

WY06 data gateway is a relay device connecting BR-Link wireless acquisition device and continuous monitoring system, which can connect up to 100 wireless acquisition devices and 2 RS485 devices, and can be externally connected with a three-color light signal tower to realize on-site audible and visual alarm. It is suitable for environmental monitoring scenarios.

Product features

- 5 inch HD capacitive touch.
- 300000 groups of offline data cache, which can be expanded to 10 million groups.
- It comes with a backup battery and can operate for 72 hours under typical conditions.
- Support Ethernet POE/WIFI connection mode and MODBUS TCP.
- IP67 waterproof design, can be installed in complex environment.
- Support wireless acquisition equipment ad hoc network and signal extender.
- It supports 2 RS485 interfaces and a set of three-color light signal tower.
- And that extensible remote alarm module can replace the serv to send an overrun short message WeChat to alarm when the server is abnormal or disconnect from the server.



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.

Integrity and continuity of data

WY06 data gateway comes with 300,000 groups of data cache, and can be expanded to 2 million groups. In the case of failure to connect to the server, the data will be temporarily stored in the cache, and then transmitted to the server when the network is restored.

Ad hoc network

The redundancy of the system can be increased by installing multiple WY06 data gateways in the same space. The collector will automatically find the gateway connection with the best signal. When one of the gateways fails or cannot be connected to the server, the normally working gateway will automatically replace the function of the original gateway.

Automatic time synchronization

WY06 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.

Good scalability

It is equipped with 2-way RS485, which can be connected to external equipment or other sensors, and supports 4-way IO control, and can be connected to external equipment such as signal tower relay.

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	External (Can be equipped with signal extension antenna or rod antenna)
Frequency band	470Mhz
Wireless Maximum Connections	100

Data acquisition and storage

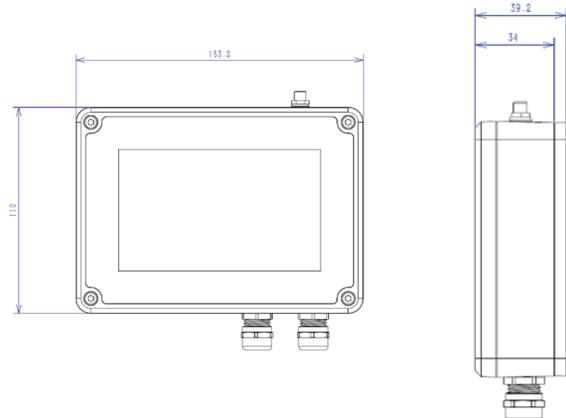
Cache size	300,000 groups, expandable to 2 million groups
Buffer type	NOR Flash (NAND Flash)
Continuation order	FIFO/FILO is configurable, depending on the probe configuration

Environmental parameters

Storage temperature range	-20~60°C
Operating temperature range	-20~60°C
IP protection class	IP67 IP30 (using external interface)
Operating humidity	0-100% non-condensing

Other specifications

Screen type	LCD color screen
Screen size	5 inches
Screen resolution	800x480 Pixel
Audible and visual alarm	Support
Battery	Three 18650 rechargeable lithium batteries
Size	
Material	ABS engineering plastics
External interface	RS485x2 tricolor light signal tower
Output voltage of external equipment	24V
Typical Battery Standby Time	48 hours
Weight	383g
Installation method	Magnetic attraction, wall hanging, cable ties



External power supply

Supply voltage	4.5~27V
Supply current	2A
Implementation of standards	GB4943.1-2011 GB/T9254.1-2021 GB17625.1-2012