# **SZ5090T**

# **ZIGBEE Wireless Gateway**

#### **Product Overview**

SZ5090T is based on ZIGBEE industrial wireless data acquisition module is mainly used for search bogey for industrial use MODBUS-RTU protocol wireless device dataset collection, data acquisition modules to achieve practical low state line monitoring.

This product can be (1) SMT industry temperature and humidity data monitoring (2) Electronic Equipment Factory temperature and humidity data monitoring (3) cold storage temperature and humidity monitoring (4) storage temperature and humidity monitoring (5) pharmaceutical GMP monitoring system (6) Environment temperature and humidity monitoring (7) telecommunications room temperature and humidity monitoring (8) Other need to monitor temperature and humidity and so on various occasions.

In order to facilitate networking and industrial engineering applications, this module uses MODBUS-RTU communication protocol widely used in industry to support secondary development. Users only need to use any serial communication software module data query and set according to our protocol.

Module standard interface is RS232 communication interface, optional RS485. When the user actually uses, it can be equipped with RS232 / RS485 converter or RS232 / USB converter cable according to the actual needs.

## **Parameters**

Parameters	Technical Specifications
Baud Rate	9600 (other baud rate can be customized)
Communication port	Zigbee Wireless Turn TCP/IP
Radio frequency	2.4G ISM band global free (ZigBee)
Network Type	Star network
Network Capacity	65,535 network nodes
Power supply	Bus-powered, DC9V 1A
Power	2W
storage temperature	-40 - 85 ℃
Operating environment:	-40 - 85 ℃ -40 ℃ ~ + 85 ℃
Dimensions	96 × 63 × 21mm³



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## **ORDERING**

#### INFORMATION

Туре	Order No.
SZ5090T	SZ5090T

## Package dimensions



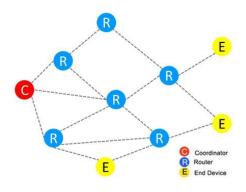
### **ZIGBEE Introduction**

Zigbee is based on IEEE802.15.4 standard low -power personal area network protocol. Under the agreement stipulated technology is a short-range , low-power wireless communication technology . The name comes from the character dancing bees , because bees (bee) is by flying and "buzz " (zig) shake wings " dance " to transfer pollen where location information with their peers, that bees rely on this way constitute a group communication network. Its characteristics are close , low-complexity , self-organizing, low power, low data rate, low cost. Mainly suitable for automatic control and remote control in the field, can be embedded in a variety of devices . In short , ZigBee is a cheap , low-power short-range wireless network communication technology.

ZigBee is a low-speed short-range transmission of wireless network protocols. ZigBee protocol , respectively from the bottom to the physical layer (PHY), media access control layer (MAC), the transport layer (TL), the network layer (NWK), the application layer (APL) and the like. Which the physical layer and MAC layer follow IEEE 802.15.4 standard. ZigBee network is mainly characterized by low power, low cost , low rate , supporting a large number of nodes , supports a variety of network topologies , low complexity, fast, reliable and secure. ZigBee coordinator can be divided into network devices (Coordinator), aggregation node (Router), sensor nodes (EndDevice) , three roles.

#### A distance farther

zigbee supports up to 15 hops, between points furthest 2KM, can support large distance networking.



Second, more powerful equipment

Flexible node types, for the center, relay, terminal, multi-node, more convenient and easier

Third, anti-interference ability

Channel detection allows data to reduce collisions

Complex code sequence using DSSS Direct Sequence Spread Spectrum technology, with high rates of pseudo-noise code sequence information code sequence motif with two plus (waveform multiplied) to control the phase of the carrier after a direct sequence spread spectrum signal is obtained, the higher the upcoming original power, with a more narrow frequency becomes low power wideband frequency to obtain satisfactory anti-noise performance in the wireless communications field.