

Product Overview

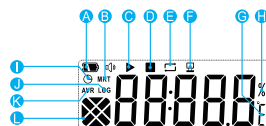
This temperature and humidity data logger is mainly used in the fields or places of medicine, food, life science, flowers, breeding industry, ice chest, container, shady cabinet, medical cabinet, refrigerator, laboratory and greenhouse, etc. RC-51H is plug and play and it can directly generate the data report, with no need to install data management software. The data can still be read in case battery runs out.

Structure Description



- | | |
|-------------------|---|
| 1 Transparent cap | 5 Button & Bi-color indicator (red and green) |
| 2 USB port | 6 Sensor |
| 3 LCD screen | 7 Product label |
| 4 Seal ring | |

LCD screen



- | | |
|---------------------------------|--|
| A Battery indicator | H Humidity unit or Progress percentage |
| B Mean kinetic temperature | I Timing indicator |
| C Start recording indicator | J Average value indicator |
| D Stop recording indicator | K Number of records |
| E Cyclic recording indicator | L Combined indicator |
| F Computer connection indicator | |
| G Temperature unit(°C/°F) | |

For more details, please refer to the menu and status indicator

Product label



- | | |
|-----------------------------|-----------------|
| a Model | d Barcode |
| b Firmware version | e Serial number |
| c Certification information | |

Technical Parameters

Temperature measuring range	-30°C ~ +70°C	Sensor	Built-in temperature and humidity sensor
Humidity measuring range	10%~95%RH	Record capacity	32000 points (MAX)
Resolution	0.1°C, 0.1%RH	Log interval	10 seconds to 12 hours continuously set
Temperature accuracy	±0.5°C (-20~ +40°C) ±1°C (others)	Alarm type	Single/Cumulative
Humidity accuracy	±3%RH (25°C, 20%~90%RH) ±5%RH (others)	Alarm threshold	This data logger supports 5 temperature thresholds and 2 humidity thresholds at maximum.

Storage temperature	-30°C ~ +70°C
Report type	AI format, read by Adobe Reader
Data interface	USB2.0
Battery	3.6V ER14250 disposable lithium battery

Battery life	At least 24 months at 25°C with 15 minutes record interval
Size	131(length)* 24mm(diameter)
Weight	Approx 16g

Parameter Instruction

Users can reconfigure the parameters by data management software per actual needs. The original parameters and data will be cleared.

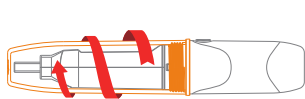
Alarm threshold	This data logger supports 3 upper temperature limits, 2 lower temperature limits, 1 upper humidity limit and 1 lower humidity limit.
Alarm zone	The zone which beyond the alarm threshold
Alarm type	Single The data logger records the single time for continuous over-temperature events. Cumulative The data logger records the cumulative time of all the over-temperature events.
Alarm delay	The data logger does not alarm immediately when the temperature is within the alarm zone. It begins to alarm only when the over-temperature time elapses the alarm delay time.
MKT	Mean kinetic temperature, which is an evaluation method of the temperature fluctuation effect on the goods in storage.

Operating Instructions

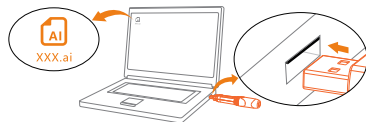
This data logger can be stopped by software. Users can stop the logger by clicking the stop button in the data management software

Action	Parameter configuration	Operation	LCD indicator	Indicator
Start	Instant-on	Disconnect to USB		Green indicator flashes 5 times.
	Timing start	Disconnect to USB		Green indicator flashes 5 times.
	Manual start	Press and hold for 5s		Green indicator flashes 5 times.
	Manual start (delayed)	Press and hold for 5s		Green indicator flashes 5 times.
Stop	Manual stop	Press and hold for 5s		Red indicator flashes 5 times.
	Over-Max-record-capacity stop (disable manual stop)	Reach the Max capacity		Red indicator flashes 5 times.
	Over-Max-record-capacity stop (Enable manual stop)	Reach the Max capacity or press and hold the button for 5s		Red indicator flashes 5 times.
View		Press and release the button	Refer to the menu and status indicator	

View data When the data logger is inserted into the USB port of the computer, the data report will be created automatically. The red and green indicators flash in turn when the document is being created, and the LCD screen shows the progress of AI Report creation. The red and green indicators light at the same time immediately after the document is created, then users can view the data report. The document creation will last for no more than 4 minutes.



① Rotate the transparent cap in the direction of the arrow and remove it.



② Insert the data logger into the computer and view the data report.

Menu and Status Indicator

Description of the indicator flashing status

Status	Action of the indicators	Status	Action of the indicators
Not started	The red and green indicators flash 2 times simultaneously.	Started-alarm	The red indicator flashes once. The red light flashes once per minute automatically.
Start delay Timing	The red and green indicators flash once simultaneously.	Stopped-normal	The green light flashes 2 times.
Started-normal	The green indicator flashes once. The green light flashes once per minute automatically.	Stopped-alarm	The red light flashes 2 times.

Description of the menus

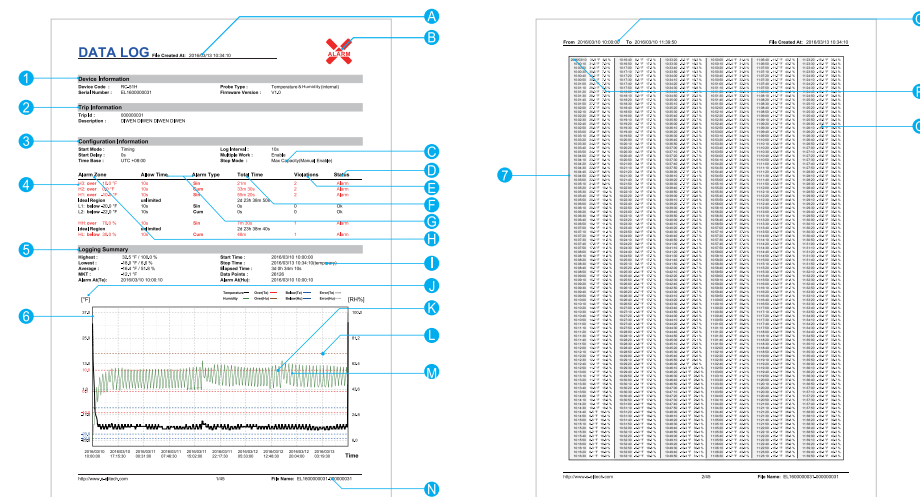
Menu	Description	Example	Menu	Description	Example
1	Countdown of the (timing) start	03:42 (hour:min:N*10*sec)	6	Average humidity value	45%
	Countdown of the (delayed) start	03:42 (hour:min:N*10*sec)	7	Maximum temperature value	98.0
2	Current temperature value	23.0	8	Maximum humidity value	98%
3	Current humidity value	23%	9	Minimum temperature value	27.0
4	Points of the records	32000	10	Minimum humidity value	27%
5	Average temperature value	48.0			

Description of the combined indicators and other status

Display	Description	Display	Description
(group)	No alarm	(group) rotating	Rate of progress
(group)	Already alarmed	--	Null value
(group)	Minimum value	---	Clear data
(group)	Maximum value	USB	In USB communication

Note: 1 Menu 1 appears only when the corresponding function is selected. 2 "▶" should be in a state of blinking. 3 The display in the combined indicator area. The same as below.

Report



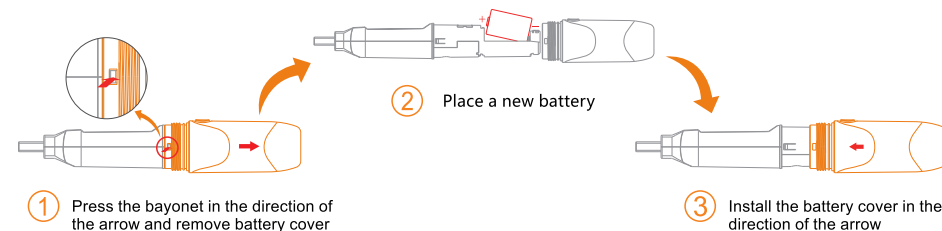
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Other pages

1	Basic information	B	Alarm (Alarm status as shown in the figure above)	J	Vertical coordinate unit of the data graph
2	Description of the usage	C	Stop mode that has been set.	K	Alarm threshold line (corresponding to the item L)
3	Configuration information	D	Alarm status of the temperature alarm zone	L	Alarm threshold
4	Alarm threshold and related statistics	E	Total times of exceeding the temperature alarm threshold	M	Record data curve (black indicates temperature, deep green indicates humidity)
5	Statistical information	F	Total time of exceeding the temperature alarm threshold	N	Document name (serial number & description of usage ID)
6	Temperature and humidity graph	G	Alarm delay and alarm type	O	Record time range in the current page
7	Temperature and humidity data details	H	Alarm threshold and temperature alarm zones	P	Records when date changes (date & temperature and humidity)
A	Document creation time (record stop time)	I	Actual stop mode (different from the item C)	Q	Records when the date is not changed (time & temperature and humidity)

Attention: The data above is only used as explanation of the report. Please refer to the actual document for specific configuration and information.

Replace battery



What's included

1 temperature and humidity data logger 1 Er14250 battery 1 user manual