

## 2. ZIGBEE Wireless Data Acquisition Modules



### ZIGBEE-1080 (Server)

- ※ Transmission Distance:
  - Normal Type: Indoor: <30m, Outdoor: <100 m
  - Strengthen Type: Indoor: <100m, Outdoor: <1000 m
- ※ Supports up to 6-hop
- ※ Increase the network coverage up to 6km
- ※ Data Transfer:
  - AT mode: transparent transmission, only applies to two-plane couplet
  - API mode: the data which RF transmits and receives are transferred into the API function (default)
- ※ Transmission Mode: radio to send or destination address to send mode (default) optional
- ※ Node Type: Central node (coordinator), routing nodes
- ※ Networking Capabilities: star network, tree network, chain-type network, Mesh network
- ※ 16-channel automatic, 254 network ID arbitrarily setting
- ※ With an RS-232/485 interface
- ※ Multi-reliable hardware and software design, watchdog technology enables safe operation of equipment
- ※ Power Consumption:
  - Send Current: General: <50mA; Enhanced: <295mA
  - Idle/Receive Current: General: <20mA; Enhanced: <35mA
  - Sleep Current: <100uA (only the terminal nodes support the hibernation feature)
- ※ Power Supply: 10VDC~30VDC
- ※ Operating Temperature: -20℃~+70℃
- ※ Operating Humidity: 5%~90%

### ZIGBEE-1081

- ※ Core Modules:
  - 32-bit RISC processor, Master Frequency 66MHZ
  - 2MB NorFlash, 512KB SRAM)
- ※ An external RTC can be calibrated
- ※ Hardware watchdog to ensure the reliable operation of the system
- ※ Support CF card, storage, and it is convenient to transfer data
- ※ 2 LED lights (power supply: red, status: green)
- ※ 240\*320 monochrome LCD, human-computer display device (optional)
- ※ 4-wire resistive touch screen, man-machine interface (optional)
- ※ 16-channel analog input
- ※ Voltage Range: 0~5V, 0~10V,  $\pm 2.5V$ ,  $\pm 5V$ ,  $\pm 10V$  (isolation)
- ※ 12-bit 8-channel analog output
- ※ 16-channel dry contact input
- ※ 16-channel relay output
- ※ System Power Supply: +9V~+30V/200mA;
- ※ Operating Temperature: -40℃~+80℃ (without LCD screen)  
0℃~+70℃ (with LCD screen)



### ZIGBEE-1080A

- ※ Transmission Distance:
  - Normal Type: Indoor: <30m, Outdoor: <100 m
  - Strengthen Type: Indoor: <100m, Outdoor: <1000 m
- ※ Supports up to 6-hop
- ※ Can increase the network coverage to 6km
- ※ Transparent Transmission: the data which RF receives will be converted into RS-485/232 output
- ※ Transmission Mode: radio to send or destination address to send mode (default) optional
- ※ Node Type: Central node (coordinator), routing nodes
- ※ Networking Capabilities: star network, tree network, chain-type network, Mesh network
- ※ 16-channel automatic, 254 network ID arbitrarily setting
- ※ Support disconnection reconnection function
- ※ With RS-485/232 interface, can choose by DIP switch, the two can only choose one
- ※ Multi-reliable hardware and software design, watchdog technology enables safe operation of equipment
- ※ Power Consumption:
  - Send Current: General: <50mA; Enhanced: <295mA
  - Idle/Receive Current: General: <20mA; Enhanced: <35mA
  - Sleep Current: <100uA (only the terminal nodes support the hibernation feature)
- ※ Power Supply: 10VDC~30VDC
- ※ Operating Temperature: -20℃~+70℃
- ※ Operating Humidity: 5%~90%



### ZIGBEE-1082

- ※ Input Type: Thermocouple, J, K, T, E, R, S, B, N, and WRe5-WRe26
- ※ Channels: 8-channel differential input
- ※ Sample Rate: 10Hz
- ※ Resolution: 16-bit
- ※ Input Impedance: 20M $\Omega$
- ※ Full-span Drift: 25ppm/℃
- ※ Isolation Voltage: 3000V
- ※ Built-in Watchdog
- ※ Power Supply: +10VDC~+30VDC
- ※ Power Consumption: 0.6W@24VDC