

Tomonitor

atmospheric environmental temperature and humidity monitoring solutions

Temperature • Humidity • Gas • PM2.5 • Pressure • Illuminance • Noise • Wind speed • Weather station

Zigbee solution

Product introduction

S400 wireless temperature and humidity data logger is a high speed, intelligent device developed by HUATO which combines the advantages of its relevant devices. With built-in memory and Zigbee wireless transmission function, it can record 8192 readings as well as remotely monitoring warehouse, lab, refrigerator, cold storage room, etc. It adopt 2.4G frequency to transmit data, building a monitoring network with it requires no wiring, it's reliable and easy to operate.

Comparing to traditional temperature and humidity data logger, wireless data logger is better suited the ever increasing working pace. The major advantage of such a system is that it can remotely monitor environments in real-time without supervision. With the help of 2.4G Zigbee wireless networking, monitoring software, and a data receiver in office, users can effortlessly monitor temperature and humidity changes in real-time about all monitoring points clearly. Besides real-time monitoring, users can also view recorded data and when data value exceeds settings, monitoring client and the device itself will alarm users with sound and light or SMS, making it more convenient for relevant personnel to handle what happened. This wireless data logger is ideal for the monitoring of fixed points. For the monitoring of moving points like vehicles, just add a GPRS module and we can achieve the same effect.



Features

- ◆ Zigbee 2.4G wireless networking
- ◆ Wireless/wired transmission speed: 115200 BPS
- ◆ Single device transmission range: 100-500M
- ◆ Resolution: 0.1% °C/0.1%RH
- ◆ Switzerland imported 2 in 1 sensor
- ◆ Customizable record interval: 2s-24h
- ◆ Support transmission resume from break point
- ◆ Use AA battery×4, 9-12V DC adapter is optional.
- ◆ LED+buzzer alertor, alarm automatically when data value exceeds settings

S400W-TH



S400W-EX



S400W-ET



S400W-DT



S400W-EK

Model	Sensor Type	Range	Accuracy	Memory
S400W-TH	Internal Switzerland imported sensor	-20~+70°C	±0.5°C	8,192
		0~100%RH	±5%RH	
S400W-EX	External Switzerland imported sensor	-40~+85°C	±0.5°C	
		0~100%RH	±5%RH	
S400W-ET	External single channel temperature sensor	-40~+85°C	±0.5°C	
S400W-DT	External dual channel temperature sensor			
S400W-EK	External thermocouple temperature sensor	-200~+260°C	±2°C	

Zigbee to RJ45 wireless repeater.

- ◆ For the receiving of wireless data logger, can work as repeater/gateway at the same time
- ◆ Wireless transmission speed: 115200 BPS
- ◆ Connecting up to 64 wireless data logger
- ◆ Frequency channel supported: up to 15 band
- ◆ Zigbee automatic networking: searching for best route to transmit data automatically.
- ◆ Built-in RJ45 port, able to transmit the data received from data logger to server via LAN
- ◆ Power: 12V DC adapter. Equipped with holes for wall hanging.

HE2400



SMS alerter specifications

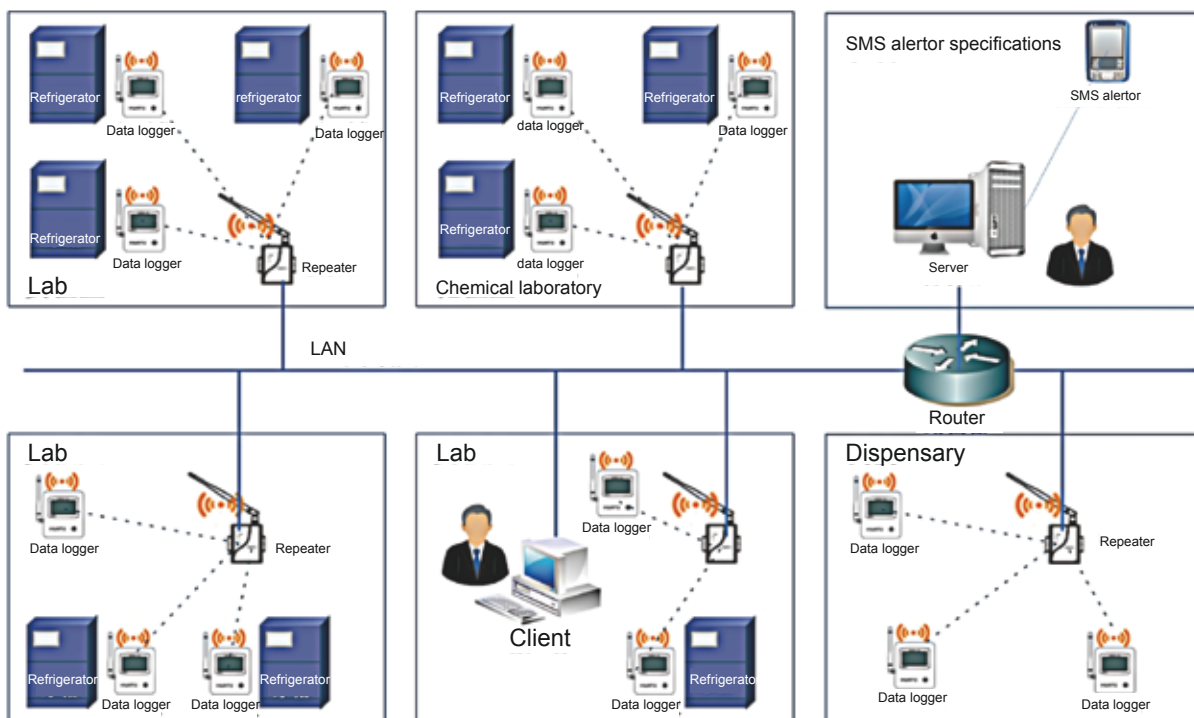
- ◆ Specifications of HE2508 SMS alerter
- ◆ Built-in RS232/SMS port, 15KVESD protection;
- ◆ Power: 12V DC adapter;
- ◆ Mobile network frequency supported: 850/900/1800/1900 MHz;
- ◆ Alarm messages will be sent via this device.



HE2508

Wireless monitoring system for refrigerator and indoor environments:

- View real-time/historic data via any authorized PC in LAN
- It's OK to open refrigerator for a while, Alerter will be triggered only when data value exceeds settings
- Alarm times can be limited to avoid frequent alarm, support fault recovery SMS.
- Timing SMS: send SMS to report system status everyday



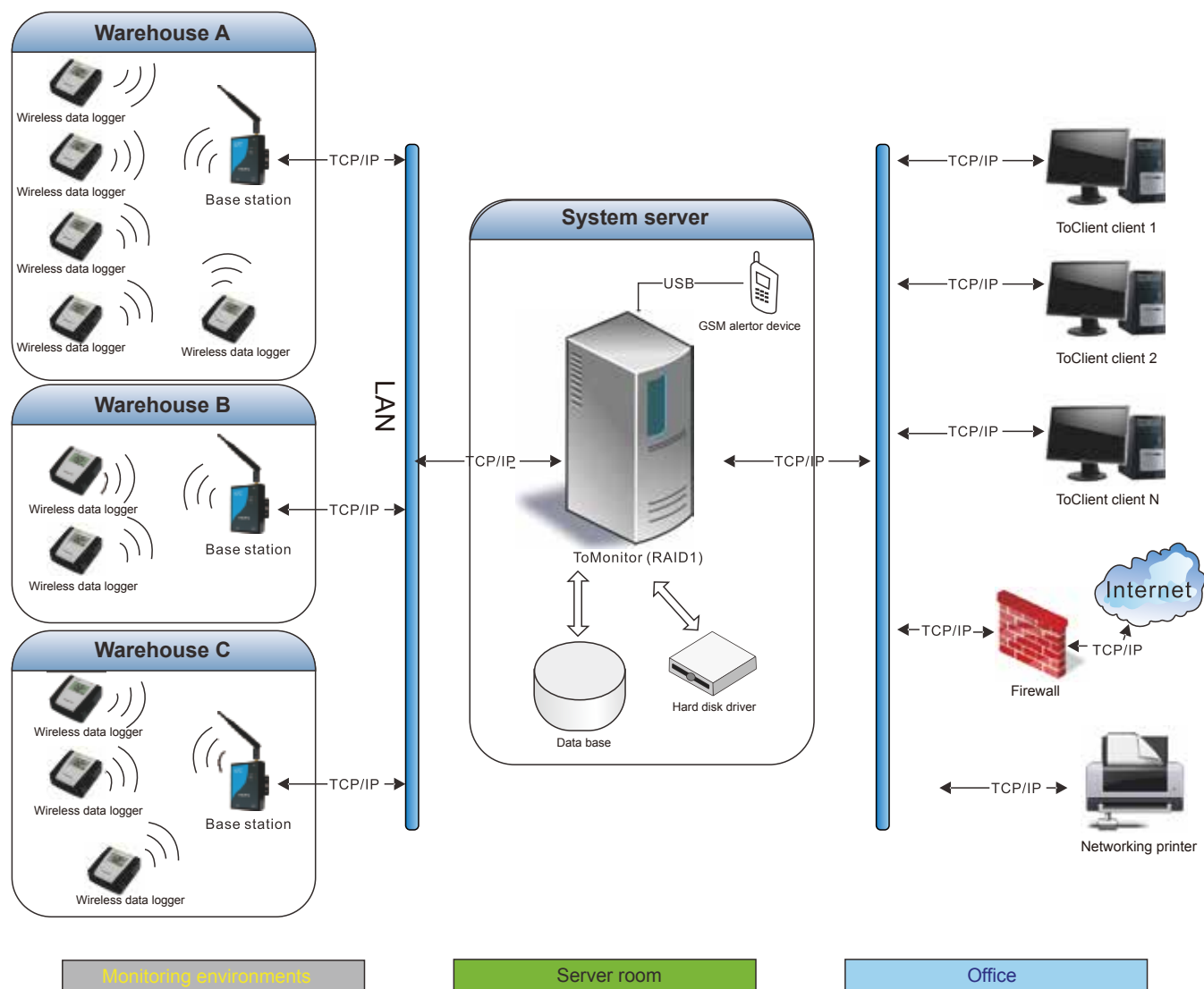
environmental monitoring system

This environmental monitoring system consist of 3 parts: the device layer , control layer and user layer.

User layer : including any authorized computers in this system. These devices is allowed to access the real-time running information and historic data of this system after installed the ToClient software. Working principle: all data is stored in the database of control layer(control server). Users can view the real-time/stored data via LAN/Internet. When the monitoring data value exceeds settings set by user, this software will also play alarm sound or send email/SMS to alarm users.

Control layer: the ToMonitor runs on a server, it writes all real-time data collecting form end devices to SQL database, it triggers the alarm function when data value exceeds settings.

Device layer: all the high precision loggers records temperature, humidity and other data automatically, then sends the data to ToMonitor for processing. With battery, our loggers continually records data when the server is shutdown or there's ine faults, so the data will not be lost .



The device layer includes temperature & humidity data logger and wireless repeater, the function of this layer is to collect, record and upload temperature & humidity data . The data logger collects and records temperature & humidity data from surrounding environment and upload it to a server via wireless repeater.

ToMonitor is server software, it stores data uploaded from data loggers and displays it on the software. Users can set temperature and humidity value range for each devices, when the value exceeds limits, the software will alarm user immediately.

ToClient is the client, user can access server via this software to view real-time/recorded data of each temperature & humidity data logger.