

RK600-07 Data Logger with data acquisition, storage, transmission and management, and other functions, is the core component of automatic weather station, which can connect 32 parameters at the same time, has the settings and color LCD display, can communication with sever or cloud via cable or wireless connection, provide communication protocol, convenient for secondary development.

FEATURES

- Local real-time display
- Multiple sensor interface
- Large storage
- Multiple communication interfaces
- Wireless optional
- Free app and PC remote monitoring software
- Data cloud platform
- Self-contained clock chip
- Solar power supply optional
- Custom display interface



ADVANTAGE

- Real time data display and storage;
- Adjustable data storage interval;
- Real time viewing of data tables;
- Support remote viewing and exporting CSV format data;
- Support wireless connection between data loggers and cloud servers;
- Support U-disk local data export;
- Support exporting data within a specified time period;
- The connector supports blind insertion, with no risk of incorrect insertion.
- Compatible with both DC and AC power sources;
- Low power design, supporting solar power supply;
- RIKA provides cloud platform open services for multi device management;
- Third party software APP、Mini programs and other applications can directly embed HMI screens, instantly possessing remote control capabilities for devices
- Support custom display interfaces (including logos, languages, etc.);

SPECIFICATION

Item	Details
Display	7" color touch screen with backlight
resolving power	1024*600
Touch type	Resistive type
Screen sleep	Support
Backlight adjustable	Support
Communication status indication	Support
Internal storage	4GB+512M
Communication interface	COM1:RS232/COM2:RS485/COM3:RS485
network	Ethernet (standard), 4G, WIFI ,LoRaWan(optional)
Communication protocol	Modbus-Rtu、Modbus-TCP、HTTP、MQTT
Supply	DC12-24V, AC100-240V (adapter)
Measurement parameters	32 max
Recording interval	1-240min settable
U_disk download	Support
Relay output	customized
Average consumption	<7W
CPU	Quad core A7 processor
Power protection	Equipped with surge protection and anti reverse protection
Withstanding voltage	500VAC
Insulation impedance	Exceeding 50M Ω @ 500VDC
working temperature	-10~+60℃
Storage environment	-20 ~70℃
CE	EN55022 & EN55024
Shell	400*500*200mm, Support solar power supply

DISPLAY INTERFA



Real-time data



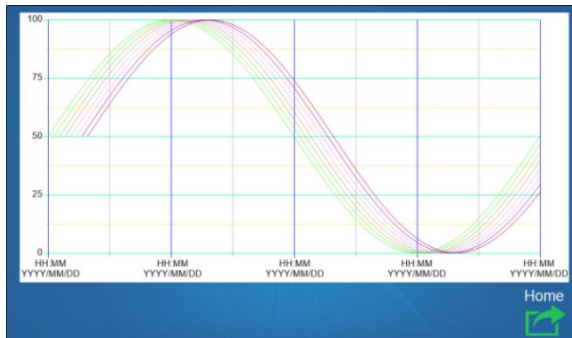
Delete: [icon]

Time	Wind_speed	Wind_direction	Air_temperature	Air_humidity	Air_pressure	Rainfall	Solar_radiation	PM1_0	PM2_5	PM10
2024-12-17 10:42:20	0.812832	192	0.815721	85.9276	1009.47	0.00	0.00	52.2	83.4	126.4
2024-12-17 10:41:20	0.738427	144	0.815721	85.8406	1009.48	0.00	0.00	79.8	129.00	164.3
2024-12-17 10:40:20	0.711562	310	0.830833	85.775	1009.49	0.00	0.00	75.4	119.5	163.3
2024-12-17 10:39:20	0.425213	270	0.845094	85.6967	1009.5	0.00	0.00	72.3	121.6	147.3
2024-12-17 10:38:20	0.832296	190	0.862896	85.6433	1009.49	0.00	0.00	70.00	112.00	139.00

Remaining Memory(Mb): 2426 Time Interval(min): 1

Return

Data form



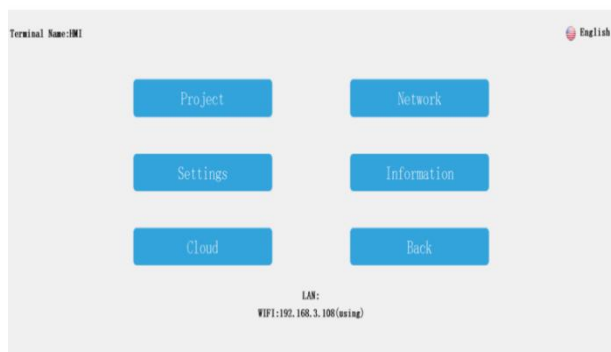
Historical curve

The interface shows a 'Time Interval' dialog box with 'Start time' (2024-12-17 10:40:30) and 'End time' (2024-12-17 10:40:30) fields. Below the dialog is a table of historical data.

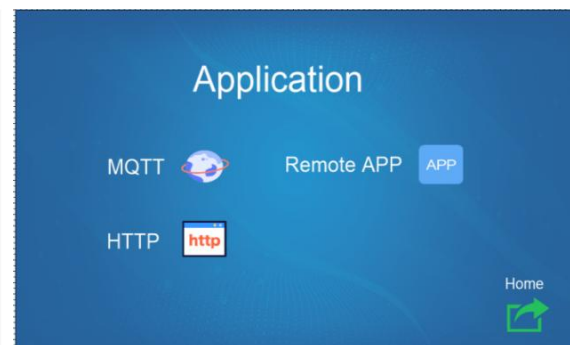
Time	Wind_1	PM10_5	PM2.5	PM10
2024-12-17 10:40:30	0.812	52.2	93.4	126.4
2024-12-17 10:41:30	0.738	79.8	129.00	164.3
2024-12-17 10:42:30	0.711	75.4	119.5	163.3
2024-12-17 10:39:30	0.425	72.5	121.6	147.5
2024-12-17 10:38:30	0.832	70.00	112.00	139.00

At the bottom, it shows 'Remaining Memory (Mb): 2426' and 'Time Interval (min): 1'.

Historical data export

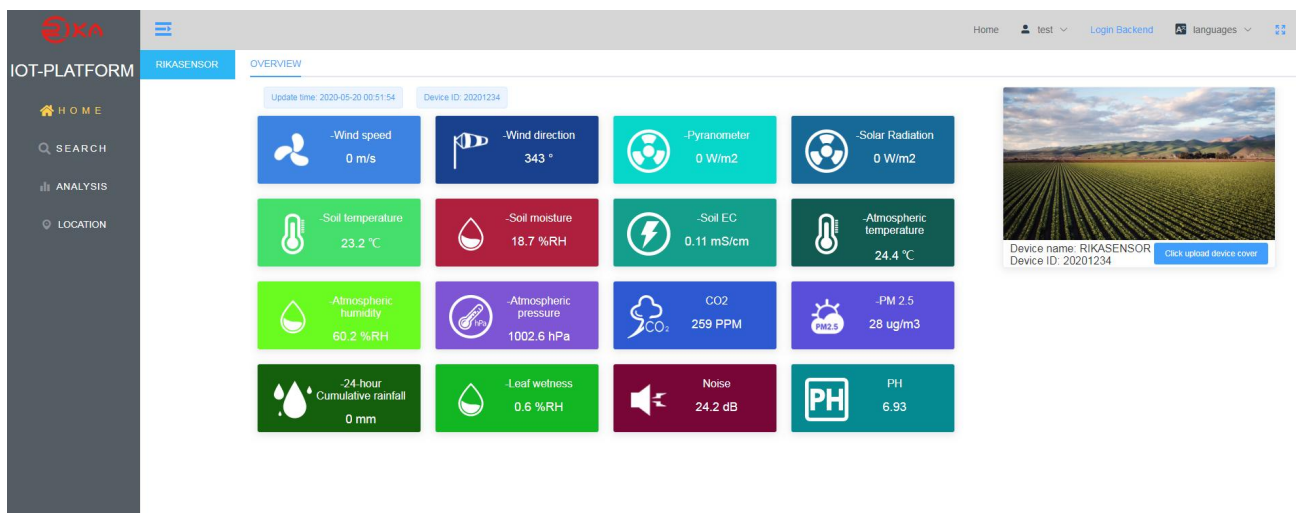


Setting interface



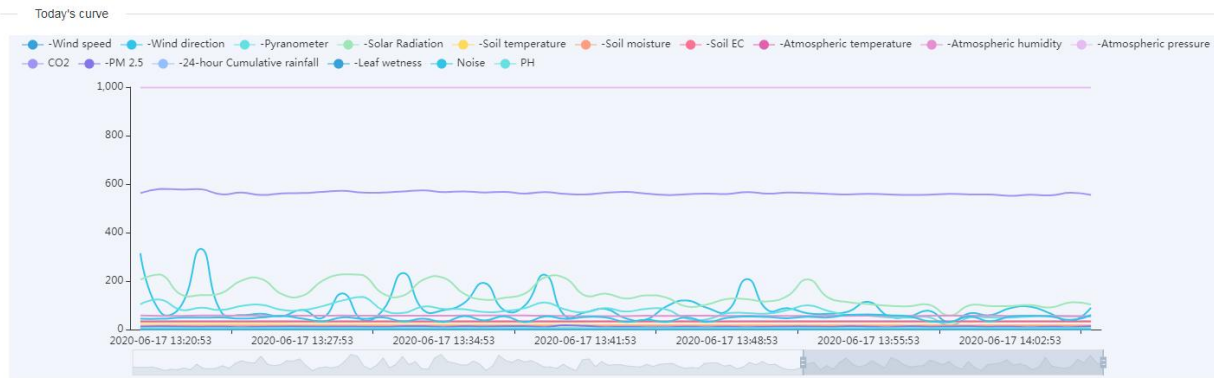
Server configuration

RIKA CLOUD



Real-time Data Interface

RK600-07C Data Logger



Data Curve Interface

IoT-PLATFORM

HOME

SEARCH


ANALYSIS

LOCATION

RIKASENSOR

Camera	Date	-Wind speed (m/s)	-Wind direction (°)	-Pyranometer (W/m2)	-Solar Radiation (W/m2)	-Soil temperature (°C)	-Soil moisture (%RH)	-Soil EC (m S/cm)	-Atmospheric temperature (°C)	-Atmospheric humidity (%RH)	-Atmospheric pressure (hPa)	CO2 (PPM)	-PM 2.5 (ug/ m3)	-24 hour Cumulative rainfall (mm)	-Leaf wetness (%RH)	Noise (dB)	PH
	2020-06-17 14:09:53	2	67	48	114	31.2	17	0.11	34.2	55.9	998.2	562	12	0	1.1	52.3	5.1
	2020-06-17 14:08:53	3.1	71	63	114	31.2	16.7	0.11	34.2	55.5	998.4	557	12	0	1.1	63	5.1
	2020-06-17 14:07:53	1.3	60	62	111	31.2	16.7	0.11	34.2	55.6	998.2	557	12	0	1.1	53.5	5.1
	2020-06-17 14:06:54	1.3	90	54	103	31.1	16.9	0.11	34.2	55.7	998.2	555	13	0	1.1	59.7	5.1
	2020-06-17 14:05:53	1.7	33	55	112	31.1	16.6	0.11	34.2	55.3	998	564	10	0	1.1	40.2	5.1
	2020-06-17 14:04:53	3.4	66	57	91	31.1	17.1	0.11	34.2	56	998.2	554	12	0	1.1	53.9	5.1
	2020-06-17 14:03:53	1.7	94	54	101	31	16.9	0.11	34.2	56.8	998.1	556	10	0	1.1	56.1	5.1
	2020-06-17 14:02:53	2.5	88	49	97	30.9	17	0.11	34.2	56.5	998.1	552	12	0	1.1	53.5	5.1
	2020-06-17 14:01:53	0.8	59	50	97	30.9	16.9	0.11	34.2	57.9	998	557	11	0	1.1	34.1	5.1
	2020-06-17 14:00:53	0.5	67	50	100	30.8	16.8	0.11	34.2	56.9	998	557	13	0	1.1	53.5	5.1
	2020-06-17 13:59:53	0.7	29	17	58	30.8	16.6	0.11	34.2	57.2	998	560	12	0	1.1	30.8	5.1
	2020-06-17 13:58:53	1	77	51	102	30.6	17	0.11	34.2	56.9	998	556	11	0	1.1	34.1	5.1
	2020-06-17 13:57:53	2.9	54	49	96	30.6	16.4	0.11	34.2	56.5	998.2	555	13	0	1.1	54.4	5.1
	2020-06-17 13:56:53	0.8	55	50	98	30.5	16.8	0.11	34.2	56.4	998.2	557	10	0	1.1	58.7	5.1
	2020-06-17 13:55:53	0.2	114	57	105	30.5	16.8	0.11	34.2	57.5	998	560	12	0	1.2	62.5	5.1
	2020-06-17 13:54:53	1.1	74	60	113	30.4	16.9	0.11	34.2	56.6	998	557	13	0	1.1	60.5	5.1
	2020-06-17 13:53:53	1.5	65	77	132	30.3	16.9	0.11	34.2	56.9	998	560	11	0	1.2	49.6	5.1
	2020-06-17 13:52:53	1.2	67	100	207	30.3	16.6	0.11	34.2	56.4	998	563	12	0	1.2	52.8	5.1
	2020-06-17 13:51:53	2.4	88	80	139	30.3	16.9	0.11	34.3	56.3	998.2	565	12	0	1.1	46.6	5.1
	2020-06-17 13:50:53	1.7	81	66	116	30.3	16.7	0.11	34.3	56.4	998.2	561	11	0	1.2	51.7	5.1

Data Export Interface



IOT-PLATFORM

HOME

SEARCH

ANALYSIS

LOCATION

RIKA SENSOR

Today's statistics

Camera

channel	name	average	minimum	minimum time	maximum	maximum time
e1	-Wind speed	1.4	0	2020-06-17 05:16:45	3.6	2020-06-17 12:09:55
e2	-Wind direction	93	26	2020-06-17 12:21:53	346	2020-06-17 05:20:45
e3	-Pyranometer	284	0	2020-06-17 05:11:44	908	2020-06-17 12:25:53
e4	-Solar Radiation	363	0	2020-06-17 05:11:44	1051	2020-06-17 12:38:53
e5	-Soil temperature	28.3	26.7	2020-06-17 05:11:44	31.4	2020-06-17 14:11:53
e6	-Soil moisture	16.9	16.1	2020-06-17 12:58:53	17.2	2020-06-17 05:12:45
e7	-Soil EC	0.11	0.1	2020-06-17 05:21:45	0.11	2020-06-17 05:11:44
e8	-Atmospheric temperature	33.6	28.9	2020-06-17 05:11:44	34.9	2020-06-17 12:22:53
e9	-Atmospheric humidity	56.4	54.1	2020-06-17 12:22:53	71.5	2020-06-17 05:11:44
e10	-Atmospheric pressure	998.5	998	2020-06-17 13:49:53	999	2020-06-17 05:12:45
e11	CO2	564	542	2020-06-17 12:14:53	613	2020-06-17 11:49:53
e12	PM 2.5	12.2	10	2020-06-17 12:02:53	19	2020-06-17 05:11:44
e13	-24-hour Cumulative rainfall	0	0	2020-06-17 05:11:44	0	2020-06-17 05:11:44
e14	-Leaf wetness	1.2	1.1	2020-06-17 12:34:53	1.3	2020-06-17 12:13:53
e15	Noise	46.2	30.8	2020-06-17 13:06:53	64	2020-06-17 12:09:55
e16	PH	6.06	5.94	2020-06-17 14:05:53	6.15	2020-06-17 05:11:44

Home

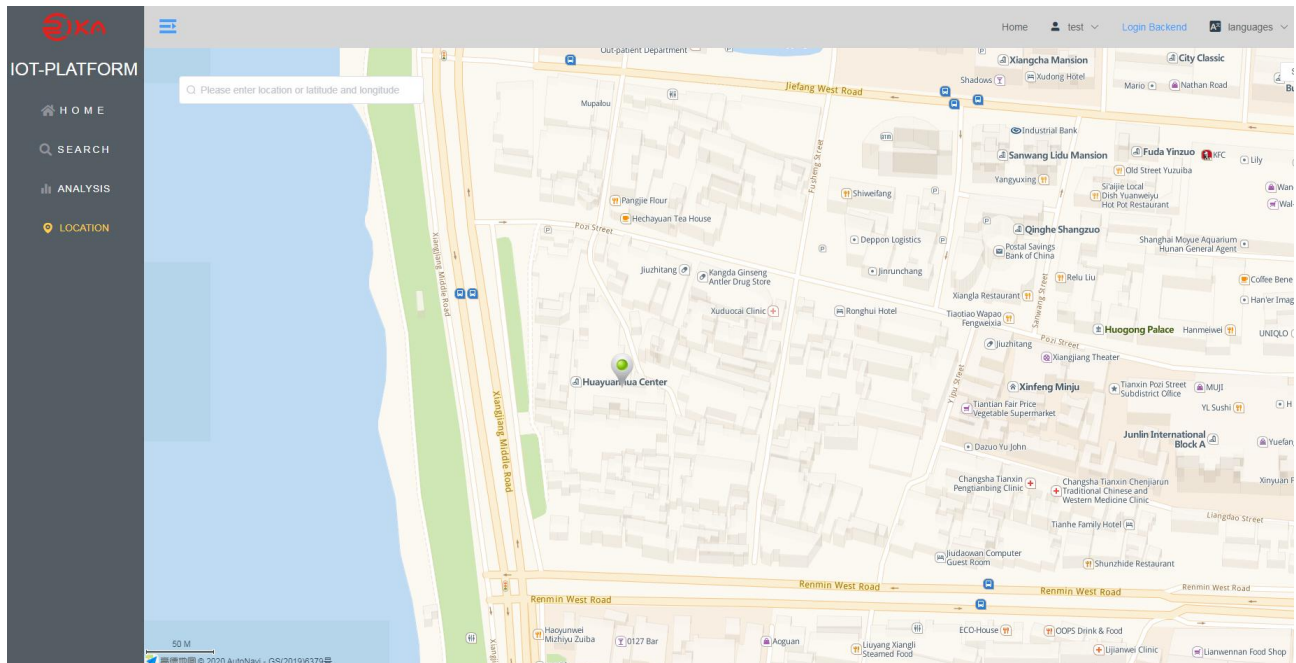
test

Login Backend

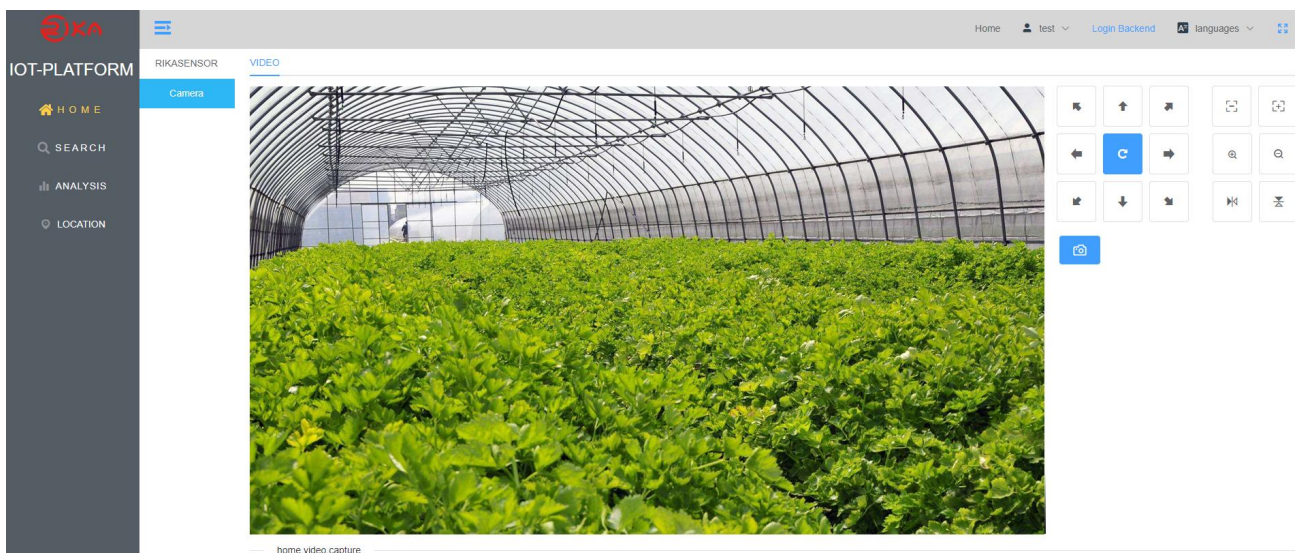
languages

Statistics Interface

RK600-07C Data Logger



Map Positioning Interface

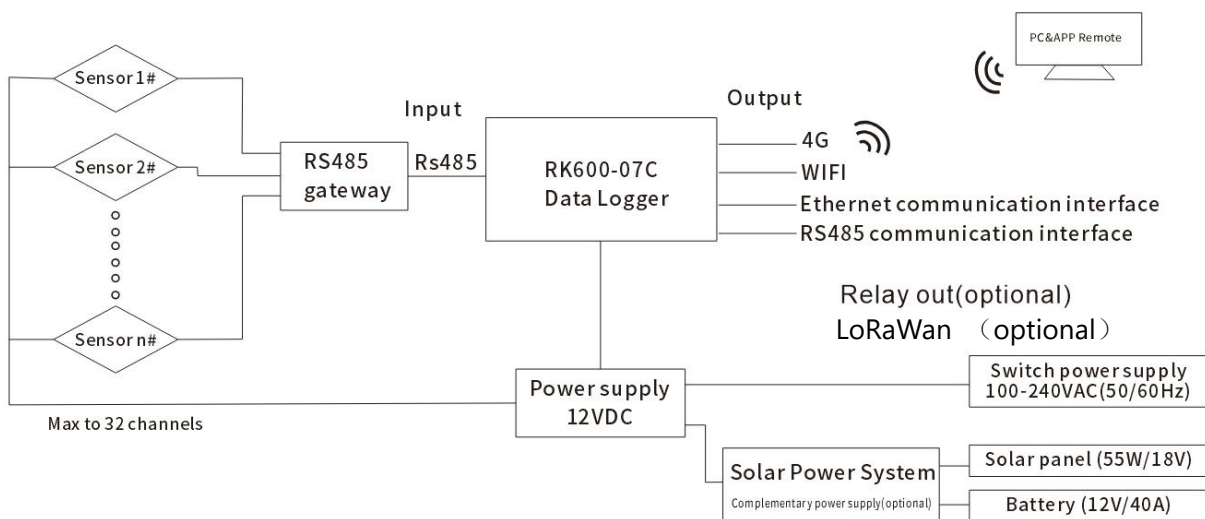


Video Surveillance Interface

PART LIST

Item	RK600-07C
Data logger	√
Protection box	√
Waterproof connector(to sensors)	√
Power connection terminal	√
USB-RS485 converter	√
Power adapter(AC100-240V@12VDC)	√
Solar charging controller	Optional
Solar panel	Optional
Lead acid battery ^①	Optional
Ethernet module	√
GPRS/2G/3G/4G	Optional
Lora module	Optional
Relay module	Optional
Other parts	Customizable
① Since air transportation is not available, it is recommended that users purchase locally.	

SYSTEM DIAGRAM



RK600-07C SYSTEM DIAGRAM

Revision time	Reviser	Current Version	Remarks
20250505	Michael	V5.0	