CY08E Ethernet Recorder

CY08E Ethernet recorder 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/carbon dioxide/dew point/hydrogen peroxide, etc.
- 50000 groups of offline data cache.
- With backup battery, it can work for 14 days in case of external power failure.
- Support POE power supply.
- While supporting BR-link communication protocol and Boron continuous monitoring system V5.0, PLC or other devices can read data in real time through Modbus TCP.
- IP65 waterproof design.
- Rich installation methods: magnetic attraction, wall hanging, bundling.

Supports Ethernet BR-Link protocol and MODBUS TCP support

Ethernet transmission is supported, and data is transmitted to the server through the IP address in the network. POE power supply is supported, and power supply and data transmission can be realized by one network cable. Support Modbus TCP, PLC and other industrial control equipment to obtain data through the MODBUS protocol of Ethernet.

Automatic time synchronization

The CY08E Ethernet recorder has an automatic time synchronization mechanism to keep time synchronization with the server at all times. The server only needs to be synchronized with the standard time, so that the whole system can be kept synchronized with the standard time from the continuous monitoring system to the acquisition end.

Rich probe support

Users can choose the appropriate type of probe, and can 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.

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 CY08E Ethernet data logger is equipped with 50,000 sets of data cache. In case of failure to connect to the server, the data will be temporarily stored in the cache, and then transmitted to the server when it is restored through the network.

After the data is uploaded to the server, the data backup is still kept in the data logger. 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 five groups of data are kept.

The backup battery design can still work for 14 days after power failure to ensure data integrity.

Technical specifications

Ethernet transmission

Transport protocol	BR-Link Ethernet
Speed	10/100Mbps
POE	EEE802.3af Class 0
Interface	M8-8pin (with M8 to RJ45 cable)

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℃
Operating temperature range (With spare battery)	0 ~ 60 ℃ (standard)
Operating temperature range (No battery backup)	-40~60℃
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 EEE802.3af 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	14 days
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.