2-channel humidity.
- Data can be exported via USB.
- Real-time positioning of refrigerated truck and replay of its moving path
- Built-in GSM module can realize SMS alarm and GPRS communication (optional). Five mobile phone numbers can be bound.
- Internal GPS module helps position the refrigerated truck accurately (optional).
- Thermal printer is included to print on-site data. (Stylus printer is optional.)
- CAN bus interface is reserved.

**Parameters**
- Power supply: 9VDC~18VDC, nominal voltage: 12VDC
- Temperature control accuracy: ±0.1°C
- Temperature display range: -30.0°C ~ 100.0°C, resolution: 0.1°C
- Temperature measuring accuracy: ±0.5°C (0°C ~ 40°C); ±1°C (-25°C ~ 0°C); ±2°C (others)
- Humidity accuracy: ±3%RH (30-85%RH)
- Sensor: NTC (10K-25°C), length: 8m (It can be lengthened to 50m.)
- Record capacity: 75000 points (each channel)
- Application environment:
  - Recording: -30°C~70°C
  - Printing: -10°C~50°C
  - Storing: -40°C~85°C
- Humidity: 10%RH~95%RH (non-condensing)
- Ambient pressure: 86~106Kpa
Data Management Software

Data management software is our latest generation products which developed to support the analysis of the data loggers. Fully considered of user’s habits, simple operation, and many humanized design concept was introduced to the program during the design. At the same time. Very powerful data analysis, data logger can conduct in-depth and detailed analysis processing, and provides many type of reports, user can export the data to Microsoft Excel, Word, Text, PDF and other forms.

Export to PDF: export your data to portable document format(*.pdf). Once exported, you can open the file using Adobe Reader.
Export to Excel: export your data to the popular spreadsheet format(*.xls). Once exported, you can open the file directly from Microsoft Excel.
Export to Word: export your data to the popular document format(*.doc). Once exported, you can open the file directly from Microsoft Word.
Export to Txt: export your data to the popular document format(*.txt). Once exported, you can open the file directly from Notepad.
Email file: allows you to quickly email attachments of data in *.pdf, *.xls, *.doc and *.txt file formats directly from the data management software with a single mouse click.

Software Compatibility

<table>
<thead>
<tr>
<th>Model</th>
<th>RC-12</th>
<th>RC-55</th>
<th>RC-51</th>
<th>RC-51H</th>
<th>TE-10</th>
<th>ETAG-1</th>
<th>RC-8</th>
<th>RC-8HC</th>
<th>RC-5</th>
<th>RC-61</th>
<th>DR-210A</th>
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</table>

Data Table: displays detailed information for each data point including dates, times, temperature and humidity readings.

Report: displays statistical temperature and humidity data, such as maximums, minimums, average values, upper limits and lower limits.

Curve Graph: presents temperature and humidity sensor data over time.
### Product Selection Table

<table>
<thead>
<tr>
<th>Model</th>
<th>RC-12</th>
<th>RC-55</th>
<th>RC-51</th>
<th>RC-51H</th>
<th>TI-10</th>
<th>ETAG-1</th>
<th>RC-4</th>
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### Optional Accessories of the Monitors

#### Humidity Sensor

**Product name:** NTC Sensor  
**Rated zero-power resistance:** R25 = 10KΩ ± 1%  
**B-value:** B25 / 85 = 3435K ± 1%  
**Withstand voltage:** below AC 1800V 3s 1mA  
**Insulation resistance:** above DC 500V 100MΩ  
**Operating temperature range:** -50°C ~ 120°C  
**Unit:** mm

<table>
<thead>
<tr>
<th>Name</th>
<th>Specifications</th>
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</thead>
<tbody>
<tr>
<td>1. Thermistor</td>
<td>R25 10KΩ± 1% B25/85 3435K± 1%</td>
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<tr>
<td>2. Molding resin</td>
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<td>3. Lead wire</td>
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<td>4. Solder</td>
<td>Lead-free type</td>
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</table>

#### Temperature Sensor

**Product name:** NTC Sensor  
**Rated zero-power resistance:** R25 = 10KΩ ± 1%  
**B-value:** B25 / 85 = 3435K ± 1%  
**Withstand voltage:** below AC 1800V 60s 1mA  
**Insulation resistance:** above DC 1000V 100MΩ  
**Operating temperature range:** -40°C ~ 105°C  
**Unit:** mm

<table>
<thead>
<tr>
<th>Name</th>
<th>Specifications</th>
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<tbody>
<tr>
<td>1. Thermistor</td>
<td>R25 10KΩ± 1% B25/85 3435K± 1%</td>
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<td>2. Over coating</td>
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<td>3. Stainless steel pipe</td>
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<td>5. Lead wire</td>
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<td>6. Solder</td>
<td>Lead-free type</td>
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</table>
Optional Accessories of the Monitors

Adaptor

5V/1A:

Input voltage:
Rated voltage: 100~240VAC
Variation range: 90-264VAC

Input frequency:
Rated frequency: 50/60Hz.
Variation frequency: 47-63Hz

Input current:
When input AC voltage equals the lower limit of rated voltage and voltage load is full, the Max input AC current is 0.2A.

Inrush current:
When the rated load outputs and ambient temperature is 25°C, there is no damage at input 240VAC cold starting.

AC leakage current:
0.25mA at Max at input voltage 240VAC.

Output power

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<th>Output power</th>
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<td>1A</td>
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Combined Load/Line Regulation

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<th>Min. Load</th>
<th>Rated Load</th>
<th>Line Regulation</th>
<th>Load Regulation</th>
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<td>5VDC</td>
<td>0.01A</td>
<td>1A</td>
<td>-2%</td>
<td>±6%</td>
</tr>
</tbody>
</table>

Ripple and Noise:
Test condition: At 115/230VAC input and Min and Max load output, connect an oscilloscope with bandwidth of 20MHz to the output end of the adapter, which, meanwhile, is in parallel with a 47uF electrolytic capacitor and a 0.1uF ceramic capacitor.
Voltage: +5VDC
Ripple and noise(Max): 300mV p-p

Hold up time:
5 ms at Min at 115VAC input and Max output Load.

Efficiency:
At 115/230VAC input voltage, 1/4, 1/2, 3/4 and full load calculates average efficiency, 68.17% at Min. Adapter meets efficiency level V.

Overshoot:
10% at Max when power supply is turned on/off.

Operating temperature:
0°C ~ 40°C, full load, normal operation.

Storage temperature: -20°C ~ 80°C

With package

Operating humidity:
5%(0°C) ~ 90%(40°C), 72hr, full load, normal operation.

SAFETY AND EMI REQUIREMENT:
Safety: Comply with 60950-1/60065.

DIELECTRIC STRENGTH Hi-Pot:
Primary to secondary: 3000VAC/10mA/60S for type test.
Insulation resistance:
Primary to secondary: 20MΩ min at 500V DC.

EMI Standard
Meets the limits

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<tr>
<th>Type</th>
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<th>5V/2.5A</th>
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<td>EU plug</td>
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Sucker antenna