

Product overview

The data logger is mainly used in the fields of medicine, vaccine, blood, foodstuffs, flower and plant, laboratory etc., especially in the places which require using higher waterproof grade of data logger in cold chain storage and transportation. Data can be read directly by mobile phone APP in NFC mode wirelessly with no need to tear off the plastic film bag. Even in case of dead battery, the data still can be read by a mobile phone.

Appearance and caption

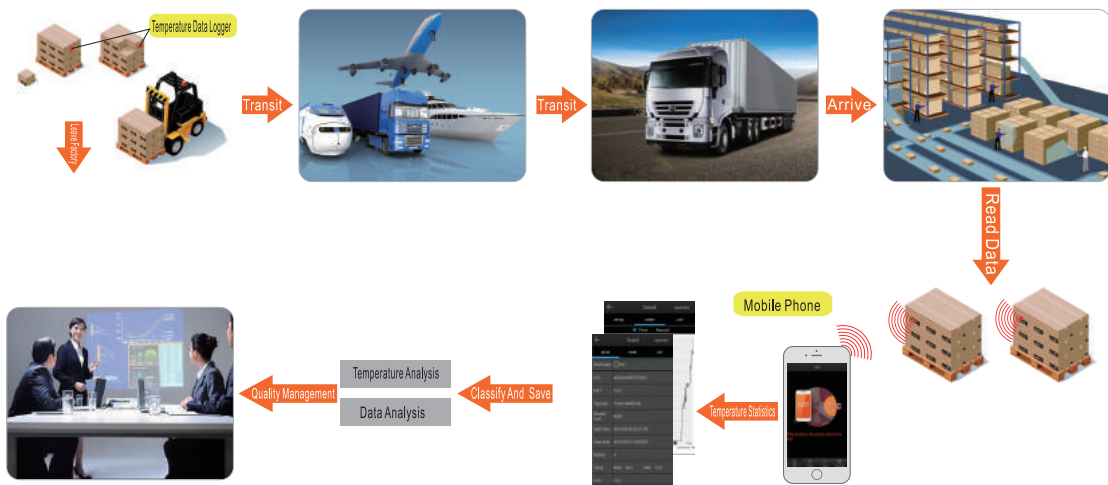


Technical parameters

Temperature measuring range: -25℃~60℃(-13℉ ~140℉)	Start mode: press start button (press and hold for more than 4 sec)
Resolution: 0.1℃	Storage mode: cyclic storage, full record stop
Storage temperature: -25℃~60℃(-13℉ ~140℉)	Stop mode: full record stop, record reading stop
Accuracy: ±0.5℃(±0.9℉)	Data reading device: Android mobile phones with NFC function
Sensor: internal NTC1 <sup>1</sup>	How to read: place the mobile phone right above the logger within 5cm
Record capacity: 4000 points (MAX)	System: Android 4.0 above
Record interval: 1~240 min settable	Dimensions: 70 (L)*50(W)*2.4(H) (mm)
Start delay: 1~240min settable	Weight: 10g
Power supply: internal CR2032 lithium battery	Battery life: 1 year at 25 ℃ in cyclic storage mode with 15 min record interval
Protection grade: IP672 <sup>2</sup>	

**Note:** 1. It is suggested to store the data logger at normal temperature before it is started. 2. To guarantee the protection grade, please do not immerse the data logger in corrosive liquid, such as ethyl alcohol or oleic acid, etc. for long time.

Flow chart



Operating steps

1. Download mobile phone APP  
Use an Android mobile phone with NFC function to scan Fig.1 or the QR code on the data logger, download and install the APP software. After installation is completed, the APP icon (Fig.2) will appear on the desktop.



Fig.1

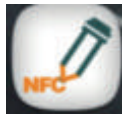


Fig.2

## 2. Open NFC function of the mobile phone

Open the APP and NFC function per hints shown in Fig.3 & Fig.4. Please refer to the mobile phone manual for detailed operating steps.

## 3. APP interface and parameter settings

Click "more" in the APP (Fig.5) to enter the following interface (Fig.6). Then set parameters of 'Unit', 'Email address', 'Language', 'Server', 'File path', 'Date format', 'Time format', 'Data access' etc. Click 'Clean file' to clean up the file under storage path.

Unit: Celsius (°C) / Fahrenheit (°F).

Email address: the email address of the email receiver.

Language: Simplified Chinese / English.

Server: IP address and port number of the server which data will be uploaded to.

File path: the local path of the exported data file in the mobile phone.

Date format: multiple formats are selectable.

Time format: multiple formats are selectable.

Data access: Query the user, cover (default), add (default).

Query the user: when reading data, the APP Query the user to select 'cover' or 'add'.

Cover (default): when read, the data is covered in the original record list.

Add (default): when read, the data is saved in a new record list.

## 4. Configure the data logger

Default parameters are as follows (Fig.7):

Company name : /	Temp : Upper 25°C, Lower 15°C
Product name : /	Record interval : 5 min
Place of origin : /	Start delay : 10 min
Time zone : GMT+8	Storage mode : cyclic storage
Serial No. : ET16030100001 <sup>3</sup>	Whether to stop to read data? No
Remark : /	

**Note: 3.The definition of serial No. is as follows:**

<b>ET16030100001</b>	Serial No.: increase from 00001 progressively
	Date: e.g. 01 represents 1st
	Month: e.g. 03 represents March
	Year: e.g. 16 represents 2016
	Fixed product model

When the data logger leaves factory, its serial No. is configured and does not allow change.

Before the data logger is started, parameters except "serial No." can be modified as needed. Open the APP and click "config." as shown in Fig. 8. Type in parameter info (Fig.9), place the back of the mobile phone close to the data logger within 5cm, stay still until read-in is completed. The software will automatically scan the data logger and prompt "whether to read in data". Click "OK", wait until "read-in successful" appears in the interface. Then move the mobile phone away.

## 5. Start recording

After configuration of the data logger, press and hold the start button for more than 4 seconds, the indicator will blink continuously. Release the button and the data logger is started.

Press and release the button once, you may judge the running status of the data logger by the blinking of red indicator. Refer to the table below for details.

Status	Action of the indicator
Not started	Red indicator blinks once.
Start recording	Red indicator blinks quickly and continuously.
Stop recording	Red indicator blinks slowly and continuously.

## 6. Read data

Open the APP, place the back of the mobile phone close to the data logger within 5cm, stay still until read-in is completed. It will take about 15 seconds to read 4000 points of data.

If the mobile phone fails to read the data. Move the mobile phone away and place it close to the data logger again within 5 cm, stay still until it reads data successfully.

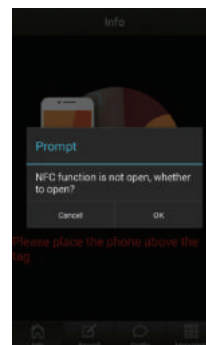


Fig.3

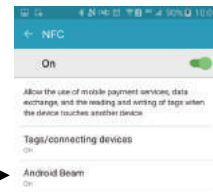


Fig.4



Fig.5



Fig.6

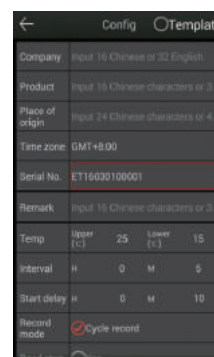


Fig.7



Fig.8

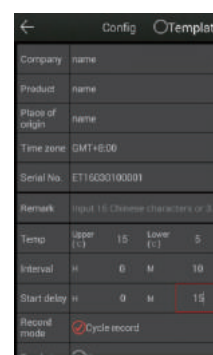


Fig.9