Manuals+ — User Manuals Simplified.

Elitech Multi-use Temperature & Humidity Logger User Manual

Contents

Multi-use Temperature & Humidity Logger

RC-51H User Manual Multi-use Temperature&Humidity Data Logger

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		
3	LCD screen	6	Sensor
4	Seal ring	7	Product label

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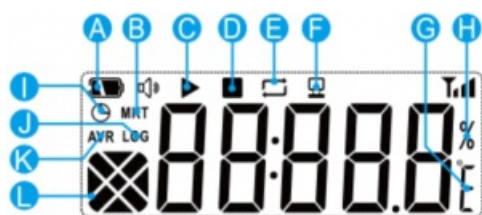
A	Battery indicator	H	Humidity unit or Progress percentage
B	Mean kinetic temperature		
C	Start recording indicator	I	Timing indicator
D	Stop recording indicator	J	Average value indicator
E	Cyclic recording indicator	K	Number of records
F	Computer connection indicator	L	Combined indicator
G	Temperature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

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

Product label[(I)]
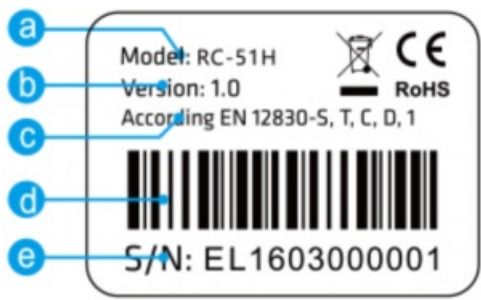
a	Model	d	Barcode
b	Firmware version	e	Serial number
c	Certification information		

Ⓘ: Picture is for reference only, please take real object as standard.

⬊ **Technical Specifications**

Recording Options	Multi-Use
Temperature Range	-30°C to 70°C
humidity Range	10%~95%
Temperature & humidity Accuracy	±0.5(-20°C/+40°C);±1.0(other range) ±3%RH (25°C, 20%~90%RH), ±5%RH(other range)
Data Storage Capacity	32,000 readings
Software	PDF/ElitechLog Win or Mac (latest version)
Connection Interface	USB 2.0, A-Type
Shelf Life/Battery	2 years[1]/ER14250 button cell
Recording Interval	15 minutes(standard)
Startup Mode	Button or software
Stop Mode	Button, software or stop when full

Weight	60g
Certifications	EN12830, CE, RoHS
Validation Certificate	Hardcopy
Report Generation	Automatic PDF report
Temperature & humidity Resolution	0.1°C(Temperature) 0.1%RH (Humidity)
Password Protection	Optional on request
Reprogrammable	With free Elitech Win or MAC software
Alarm Configuration	Optional, up to 5 points, Humidity only supports upper and lower limit alarm
Dimensions	131 mmx24mmx7mm(LxD)
1.Depending on optimal storage conditions (±15°C to +23°C/45% to 75% rH)	

Software download: **www.elitecilus.com/download/software**
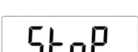
Parameter Instruction
Users can reconfigure the parameters by data management software per actual needs. The the original parameters and ata will be cleared.

| 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 5 s	rEC	Green indicator flashes 5 times.
	Manual start (delayed)	Press and hold for 5 s	StArt	Green indicator flashes 5 times.
Stop	Manual stop	Press and hold for 5 s	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 PDF 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.
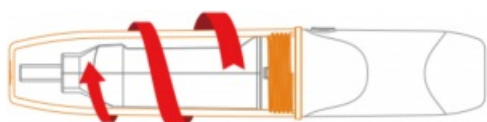
(1) Rotate the transparent cap in the direction of the arrow and remove it.

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

Software download: www.elitechus.com/download/software
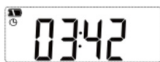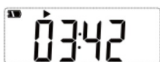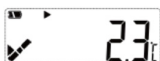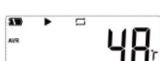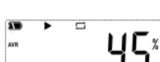
Menu and Status Indicator

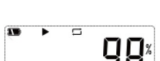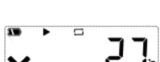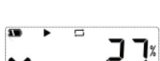**Description of the indicator flashing status**
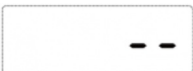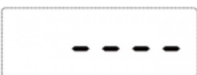
Status	Action of the indicators
Not started	The red and green indicators flash 2 times simultaneously.
Start delay Timing	The red and green indicators flash once simultaneously.
Started-normal	The green indicator flashes once. The green light flashes once per minute automatically.
Started-alarm	The red 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
	Countdown of the (delayed) start	03:42
2	Current temperature value	2.3℃
3	Current humidity value	2.3%
4	Points of the records	LOG 32000℃
5	Average temperature value	AVR 4.8℃
6	Average humidity value	AVR 4.5%
7	Maximum temperature value	9.8℃
8	Maximum humidity value	9.8%
9	Minimum temperature value	2.7℃
10	Minimum humidity value	2.7%

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.

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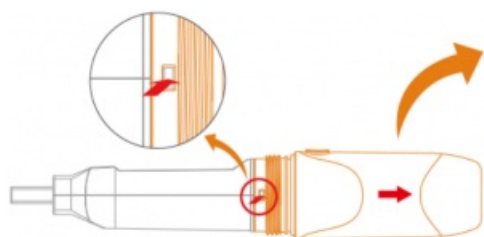
(1) Press the bayonet in the direction of the arrow and remove battery cover

(2) Place a new battery

(3) Install the battery cover in the direction of the arrow
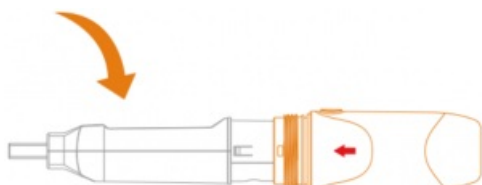
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Report
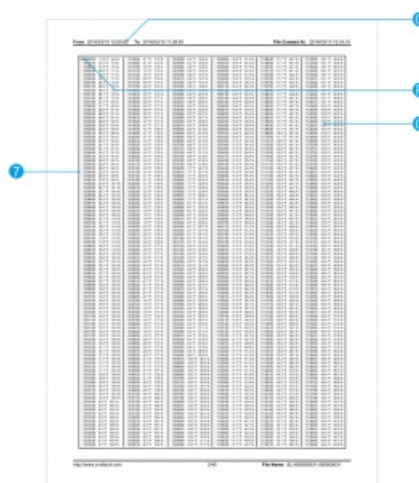
| | |
| The first page | Other pages |

1	Basic information
2	Description of the usage
3	Configuration information
4	Alarm threshold and related statistics
5	Statistical information

6	Temperature and humidity graph
7	Temperature and humidity data details
A	Document creation time (record stop time)
B	Alarm (Alarm status as shown in the figure above)
C	Stop mode that has been set.
D	Alarm status of the temperature alarm zone
E	Total times of exceeding the temperature alarm threshold
F	Total time of exceeding the temperature alarm threshold
G	Alarm delay and alarm type
H	Alarm threshold and temperature alarm zones
I	Actual stop mode (different from the item C)
J	Vertical coordinate unit of the data graph
K	Alarm threshold line (corresponding to the item L)
L	Alarm threshold

M	Record data curve (black indicates temperature, deep green indicates humidity)
N	Document name (serial number & description of usage ID)
O	Record time range in the current page
P	Records when date changes (date & temperature and humidity)
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.

What's included

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

Elitech Technology, Inc.
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1551 McCarthy Blvd, Suite 112
Milpitas, CA 95035 USA   V2.0

Software download: www.elitechus.com/download/software

Documents / Resources

	Elitech Multi-use Temperature & Humidity Logger [pdf] User Manual Elitech, RC-51H, Multi-use Temperature Humidity Logger