

Innovative cold chain technology
Healthy quality of life

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Access To Services

GPRS Temperature OR Humidity Recorder G-Aplus

User manual

Warranty Card

Certificate of conformity



Zhejiang Wason Cold Chain Science and Technology Co.,Ltd

V1.0

Special instructions

This version of the user manual is the supporting user manual for the 4G version of the G-Aplus series temperature/humidity recorder under the WASON brand. It is used for installing hardware and supporting data analysis software. Due to product upgrades or other reasons, if there are any differences in the pictures, mechanical dimensions, and actual objects in the manual, please refer to the actual objects.

Our company reserves the final interpretation right.

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Chapter 1 Product Overview

The WASON G-Aplus series temperature/humidity recorder is a 4G transmission network type intelligent instrument that complies with GSP/GMP specifications. Multiple sensor models and wide detection range; External sound and light alarm can be connected to achieve high decibel sound and light alarm; GPRS (4G) transmission, unlimited distance; Comes with built-in memory and automatically transfers offline data; Bluetooth communication, can be equipped with a dedicated Bluetooth printer to directly print data on-site; Connect to the dedicated cold chain aggregation cloud platform to achieve remote data management functions such as over limit alarms and power outage alarms on both computers and mobile devices. Widely used in fields such as food and medicine, clinical experiments, chemical electronics, archival and cultural heritage, and agricultural research.

Chapter 2 Product Selection Table

Name	Modle	Test range
Built in temperature and humidity recorder	WS-TH20G-Aplus	-20°C-70°C 0%RH~100%RH
External temperature and humidity recorder	WS-TH23G-Aplus	
Built in temperature recorder	WS-T10G-Aplus	-20°C-70 °C
External temperature recorder	WS-T11G-Aplus	-40°C-100°C

External dual temperature recorder	WS-T21G-Aplus	-40°C-100°C
External three temperature recorder	WS-T31G-Aplus	
External four temperature recorder	WS-T41G-Aplus	
External low-temperature recorder	WS-T11LG-Aplus	-90°C-70°C
External dual low-temperature recorder	WS-T21LG-Aplus	
External deep and low temperature recorder	WS-T11SLG-Aplus	-200°C-0°C
External dual depth low-temperature recorder	WS-T21SLG-Aplus	
External high-temperature recorder	WS-T11HG-Aplus	0°C-300°C
External dual high temperature recorder	WS-T21HG-Aplus	

Chapter 3 Technical Parameters

Sensor type	Temperature	Humidity
Measuring range	-20°C-70°C	0%RH~100%RH
	-40°C-100°C	/
	-90°C-70°C	/
	-200°C-0°C	/
	0°C-300°C	/
Accuracy	-20°C-70°C ±(0.3~0.5)°C ; Other ±1 °C	20°C@20%RH~8 0%RH, ±3%RH; Other; ±5%RH
Display resolution	0.1 °C	0.1% RH
Storage resolution	0.1 °C	0.1% RH
Record capacity	128000 sets	
Refresh interval	2s~99s	
Record interval	1 minute~24 hours can be set	
Data printing	On site Bluetooth printer one click printing, mini program printing, cloud platform printing	
Communication methods	4G	
Over limit alarm	Sound alarm, light alarm, SMS alarm (requires SMS function SIM card, cloud platform), telephone alarm (cloud platform), email alarm (cloud platform), WeChat alarm (cloud platform)	
Power outage	SMS alarm (requires SMS function SIM	

alarm	card, cloud platform), phone alarm (cloud platform), email alarm (cloud platform), WeChat alarm (cloud platform)
Power supply	DC12V/2A adapter and high-energy lithium battery automatically switch power supply, lithium battery can be charged, standby time of 30 days
SIM card	Built in IoT card (installed before leaving the factory)
Communication interface	USB Type-C
External dimensions	150mm X 105mm X 33mm

Chapter 4 Packaging List

The G-Aplus series temperature/humidity recorders come in multiple models, and the packaging items for each model may vary. Please carefully check whether the corresponding components of each recorder are complete after opening the packaging box. If there are any omissions, please contact your supplier promptly.

Name	picture	Quantity	Instruction
Main engine		1	G-Aplus
Wall mounted kit		1	Standard configuration

Cross screwdriver		1	Standard configuration
Data cable		1	Standard configuration
AC adapter		1	Standard configuration
User manual (including instruction manual, warranty card, certificate of conformity)		1	Standard configuration
Mobile IoT network card		1	Standard configuration
Calibration certificate		1	Standard configuration
CNAS calibration certificate		1	Optional configuration
lithium battery		1	Optional configuration
Bluetooth Printer		1	Optional configuration
Sound and light alarm		1	Optional configuration
External temperature sensor		1	Configure by host model

External dual temperature sensors		1	Configure by host model
External low-temperature temperature sensor		1	
External deep and low temperature sensor		1	
External high-temperature temperature sensor		1	
External temperature and humidity sensors		1	
External analog temperature sensor		1	
External analog dual temperature sensor		1	
External three temperature sensors		1	
External three temperature sensors		1	
External four temperature sensors		1	

Chapter 5 Communication settings

The G-Aplus series temperature/humidity recorder is a precision instrument. Non professional maintenance personnel of our company are not allowed to repair, modify, replace batteries, disassemble the body, and other operations on their own. Please strictly follow the steps in the manual. Our company shall not be

responsible for any abnormal operation, damage, data loss or indirect economic losses caused by human factors of the instrument.

Our company will guarantee the normal quality of the product during shipment. The warranty liability is limited to the following provisions: This instrument belongs to a monitoring device and cannot be controlled or adjusted. Therefore, if some instruments may have functional defects or malfunction, the manufacturer's responsibility is limited to repairing or replacing them Product.

1. Safe use of internal batteries

This instrument uses a 3.7V specialized rechargeable lithium battery. If replacement is required, please contact the instrument supplier or manufacturer. The battery cannot be short circuited, placed near a fire source, or immersed in water.

1) If the lithium battery is not used for a long time, when the voltage is below 3.2V, the charging function of the lithium battery will decrease, and it needs to be continuously charged for a period of time to recover;

2) If the battery level of the lithium battery is too low, below 2.5V, it may cause the lithium battery to be unable to charge, resulting in permanent damage to the battery. Note: During normal use, it is recommended to charge the device every 10 days or so to ensure normal use. If the device is not used for a long time, please remove the lithium battery and store it separately.

2. Operate the machine within a safe temperature range

The safe operating temperature of the main unit of this instrument is -20 °C to 70 °C. When using an external sensor, the working temperature range of the sensor can be higher than the safe operating temperature of the instrument. The specific

temperature range is subject to the technical parameters of each model. Please do not use this instrument outside the operating temperature range and do not use it in corrosive environments.

3. Storage temperature and humidity conditions

The body of this instrument is suitable for storage at temperatures of -20 °C to 70 °C and relative humidity of 20% RH to 80% RH (non condensation state). Please strictly follow the storage conditions of this product and do not exceed the limit of storage, otherwise irreversible damage to the instrument will occur.

4. Waterproof level

This product is not waterproof. If it falls into water with electricity, the external power supply should be immediately cut off. When using battery power, the battery should be immediately removed and the equipment should be returned to the dealer or original factory for testing and repair.

Chapter 6 Instructions for Use

1. Key Description:



Left directional key: confirm key, menu key, and on/off key (long press to turn on/off)



Right arrow key: return key, exit key



Up arrow key: Move the position up



Down arrow key: Move the position downwards

Menu: Press the left arrow key on the main interface to enter the main menu

Power on: Press and hold the left directional key for more than three seconds to turn on the device

Shutdown: Press and hold the left arrow key for three seconds on the main interface to shut down the device

Limit value query: In the main interface display state, press the up arrow key once to display the maximum value query result, and press the return key to exit;

In the main interface display state, press the down arrow key once to display the minimum value query result, and press the return key to exit;

Note: Limit value for query: Refers to the maximum and minimum values that the recorder has recorded and stored since the last startup, not real-time sampled data!

2. Indicator light description:

1) **Signal indicator light** : When searching for a signal, the blue light flashes 10 times every 2 minutes; The blue light flashes continuously when the device has a signal;

2) **Bluetooth indicator light** : When searching for Bluetooth, the green light flashes once every 2 seconds. When starting Bluetooth, matching password, or printing Bluetooth, the green light flashes;

3) **Device charging indicator light** : The device often lights up red during charging;

4) **Battery full indicator light** : The device always lights up green when fully charged.

3. Record settings:

1) Record the normal interval (adjustable from 1 minute to 24 hours)

Alarm interval (adjustable from 1 minute to 24 hours)

Press the up and down keys to select numbers, minutes, hours, and units. The values can be set from 1 to 59; When selecting a unit, the numerical value can be set from 1 to 24, and "<" is the backspace key. Each press will delete the previous character, as shown in Figures 1 and 2 below

Note: After each recording cycle (60 minutes) is completed, the recording will start from the starting point of the cycle!

In order to record and upload data normally, the interval must be set at 1 minute or more!

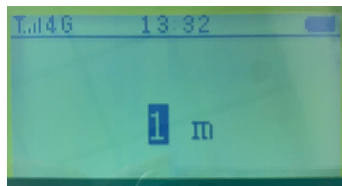


Figure 1

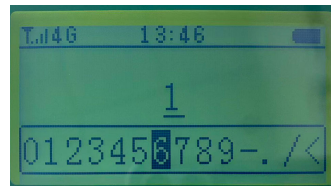


Figure 2

2) Clear Record - Power on Clear - State On (Auto clear record data when turned on)

--State off (boot up will not clear recorded data)

--Manual clearing (clearing after confirmation) is shown in Figures 3 and 4 below

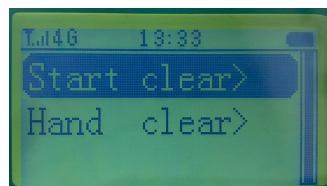


Figure 3

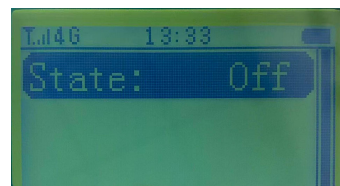


Figure 4

Record interval	Monthly required traffic	Suggested traffic package
1 min	2.15 M	30M
5 min	0.43 M	
15 min	0.14 M	

3) Clear logs

--Manual Clear - Confirm to clear the log (clear the running data of the recorder) as shown in Figure 5

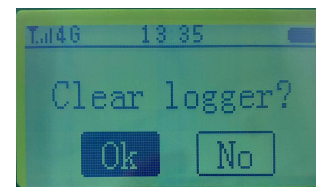


Figure 5

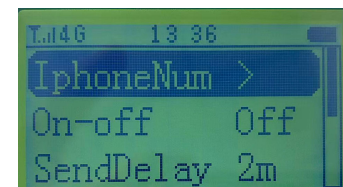


Figure 6

4) Clear Limit - Determine the maximum and minimum value for clearing (the limit value will be automatically cleared when the monitor is turned off and restarted)

4. Alarm settings:

1) Alarm Signal - Channel Settings (Set the upper and lower limits of alarms, alarm switch status, and automatically save when exiting)

--Power outage (on - send alarm message for power outage, off - do not send alarm message for power outage)

2) Alarm output - SMS alarm (set alarm number<maximum of 5 numbers>, SMS switch, send delay, alarm interval)

The power outage interval is shown in Figures 6 and 7.

--Sound alarm (set to enable or disable the sound alarm function, whether the buzzer sounds or not)

--Light alarm (set to enable or disable the light alarm function)

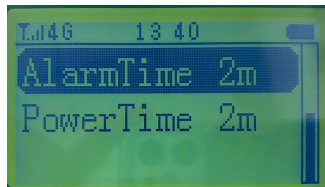


Figure 7

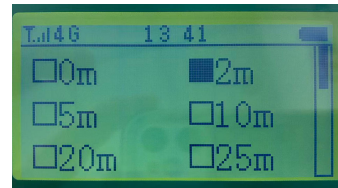


Figure 8

Explanation: SMS alarm requires SIM card with SMS function, and IoT cards without SMS function cannot be used.

--Alarm sending delay

You can choose a delay alarm time point as needed, with 13 delay points to choose from, as shown in Figures 8 and 9. If the sending delay is set to 2 minutes, it means sending a text message after the alarm value reaches 2 minutes;

Alarm interval and power outage interval

Can be set to 1-59 points; The alarm interval is set to 5 minutes, indicating that one alarm message is sent every 5 minutes. The power outage interval refers to the time interval during which a power outage occurs and a warning message is sent.

Alarm prompt:

When the temperature exceeds the alarm, the horn symbol is displayed in the upper right corner of the temperature, as shown in Figure 10:

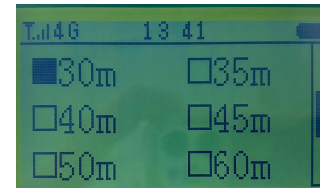


Figure 9



Figure 10

5. Communication settings:

1) Bluetooth settings - Bluetooth printing (will automatically search for and connect to the printer, and once connected, it will automatically print)

--Matching password (factory configured: 0000 or 1234, related to the printer, do not configure it yourself)

--Search for Bluetooth (search for printer, use search for the first time, and after configuration, simply select Bluetooth to print)

2) GPRS settings - GPRS switch (used to turn GPRS function on or off) When turned on, **T.M4G** is displayed in the upper left corner of the screen, and when turned off, **4G** is displayed

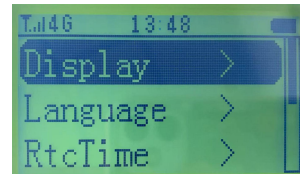
--Server settings (Server IP: Set the IP address of the host's external network, default platform IP: tio. length. cn; Server port: 30003)

Note: The server IP/port is based on the default data above, please do not change it arbitrarily!

6. System settings

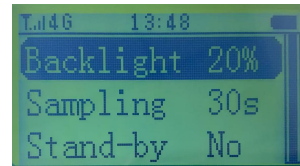
Display Settings

1) Display Settings Backlight brightness, refresh interval, and screen shutdown time



2) Language settings

Switching between Chinese and English time setting



3) Time setting

Set the instrument time, which generally does not need to be set. The time will be automatically updated when connecting to the server

4) Memory status

View the current number of records

Total: 128000

Total number of recordable data entries

REAR: 2687

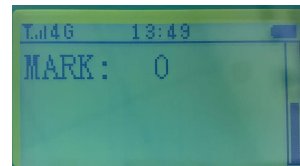
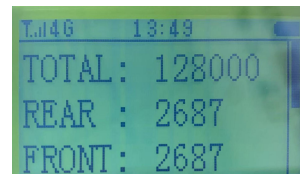
Number of records recorded

FRONT: 2687

Number of uploaded articles

MARK: 0

Number of data loop records



5) Version number

Hard: 4.1.2

Hardware version number

APP: 4.10.3

System Program Version Number

BOOT: 1.2.2

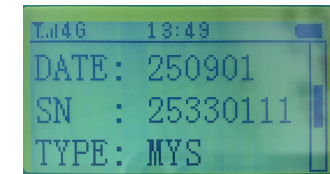
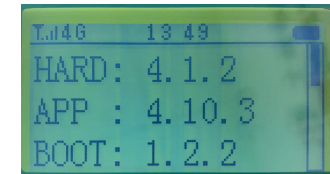
bootloader version number

DATE: 250901

version date

SN: 25330111

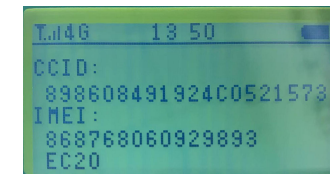
local serial number



6) Networking information

CCID: SIM card information

IMEI: 4G module information

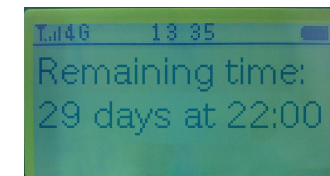


7) System maintenance

Wireless status:

Standby time:

displays the remaining battery time



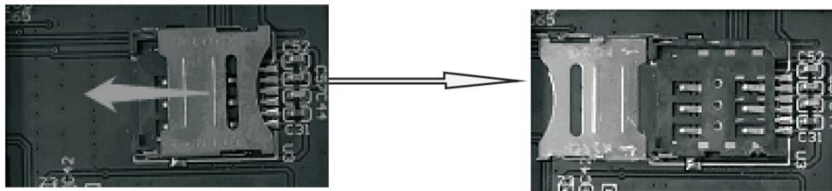
Chapter 7 Common Problems and Troubleshooting

1. Unable to read SIM card upon startup

- 1) Confirm the battery level. If the battery level is empty, please charge the device for at least half an hour and wait for the battery level to display at least one grid before turning it on.
- 2) Confirm if the SIM card is correctly inserted into the card slot.

2. SIM card installation

- 1) Open the back cover - Remove the battery, press down on the SIM card buckle, and push the buckle towards the OPEN arrow to open the buckle.



- 2) Insert the SIM card in the direction of the notch, then lay the metal buckle flat, press the buckle and push it towards the direction of the LOCK arrow to secure the SIM card.



- 3) When the phone card signal is installed as an icon , it indicates that the signal is being searched. Please be patient for 1 minute. If there is no signal for a long time due to this icon, please remove the battery and reconnect it after 5 seconds.

Product warranty card

★ Warranty regulations for recorders

1. Unless otherwise specified in this regulation, the recorder provides one year of free repair service. In case of machine malfunction under normal use, please provide a warranty card and purchase invoice for warranty. In addition to insurance, shipping, and other miscellaneous fees, warranty services are provided free of charge.

2. During the warranty period, the following repairs will also be charged

- ① Failure to present a valid warranty card and purchase invoice;
- ② Recorders purchased through informal channels;
- ③ Damage caused by failure to use, maintain, or store the product in accordance with the instructions for use;
- ④ Damage caused by falling or improper storage after purchase;
- ⑤ Damage caused by repair, renovation, disassembly, or cleaning at a non authorized repair and certification store of our company;
- ⑥ If the warranty card does not record the purchase date, product name, body number, invoice number, user name, address, phone number, or dealer name, or if the warranty card is altered without the seal of the sales store;
- ⑦ The product model or number recorded on the warranty card does not match the actual product;
- ⑧ Damage caused by not using accessories or consumables recommended by our company (batteries, communication cables);
- ⑨ Faults caused by uncontrollable natural disasters, abnormal voltage, and other external factors such as natural disasters.

3. In the warranty, depending on the specific situation, the machine body may not be processed and replaced with a model

designated by our company with no lower performance than the original product.

4. The parts replaced during warranty belong to the company.

5. Unless otherwise provided by law, incidental damage (including data loss, etc.) caused by the malfunction of this recorder shall not be compensated.

6. Please keep the warranty card properly. If the warranty card is lost, it will not be reissued.

7. This warranty system is only valid in Chinese Mainland, Hong Kong and Macao Special Administrative Region.

★ Attention

※ To protect your legitimate rights and interests, please carefully check the accuracy of the warranty card content.

※ The company and its affiliated companies shall not be responsible for any damage or accident (such as fire) caused by the failure of non company accessories (such as battery leakage/explosion).

※ The maximum retention period for the repair parts required for the maintenance service of this product is 5 years after the product is discontinued. Beyond the above retention period, depending on the specific situation of the malfunction, there may be situations where maintenance cannot be carried out. Please consult our company for details.

※ This warranty provision is designed for free repair by consumers and does not limit their legal rights.

★ Reference

When the product needs to be returned for warranty service, please carefully package it and provide it with a warranty card, fault repair instructions, etc. for reference.