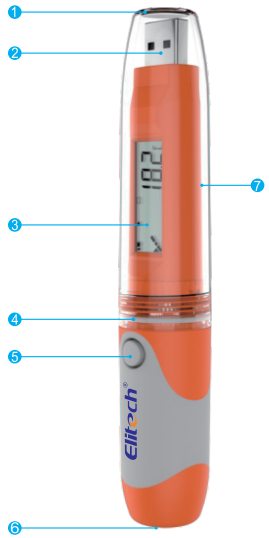
Product Overview

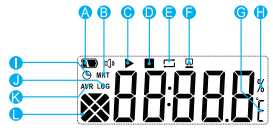
This temperature and humidity data logger is mainly used in the fields or places of medicine, food, life science, flowers , breeding industry, ice chest, container, shady cabinet, medical cabinet, refrigerator, laboratory and greenhouse, etc. RC-51H is plug and play and it can directly generate the data 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		

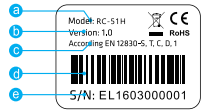
LCD screen



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

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

Storage temperature	-30℃ ~ +70℃	Battery life	At least 24 months at 25℃ with 15 minutes record interval
Report type	AI format, read by Adobe Reader		
Data interface	USB2.0	Size	131(length)* 24mm(diameter)
Battery	3.6V ER14250 disposable lithium battery	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.	

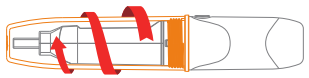
Operating Instructions

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	rEC	Green indicator flashes 5 times.
	Timing start	Disconnect to USB	StArt	Green indicator flashes 5 times.
	Manual start	Press and hold for 5s	rEC	Green indicator flashes 5 times.
	Manual start (delayed)	Press and hold for 5s	StArt	Green indicator flashes 5 times.
Stop	Manual stop	Press and hold for 5s	StoP	Red indicator flashes 5 times.
	Over-Max-record-capacity stop (disable manual stop)	Reach the Max capacity	StoP	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	StoP	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
Not started	The red and green indicators flash 2 times simultaneously.
Start delay Timing	The red and green indicators flash once simultaneously.
Started-normal	The green indicator flashes once. The green light flashes once per minute automatically.
Started-alarm	The red indicator flashes once. The red light flashes once per minute automatically.
Stopped-normal	The green light flashes 2 times.
Stopped-alarm	The red light flashes 2 times.

Description of the menus

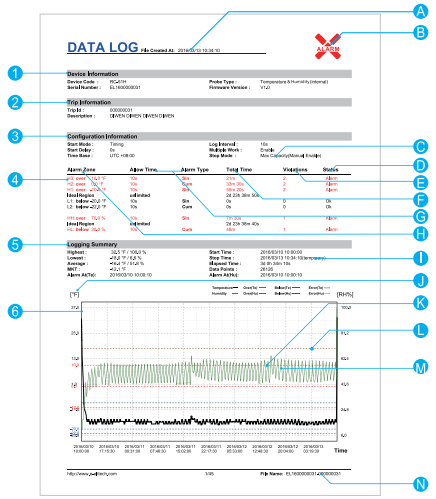
Menu	Description	Example
1 [1]	Countdown of the (timing) start	03:42 (hour:min:N*10*sec)
	Countdown of the (delayed) start	03:42 [2] (hour:min:N*10*sec)
2	Current temperature value	23
3	Current humidity value	23
4	Points of the records	32000
5	Average temperature value	48
6	Average humidity value	45
7	Maximum temperature value	98
8	Maximum humidity value	98
9	Minimum temperature value	27
10	Minimum humidity value	27

Description of the combined indicators and other status

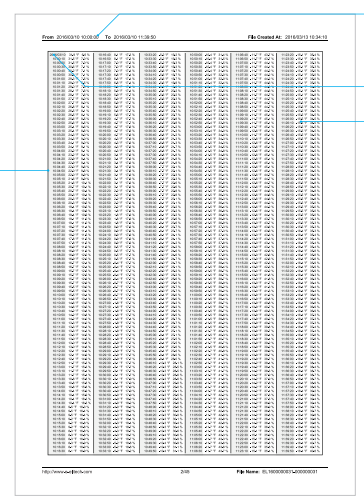
Display	Description
(group) [3]	No alarm
(group)	Already alarmed
(group)	Minimum value
(group)	Maximum value
(group) rotating	Rate of progress
- -	Null value
- - - -	Clear data
USb	In USB communication

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



The first page

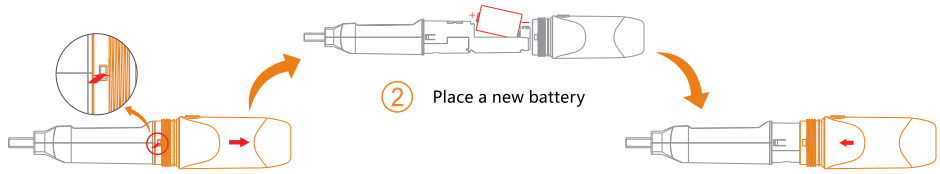


Other pages

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



① Press the bayonet in the direction of the arrow and remove battery cover

③ Install the battery cover in the direction of the arrow

What's included

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