

The **CY08 wireless data logger** is suitable for the measurement of temperature, relative humidity, carbon dioxide/hydrogen peroxide concentration, dew point and other environmental parameters in a variety of responsible environments. Applicable objects include warehouses, production areas, clean rooms, laboratories, incubators, refrigerators, refrigerated freezers and liquid nitrogen tanks with temperatures as low as -196°C.

Product features

- Abundant probe support: temperature and humidity/platinum resistance/carbon dioxide/dew point/hydrogen peroxide, etc.
- 50000 groups of offline data cache.
- Temperature and humidity probe battery life support 36-60 months (temperature and humidity).
- Standard AA alkaline/lithium iron batteries were used.
- Dual battery design, power change without shutdown.
- IP65 waterproof design.
- Its working temperature is -40 ~ 60 °C, and it can be directly placed in the cold storage.
- Rich installation methods: magnetic attraction, wall hanging, bundling.



Unique BR-Link ad hoc wireless communication

The so-called ad hoc network technology means that the wireless data logger will automatically search and connect to the gateway or signal amplifier with the best signal nearby without configuration.

Signal extension technology: When the data logger is installed in some places where the gateway signal can not reach, BR-Link's unique signal relay function can build a signal relay bridge between the data logger and the gateway to cover the dead corner of the signal.

A gateway or relay equipment will transmit signals up to 100 meters indoors and 2000 meters outdoors without shelter. Wireless communications are encrypted to ensure data integrity and security.

Rich probe support

Users can choose the appropriate type of probe, and support multiple or multiple probes at the same time.

Probe support: Vaisala HMP series temperature and humidity probe, GMP series carbon dioxide probe, DMT series dew point probe, HPP series hydrogen peroxide probe; Rozonik temperature and humidity probe; Boron HT3 low-power temperature probe, PT100/PT1000.

Multiple probes can be used at the same time, such as one carbon dioxide probe and one temperature probe, and one wireless data recorder can monitor the carbon dioxide concentration and temperature and humidity parameters of the carbon dioxide incubator at the same time. The installation is convenient and the use cost is reduced.

Integrity and continuity of data

The CY08 wireless data logger is equipped with 50,000 sets of data cache. In case of failure to connect to the gateway, the data will be temporarily stored in the cache, and then transmitted to the server when the network is restored.

After the data is uploaded to the server, the data backup is still kept in the data recorder. If necessary, the computer can be connected to export the corresponding time period data through the USB special tool (account encryption verification is required), and the latest 50,000 sets of data are kept.

Dual-battery design, two AA batteries in Group A can be replaced first, and then two AA batteries in Group B can be replaced, so as to achieve the purpose that the equipment will not shut down and ensure data integrity.

Technical specifications

Wireless transmission

Transport protocol	BR-Link wireless ad hoc network transmission
Wireless output power	≤13db (≤20mW)
Open wireless transmission distances	2000m
Typical indoor transmission distances	100m
Antenna	Built-in
Frequency band	470MHz

Data acquisition and storage

Cache size	50,000 sets
Buffer type	NOR Flash (NAND flash)
Continuation order	FIFO
Sampling rate	1 second to 24 hours
Upload frequency	1 minute to 24 hours

Environmental parameters

Storage temperature range	-20~60°C
Operating temperature range (With spare battery)	0 ~ 60 °C (standard)
Operating temperature range (No battery backup)	-40~60°C
IP protection class	IP65
IP protection class (External power supply)	IP20
Operating humidity	0-100% non-condensing

External power supply

Power connector type	USB Type-C
Supply voltage	5V
Supply current	2A
Implementation of standards	GB4943.1-2011 GB/T9254.1-2021 GB17625.1-2012

Other specifications

Battery	3.7 V 2800mha lithium battery backup
Power and Data Interface	Type-C POE IEEE802.3af Class 0
Size	75.99 x 167.56 x 37mm
Product implementation standards	GB/T 35145-2017
Sensor interface	#1 M8 x1 #2 XS8 x1 #3 Rozonik sensor interface x1
Output voltage	3.3V ~ 24V
Interface communication mode	RS485, IIC, UART
Typical standby time	36-60 months
Weight (with 2 14500 rechargeable lithium batteries)	316g
External supply voltage	5V
External supply current	2A
Number of sensors supported	1-2
Installation method	Magnetic attraction, screw, cable tie, hook

Supported sensor type (It will continue to increase in the future. If it is not within the scope, please contact the local distributor or Biorong Sales)

- Visa HMP series temperature and humidity probe, GMP series carbon dioxide probe, DMT series dew point probe, HPP series hydrogen peroxide probe;
- Rozonik temperature and humidity probe;
- Biorong HT3 low power temperature probe, PT100, PT1000.

