# RK600-08E Data Logger of Automatic Weather Station



RK600-08E Data Logger with data acquisition, storage, transmission and management, and other functions, is the core component of automatic weather station, which can connect 32 parameter at the same time, has the settings and color LCD display, can communication with PC via cable or wireless connection, provide communication protocol, convenient for secondary development.

## **FEATURES**

- Real-time display
- Multiple sensor interface
- Large storage
- Types of communication interface
- Udisk external storage optional
- Wireless optional
- Self-contained clock chip
- Solar power supply optional
- HMI phone app & PC Software
- Data cloud platform
- Custom display interface
- Relay and alarm output



RK600-08

#### **SPECIFICATION**

Item	Details
LCD	4.3'color touch screen
Storage type	Internal storage or external U_disk is optional
Internal storage	65000 pieces of data can be stored.
Data interface	RS232 or RS485(customized)
Communication mode (Select communication mode)	Ethernet(add RS232 to ethernet converter); GPRS(add RS232 to GPRS converter),data flow consumption: <100MB/month WIFI(add RS232 to WIFI converter)
Communication protocol	MODBUS-RTU(Open communication protocol, the user can convenient for secondary development)
Supply	12VDC with 100-240VAC adapter, solar power supply system optional
Record interval	1min-240min adjustable
Measurement parameters	32 Max.
Power consumption	<4W
Operating temperature	-40-+75℃
Internal protection	Built-in power isolation protection
HMI processor	ARM RISC 528MHz
Data cloud platform	Upload data to cloud platform through GPRS module or WiFi module.
Relay and alarm output	Customized alarm and relay control output
Operation time	continuous use for at least 10 hours

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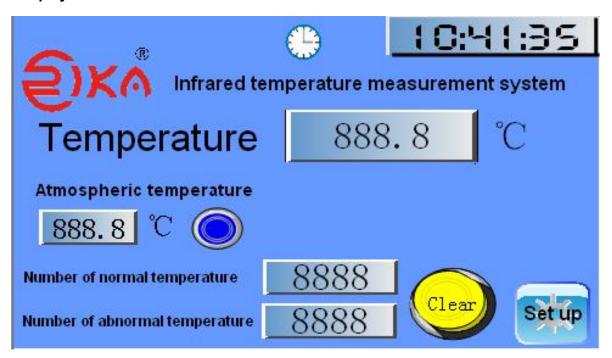
Protective box There is a waterproof storage box With IP67 standard waterproof box

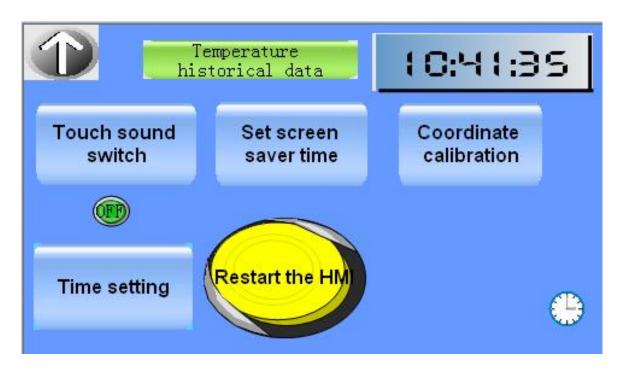
#### **Guidelines for the Selection of Data logger:**

If solar power supply is needed, RK600-08 is recommended, data logger, solar controller and battery can be installed in protective box.

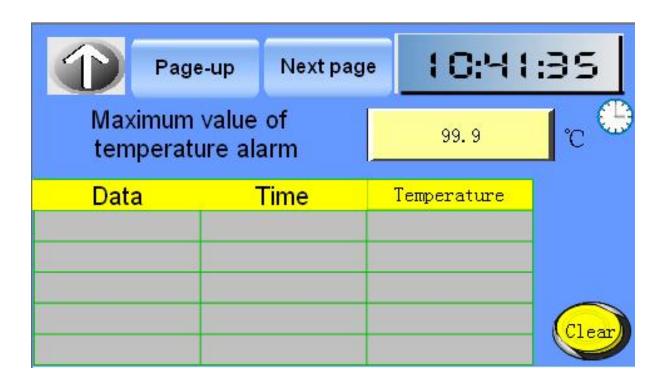
#### INTERFACE DESCRIPTION

#### Display screen of sensor data









- 1. Real time monitoring of sensor data.
- 2. Set data saving interval.
- 3. View data table in real time.
- 4. Restraint relay control output.

The above interface is an example of temperature sensor

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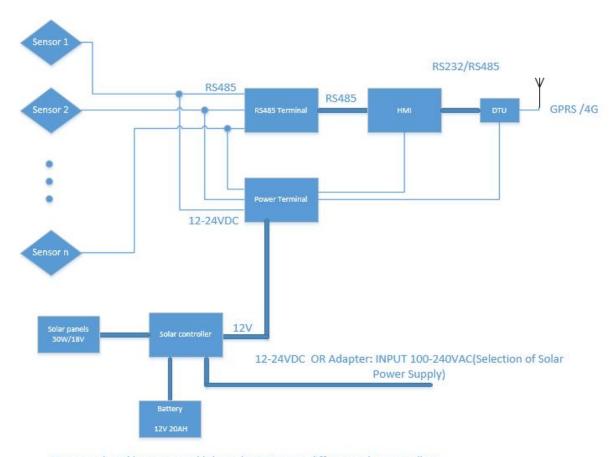
- (1)When the channel receives data normally, the channel indicator is green, and when the channel receives data abnormally, the indicator becomes red(Check whether the wire connection is good when receiving abnormal data).
- (2)Backlight progress bar moved to the left backlight darkest, moved to the right brightest, in order to reduce power consumption, keep the progress bar on the leftmost side.
- (3)Local ID default: 1(Decimal), you can modify it via MODBUS RTU command
- (4) Screen Saver time default: 1min, in order to reduce power consumption, no modification is recommended.
- (5) Record interval default:10 min, it can be modified by touch screen. First storage time is 10 minutes by default
- (6) Adjust the interface according to the type and number of sensors.

#### **COMMUNICATION MODE**

- The AWS can communicate with the center workstation by RS232 or RS485.
   If the communication distance is less than 20m, RS232 communication is recommended; if communication distance is within 20 to 800m, RS485 communication is recommended.
- GPRS wireless communication, when cable routing is inconvenient, data can be transferred by GPRS wireless communication, the center workstation can network with several RK900-01 AWS.
- LAN access, RK900-01 AWS is worked as a LAN node communication in the local network by transferring the RS232 with a LAN module. This mode can work under the network interface.



## **SYSTEM CONNECTION DIAGRAM**



Note: Lead-acid batteries and lithium batteries use different solar controllers

Complies with applicable CE directives.

Specifications subject to change without notice. Version 3.0

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