EBYTE

www.cdebye.com

IoT APPLICATION EXPERT

| Professional | Stable | Efficient |

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Hitherto ◄◄◄

2022
Received the title of "SRDI" (Specialization, Refinement, Differentiation, Innovation) Small and Medium sized Enterprise in Sichuan Province, Record annual sales.

2021
Obtained the qualifications of Chengdu Technology Center Enterprise, Industry and Trade Safety Level III Enterprise, and Intellectual Property Advantage Demonstration Unit, with annual sales exceeding 100 million yuan.

2020
Owns SMT workshops and assembly workshops, support OEM and PCBA service. In the future, sales performance will double again

2017
With strong R&D strength and production strength, stand out among the many high-tech companies in the southwest area

2018
Successfully obtaining the national certification "High-Tech Enterprise" , annual sales have repeatedly hit new highs, and double growth of performance

2019
Became the third-party design company of Texas Instruments (TI), established international business department,domestic business department, marketing department, secretary department, and Shenzhen office

2016
Annual sales rose rapidly, breaking through the 10,000,000

2015
The company team is beginning to take shape, through the efforts of 16 sales elites, the company has a place in the wireless market

2013
A core team of 8 people was formed and began to develop and sell wireless products

2012
Chengdu Ebyte Electronic Technology Co., Ltd. was formally registered and established

About Us

Chengdu Ebyte Electronic Technology Co., Ltd. was established in 2012, with an office area of over 4,000 square meters. It is a high-tech enterprise integrating R&D, production and sales, with a complete industrial chain, focusing on Internet of Things communication applications.Products cover LoRa, WiFi, Bluetooth, ZigBee, CAN bus modules, data transmission radio stations, industrial routers/gateways, LORAWAN, remote I/O modules,Industrial signal transmission, etc., with nearly 100 inventions and utility model patents, and the products have passed SRRC, FCC, CE , MIC, KC, NCC and other authoritative certifications, the company is committed to providing professional communication solutions for customers in industries such as artificial intelligence, industrial control, energy conservation and environmental protection, and rail transit.

Main business

- LoRa / WiFi / Bluetooth / ZigBee wireless module   • Serial server
- GPRS / 4G-DTU / NB-IoT Data transmission terminal

Vision	Values	Development strategy	Quality promise	Commitment to employees
Become an expert in wireless data transmission industry	Integrity Quality Development Innovation	International R&D level standardized production	Excellent quality strive for better	Family and business develop simultaneously

Provide customers with software

hardware one-step IoT application solutions

Smart agriculture

Wireless control

Data collection

Industrial manufacturing

Security Monitoring

4G

GPRS

NB IoT

EBYTE ®

Smart home

Real-time positioning

Smart oil field

Remote meter reading

Smart building

- Digital Radio
- Wi-Fi Module
- Power Module
- Signal Conversion Interface

- LoRa
- ZigBee Module
- Remote Control
- Gateway Device

- UART Serial Port Module
- 4G/GPRS/NB/GPS module
- Industrial Router
- LoRaWan

- SPI RF module
- Serial Server
- 4G/CAT1/NB DTU
- CAN bus

- SoC RF module
- Industrial IoT Devices
- Remote IO module
- Sensing and Detection

- BLE Bluetooth Module
- Antenna and accessories
- Industrial Signal Transmission
- Cloud/O Hardware

Professional and reliable IoT application expert

CE certification

FCC certification

Quality certification

RoHS certification

Ebyte product has exported to many countries and regions around the world

has been recognized by the world

IFA Global Markets — Berlin Electronics Fair

Singapore Electronics Fair

CES — U.S. CES Electronics Show

HKTDC — Hong Kong Electronics Fair

Russian International Electronics Fair

Internet of Things India expo — India Electronics and Communications Exhibition

1 The company's research and development capabilities are at the international advanced level

2 Products have passed FCC/CE/RoHS/KC and other international certifications

3 Ebyte product has Exported to many countries and regions around the world

Believe in big brands Believe in Ebyte

Ebyte provides customized wireless data transmission solutions

standing at the forefront of technology to provide you with the best products and services

AVIC

清华大学

DJI

Chinese Academy of Sciences

NARI

CETC

REC

LEVEL®

SIEMENS

Goldcard

Guoteng group

LC@SC SZLCSC

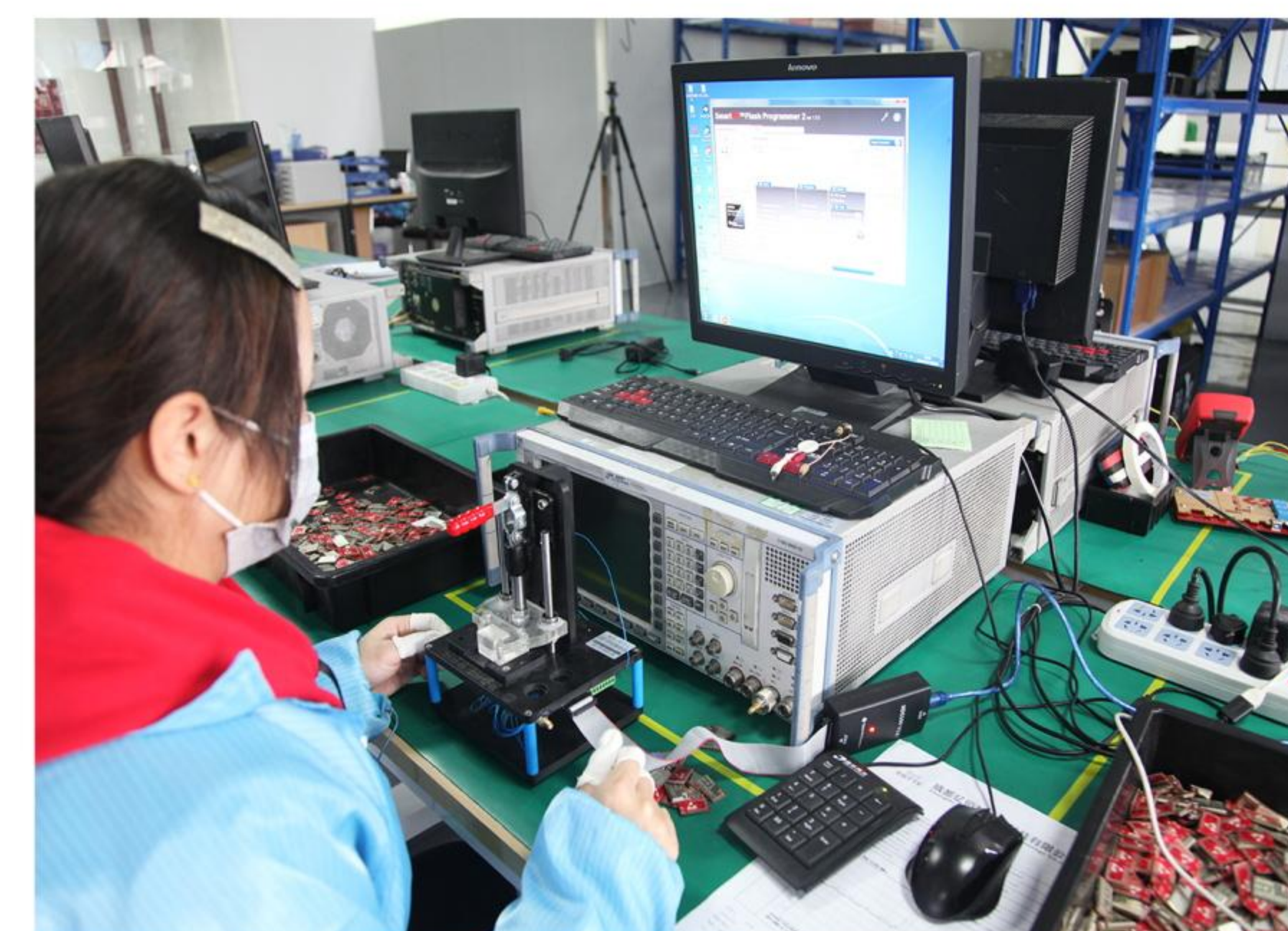Ebyte takes the Internet of Things communication technology as the core, and cooperates with many large enterprises and institutions to launch a variety of industrial communications, Internet of Things modules and wireless data transmission radio communication equipment. The products have industrial-grade quality, excellent performance, stable and reliable, and have been recognized by customers at home and abroad.
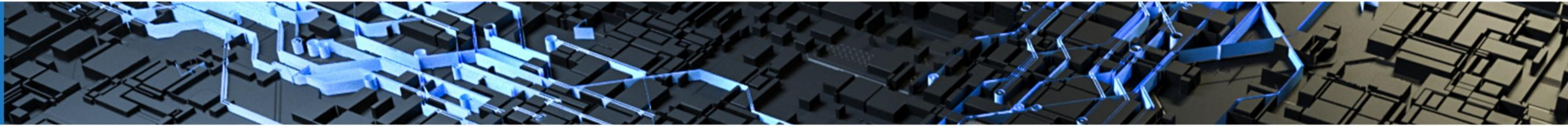
Quality is the key to ensuring the competitiveness of peers

Always keep in mind the expectations of customers, strictly screen parts and strictly monitor the production process,

Only to provide good products with reliable performance and excellent quality

Wireless module

Original imported chip industrial-grade wireless module

Ebyte has established long-term strategic cooperation with chip companies such as NORDIC, SEMTECH, SILICON LABS, etc.

And became a third-party design company of TI (Texas Instruments).

The wireless module produced uses imported original chips, high-quality capacitive and inductive devices, and industrial-grade high-precision

Equipment such as crystal oscillator can work stably for a long time. Relevant materials are detailed, and users can use and develop without barriers.

Maintain long-term and deep cooperation with the world's leading chip manufacturers

TEXAS INSTRUMENTS

NORDIC SEMICONDUCTOR

SEMTECH

SILICON LABS

Application industries

Automated irrigation
Remote data collection and control

Protection monitoring
Centralized monitoring improve efficiency

Exhibitions
Fast networking improve work efficiency

Smart power
Real-time remote monitoring fast sensor data transmission

Wireless UART module

SX1278 Chip Solution

High power 1W

Support air wakeup

Support FEC forward error correction

UART LoRa module

SX1268 Chip Solution

LoRa wireless module

LBT/RSSI

Automatic relay network

UART LoRa module

LLCC68 Chip Solution

LoRa wireless module

LBT/RSSI

Automatic relay network

High-speed LoRa module

SX1280 Chip Solution

High-speed continuous transmission
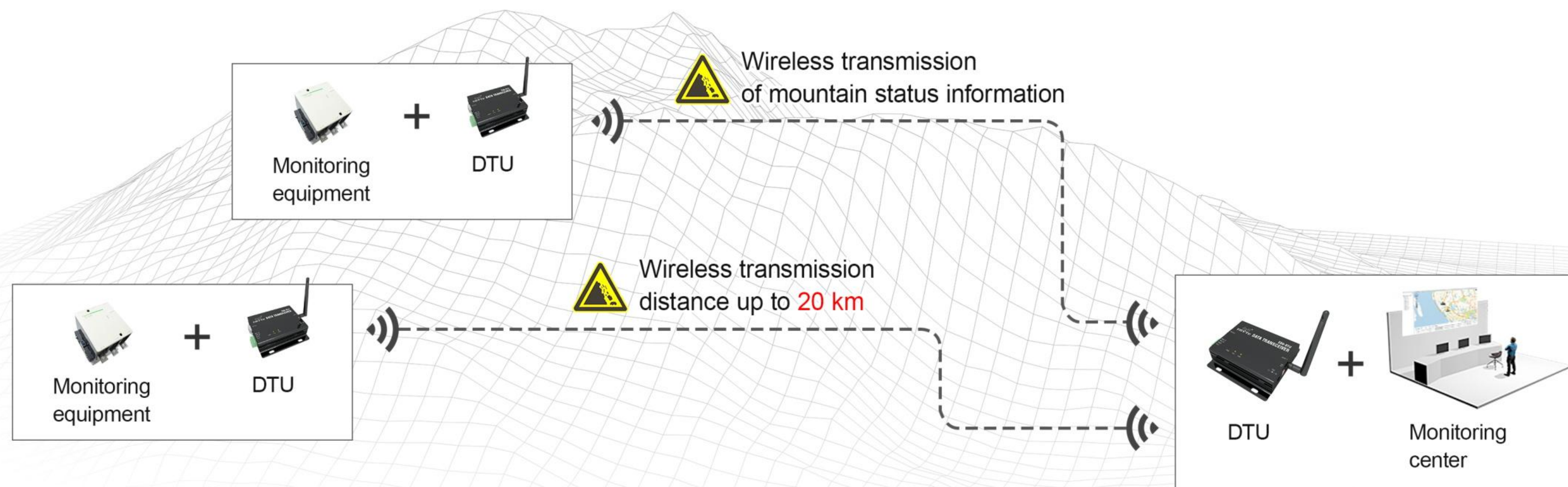
Support RSSI

Multiple working modes

Mountain (debris flow) monitoring application program

The traditional landslide monitoring and early warning system mainly uploads data to the main console through a wired network, and then broadcasts the early warning information manually. Because the landslide monitoring area is located in a remote area with complex geographic conditions, it is difficult to erect the line and the power supply is limited, which leads to the low degree of automation of the traditional method, poor monitoring accuracy, and low real-time performance. Ebyte's wireless modem series products can effectively replace traditional data lines, greatly enhance the ability to resist environmental interference, and reduce construction and maintenance costs.

Monitoring equipment + DTU

Monitoring equipment + DTU

Wireless transmission of mountain status information

Wireless transmission distance up to 20 km

DTU + Monitoring center

Application industries

Pipeline monitoring
automatic warning to prevent it before it happens

Automatic irrigation
Remote data collection saving management costs

Building automation
Efficient management reducing enterprise management costs

Engineering projects
Data is quickly connected to the Internet

High-speed continuous DTU

High-speed continuous transmission
Support high-speed continuous
Adapt to Modbus protocol
Ultra-low power consumption

RS485 to ZigBee wireless modem

ZigBee wireless modem
Strong diffraction ability
Flexible network structure
Far coverage

Narrowband wireless modem

Multiple certifications
Low frequency narrow band
strong penetration and diffraction
Industrial quality

LoRa

Oil well data monitoring solution

Monitoring the working status of oil well equipment is an important basic task of oilfield management. At present, manual inspection is commonly used for regular maintenance, which consumes manpower, material resources and time, and it is impossible to obtain the latest working status in the first time. Ebyte's LoRa series products can quickly transfer data scattered across the site to the data center, allowing the center to control the working status of the entire oilfield for the first time, laying the foundation for data dynamic analysis.

Interference

4G network Transmission

4G

LoRa spread spectrum communication: anti-interference, longer transmission distance, and stable communication

Application industries

Advanced meter
Realize remote collection
Reduce labor

Wireless remote control
Improve work efficiency
and freely control remote

Wireless alarm
Real-time alarm
faster response

Industrial sensors
No wiring, more convenient
adapt to more applications

LoRa wireless module

LoRa Wireless Module
Automatic relay networking
Set communication key by yourself
Wireless parameter configuration

New LoRa wireless modem

Military-grade LoRa modulation wireless DTU
Single package supports 240 bytes
230MHz power frequency band penetration
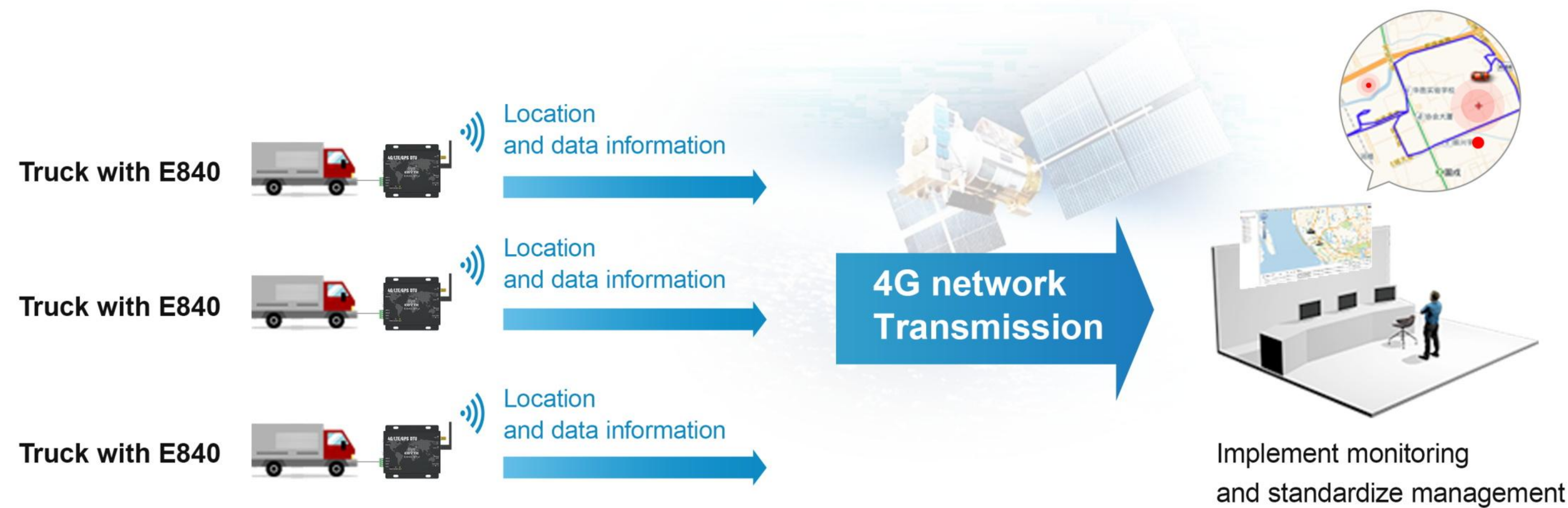Support multi-level relay networking"

RF to 2G/4G network server

Radio frequency to 2G/4G network server
Sub-1G and 2G/4G network data transmission
Support LoRa spread spectrum technology
Built-in high-performance MCU

4G/GPRS/NB

GPRS 4G NB-IoT

Cold chain logistics vehicle application

In the current cold chain transportation business, most of the independent temperature recording and management are carried out by placing an isolated temperature detection recorder on the car. Therefore, cold chain logistics encounters the bottleneck that it is difficult to monitor the temperature and analyze data in real time. The 4G/GPRS/NB series products launched by Ebyte use the operator's network to upload data to the Internet in real time, enabling real-time monitoring anytime, anywhere.

Truck with E840

Location and data information

Truck with E840

Location and data information

Truck with E840

Location and data information

4G network Transmission

Implement monitoring and standardize management

Application industries

Automotive applications
Improve operating efficiency and view vehicle status

Shared equipment
More convenient to use and realize remote monitoring

Wind monitoring
Real-time control of data effective monitoring

Vending machine
Reduce labor costs and collect transaction information remotely

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Serial port to 2G/4G wireless module

4G LTE data transmission module

Support transparent transmission

Support up to 230400 baud rate

Large serial port buffer function

Serial port to 2G/4G wireless modem

GSM/GPRS digital modem

Support data transparent transmission

Support TCP, UDP network protocol

Support heartbeat package, registration package

Serial port to NB network wireless module

NB data transmission module

Support mobile NB card

With anti-interference ability

Anti-electromagnetic interference

Remote control

Remote control solution for smart agriculture and fishery

Smart agriculture and fishery uses the 4G mobile phone cloud smart remote control switch to realize remote control of the aerator on the mobile phone APP through the 4G network. The remote control switch supports multiple control methods (mobile phone APP/remote control/keys), and has multiple working modes (self-locking/jogging/interlocking). The remote control solution is highly efficient and low-cost, making smart agriculture and fishery more "smart"

4G network
Unlimited distance

Switch 1

Switch 2

Switch 3

Switch 4

Application industries

Industrial control
Remote control
High efficiency

Agricultural irrigation
Automated control to improve energy efficiency

Household appliances
Remote control
convenient and worry-free

Security systems
Real-time remote control
Fast and efficient

4G phone smart remote control switch

Free for life (support sim card)

Multiple control methods (APP/remote control/keys)

Multiple working modes

Flexible power supply (AC/DC)

Multi-specification output (channel 1/2/4)

Support rail installation

4G phone smart remote control switch

Free for life (support sim card)

Multiple control methods (APP/remote control/keys)

Multiple working modes

Flexible power supply (AC/DC)

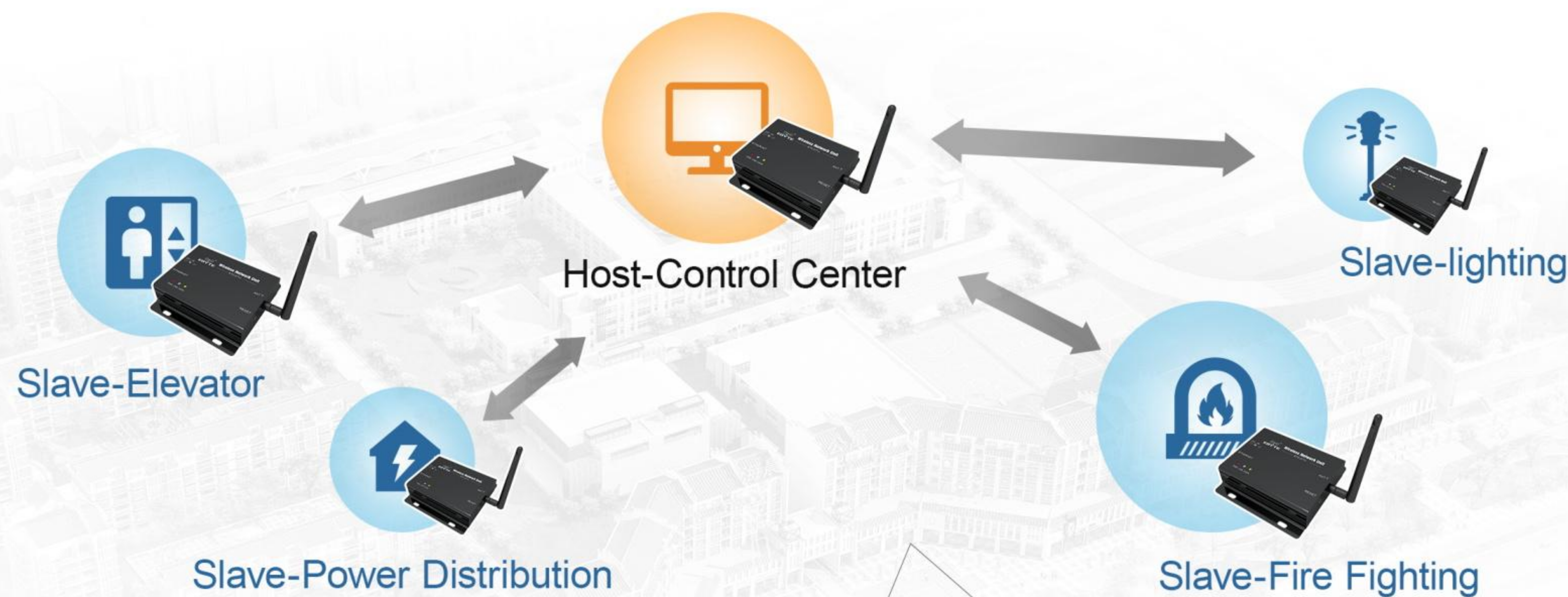Multi-specification output (channel 1/2/4)

Support rail installation

Wireless remote control switch

No 4G network required

Remote control (wireless)

Multiple working modes

Flexible power supply (AC/DC)

Multi-specification output (channel 1/2/4)

Support rail installation

Wi-Fi/Serial server

Smart community application solution

Building automation adopts IoT technology to conduct comprehensive and effective monitoring and management of HVAC, water supply and drainage, power supply and distribution, lighting, elevators, and fire protection in the community, expand the comprehensive use of the community and improve the efficiency of property management, and ensure community equipment in the best operating state of high efficiency and energy saving. Ebyte's wifi/serial server series products are easy to operate and simple to use. The use of data transparent transmission can quickly connect to different use environments, reducing the pressure of system development.

Slave-Elevator

Host-Control Center

Slave-lighting

Slave-Power Distribution

Slave-Fire Fighting

Multiple groups of networks can be run in the same area at the same time
and multiple slaves can send data to the host at the same time

Application industries

Wireless alarm
Real-time alarm to
ensure fast reception

Remote keyless entry
Intelligent control door lock
Convenient and quick

Smart home
Remote viewing
intelligent control
improve the quality of life

Shared equipment
More convenient to use
realize remote monitoring
management

Serial port to WiFi network

Serial port and WiFi two-way transparent transmission

CC3200 chip solution

3M high-speed continuous transmission

Support OneNet

RS485 to Ethernet serial server

RS485 to Ethernet serial server

Two-way transparent transmission

Cost-effective

Support TCP/UDP

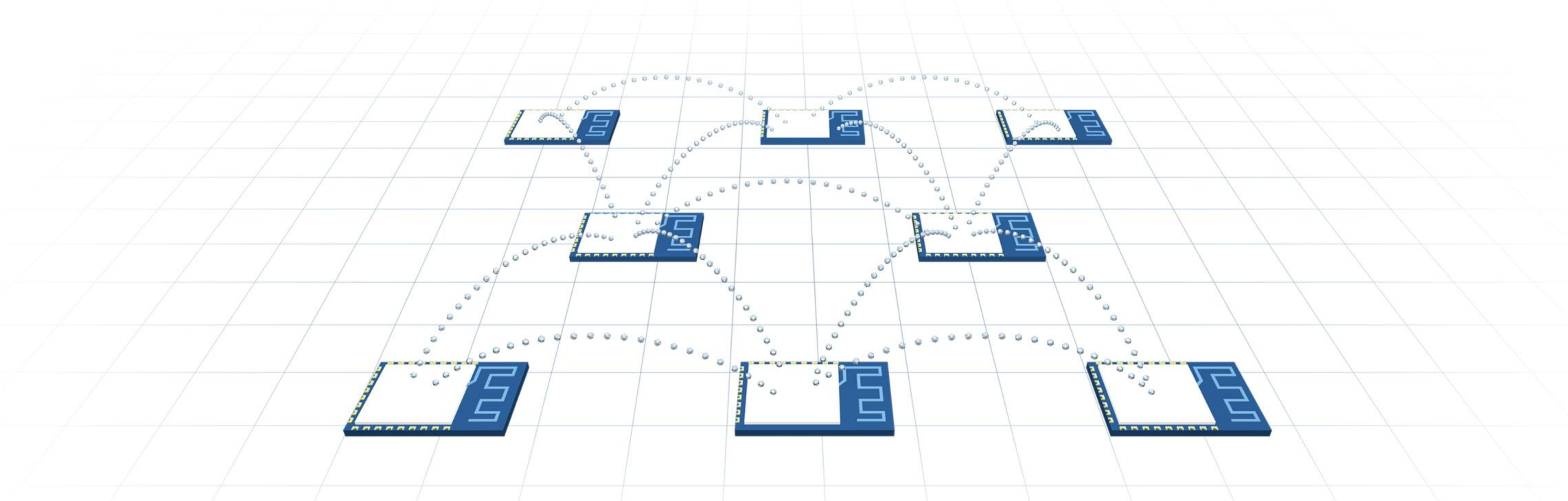**RF to Ethernet serial server**

Star Ad Hoc Network

Integrate coordinator and terminal as one

Long-distance and high-speed transmission modes

PC operation

Bluetooth

▌SigMesh Ad Hoc Network

SigMesh especially improves the communication efficiency of building a large-scale network coverage, and will be more suitable for building automation construction, allowing tens of thousands of devices to transmit information in a safe, reliable, and stable environment. In the relay network, any module is a relay, and data can be received at the same time as the relay. Data signal covers a range of 50 meters.

- Multiple-to-multiple communication
- Relay/node integration
- Supporting multi-node networking

▌Application industries

Street light control
Simple maintenance
intelligent control

Building automation
Efficient management
reducing costs

Wireless remote control
Ultra-low power consumption
small size

Wireless audio
Simple and easy to use
convenient for secondary
development

Bluetooth Mesh Ad Hoc Network Module

TLSR8269 chip solution

Multi-node networking

Automatically remember network information

Mobile APP can proxy to any node to access the network

High-speed Bluetooth module

CC2640 Chip Solution
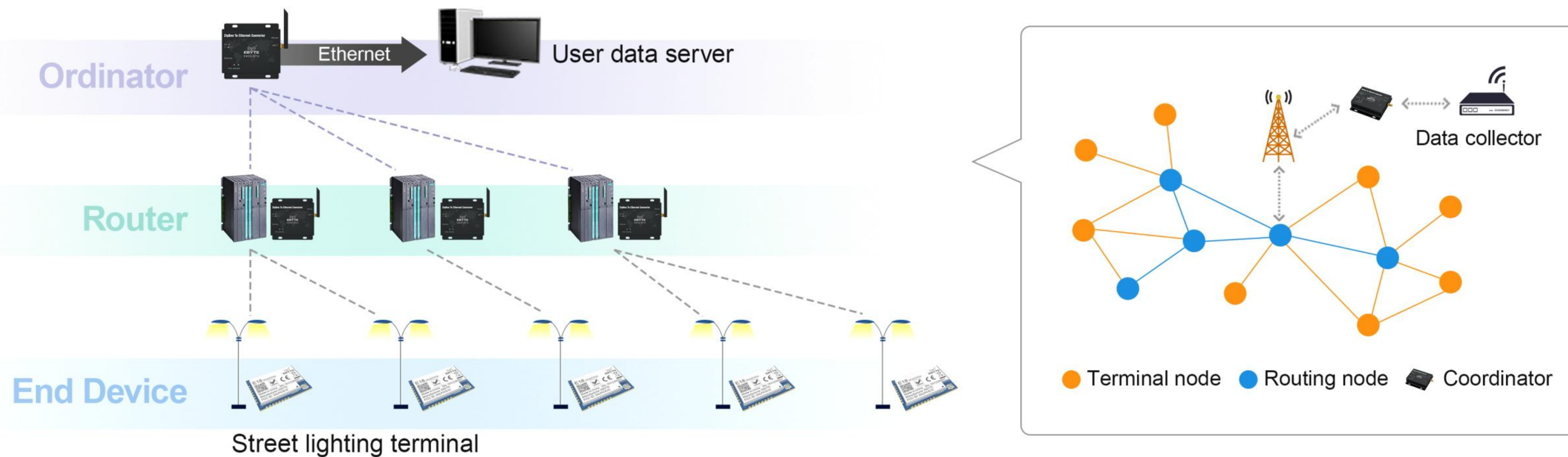
Ultra small size

Bluetooth Low Energy 4.2

Multi-role mode

Low power Bluetooth module

nRF51822 Chip Solution

High-performance low-power processor

Support BLE4.2, BLE5.0

256KB FLASH, 16KB RAM

ZigBee

Smart street lighting solution

The Internet of Streetlights can support intelligent monitoring and command control applications such as streetlights, environmental parameters, traffic flow, etc. in the upper layer of smart cities, and realize the intercommunication and sharing of equipment resources and data resources in smart cities through cloud services, avoiding basic transmission in smart cities. The repeated construction of sensor network facilities achieves a high degree of sharing and sharing of multiple sensor terminal equipment and information resources. The ZigBee products launched by Ebyte feature fast networking, strong self-healing, and adapt to complex road conditions which are the best choice for smart street lighting.

Ordinator — Ethernet → User data server

Router

End Device — Street lighting terminal

Data collector

● Terminal node ● Routing node ▬ Coordinator

Application industries

Security systems
No wiring required
Maintenance cost

Building automation
Efficient management
Reducing costs

Healthcare products
Stable data transmission
Protect user data privacy

Hotel solutions
Flexible networking
Convenient management

ZigBee to UART module
ZigBee 3.0
Support ZHA/ZLL
ZigBee Ad Hoc Network
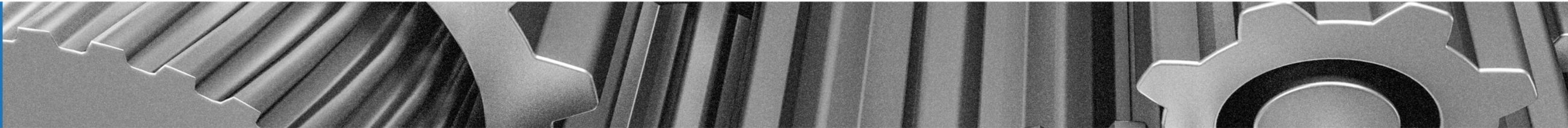Adopt AES 128-bit encryption function

RS485 to ZigBee modem
ZigBee wireless modem
Strong diffraction ability
Flexible network structure
Wide coverage

High-power ZigBee gateway
High power 500mW
Automatic networking
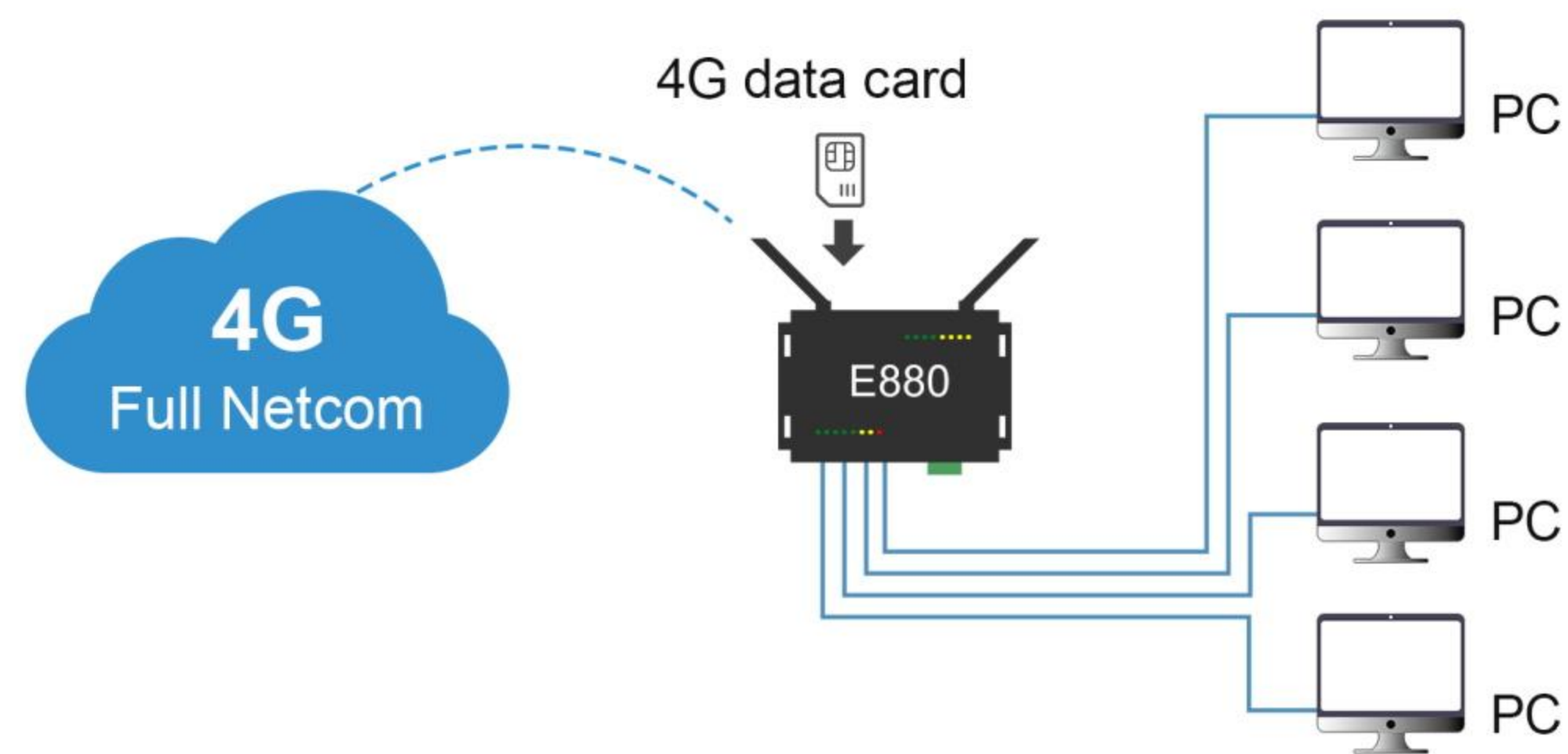Network self-healing
Two-way Socket link
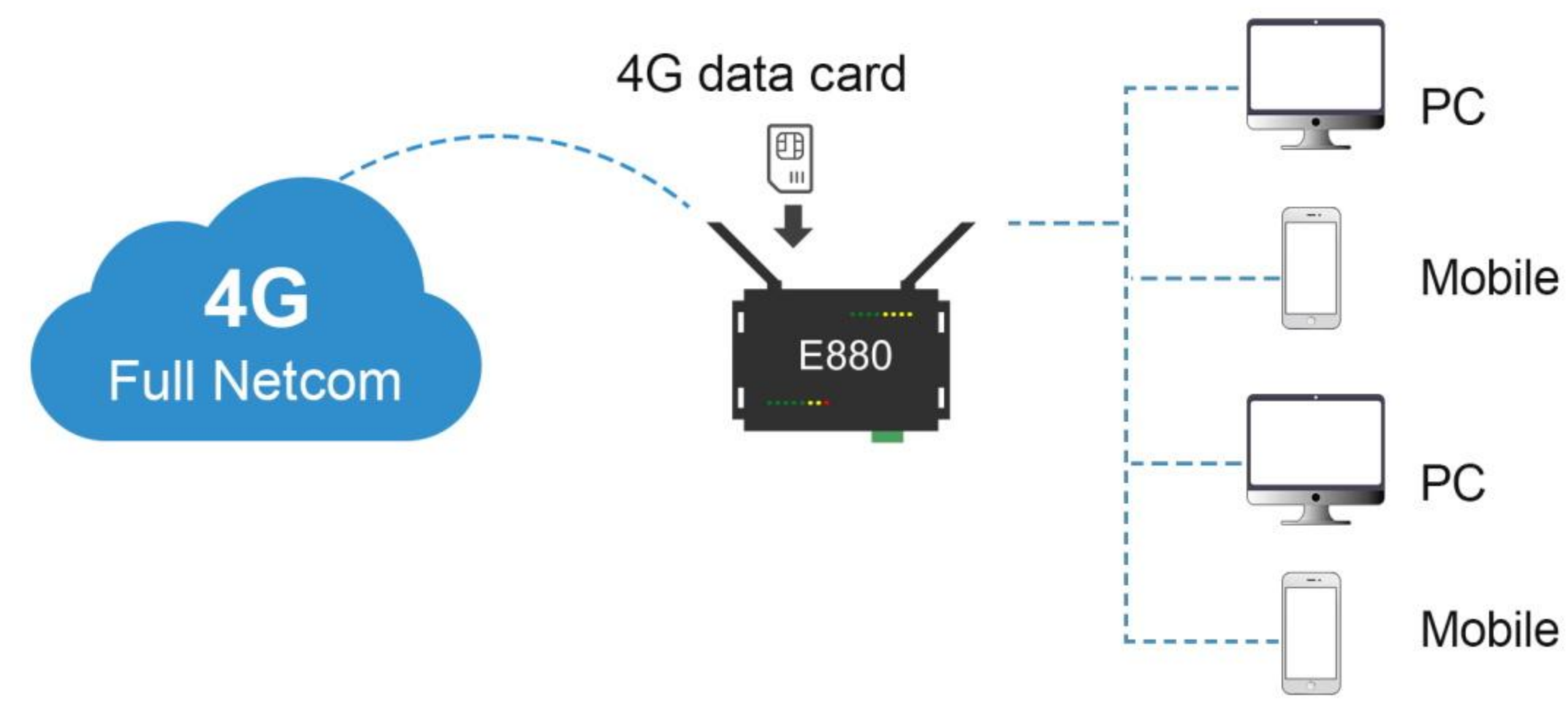
Industrial router

Mining production system solutions

Mining production is in a complex system that dynamically changes with time. This characteristic determines that the traditional mine production management project separates production personnel, physical infrastructure and information infrastructure, and various actualities formed during the production process. The status data is therefore not effectively integrated. Ebyte's industrial routers can effectively link the physical infrastructure and information infrastructure involved in the production process, so it can effectively integrate various actual status data.

Application industries

Engineering projects
Data is quickly connected to the Internet

Remote mountainous areas
Long-distance wireless upload to remote server

Tourist attractions
Push attraction information to improve tourist experience

Exhibitions
Improve work efficiency
Fast networking
Realize mobile office

❶ 4G to wired network

4G data card

4G Full Netcom

E880

PC
PC
PC
PC

❷ 4G to Wi-Fi

4G data card

4G Full Netcom

E880

PC
Mobile
PC
Mobile

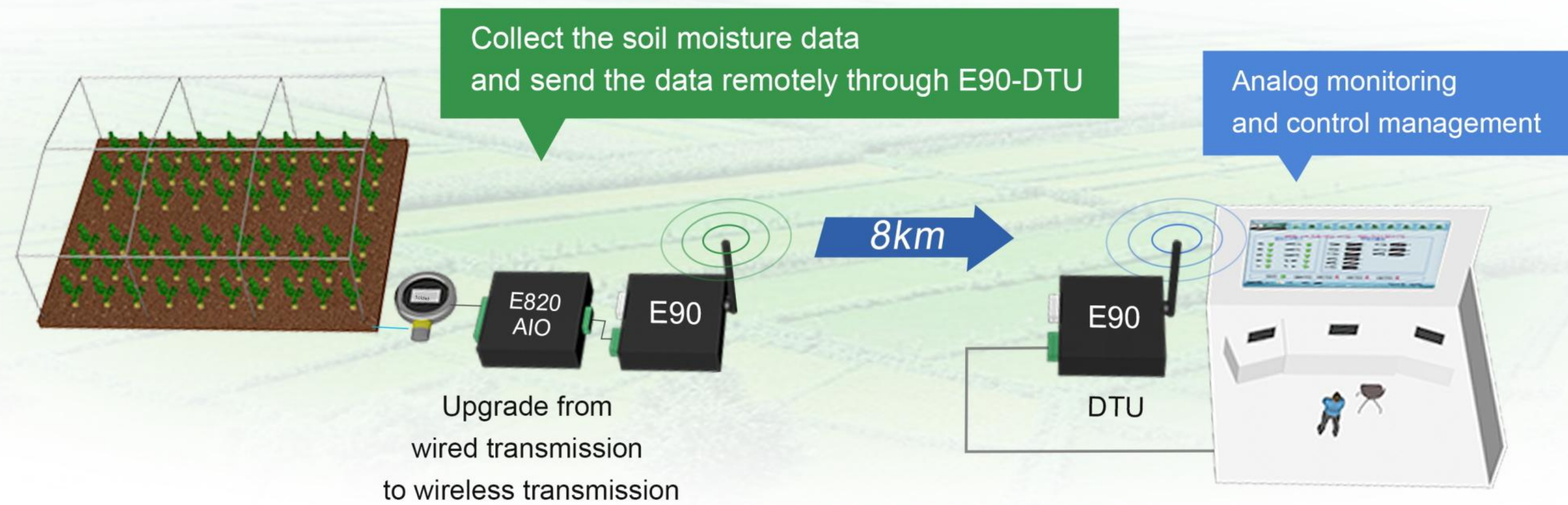## Industrial 4G wireless router

- 4G wireless router
- QOS flow control management
- WPS one-click Internet

- Commercial-grade high-performance embedded structure
- Support SMS AT command remote management
- Practical design with multiple network ports

Wireless data transmission gateway

Smart agricultural data collection solution

Smart agriculture is the use of sensors, controllers and software to monitor and control the agricultural environment and production process through mobile phones or computers. Ebyte's wireless data transmission gateway can transmit field data to the network data center in real time, and establish a professional system based on a big data platform, making traditional agriculture more "smart".

Application industries

Bridge monitoring
Wireless transmission
online monitoring of real-time data

Automated irrigation
Remote data collection
saving management costs

Forest fire monitoring
Centralized monitoring
improve efficiency
and quickly collect field data

Industrial sensors
Real-time remote monitoring
fast sensor data transmission

Collect the soil moisture data
and send the data remotely through E90-DTU

Analog monitoring
and control management

E820 AIO

E90

8km

E90

DTU

Upgrade from
wired transmission
to wireless transmission

RF to Ethernet high-speed connection

Ethernet high-speed continuous transmission
Ultra low power consumption
TCP multiple connections
Heartbeat package, registration package

LoRa to 4G data transmission gateway

4G high-speed big data transmission
Automatic relay networking
RF distance up to 10km
Support two Socket links to send and receive

ZigBee gateway

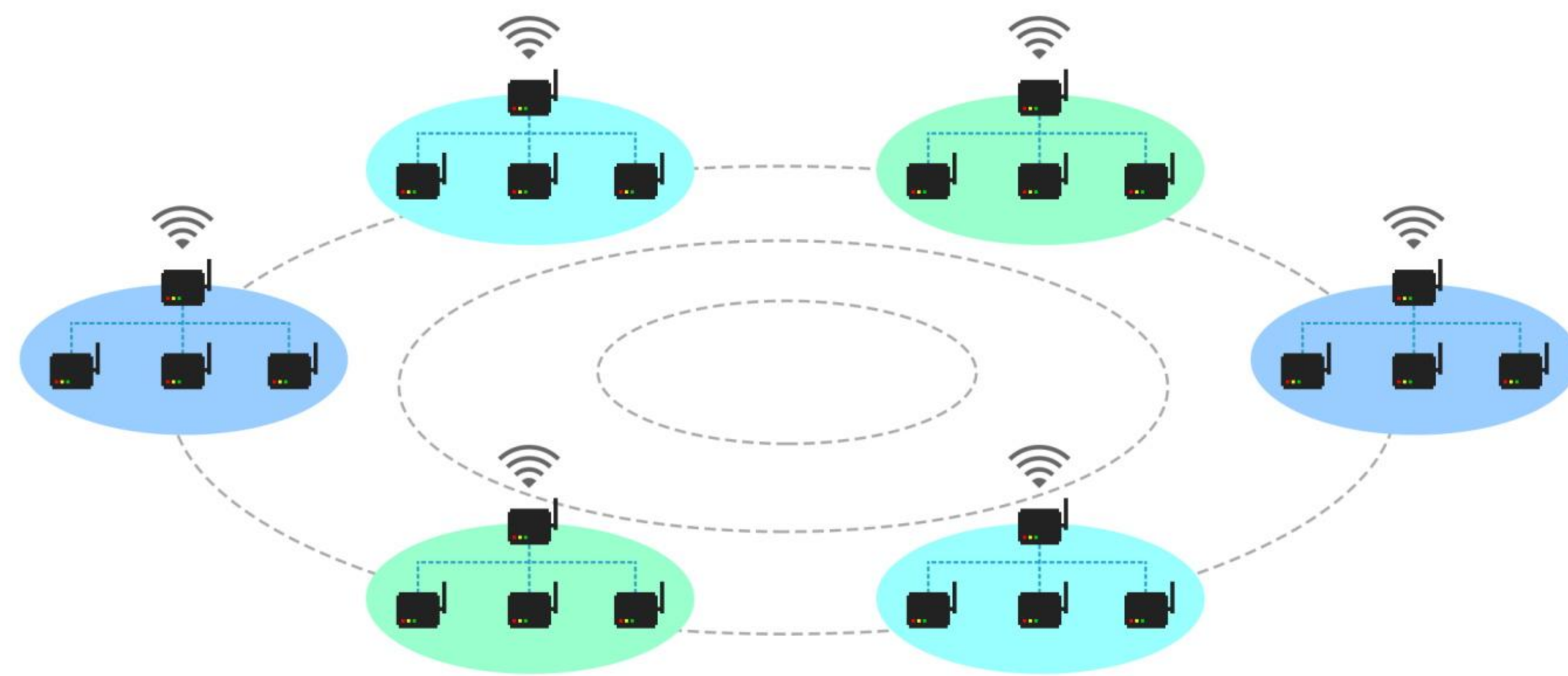ZigBee Ad Hoc Network
Two sockets work at the same time
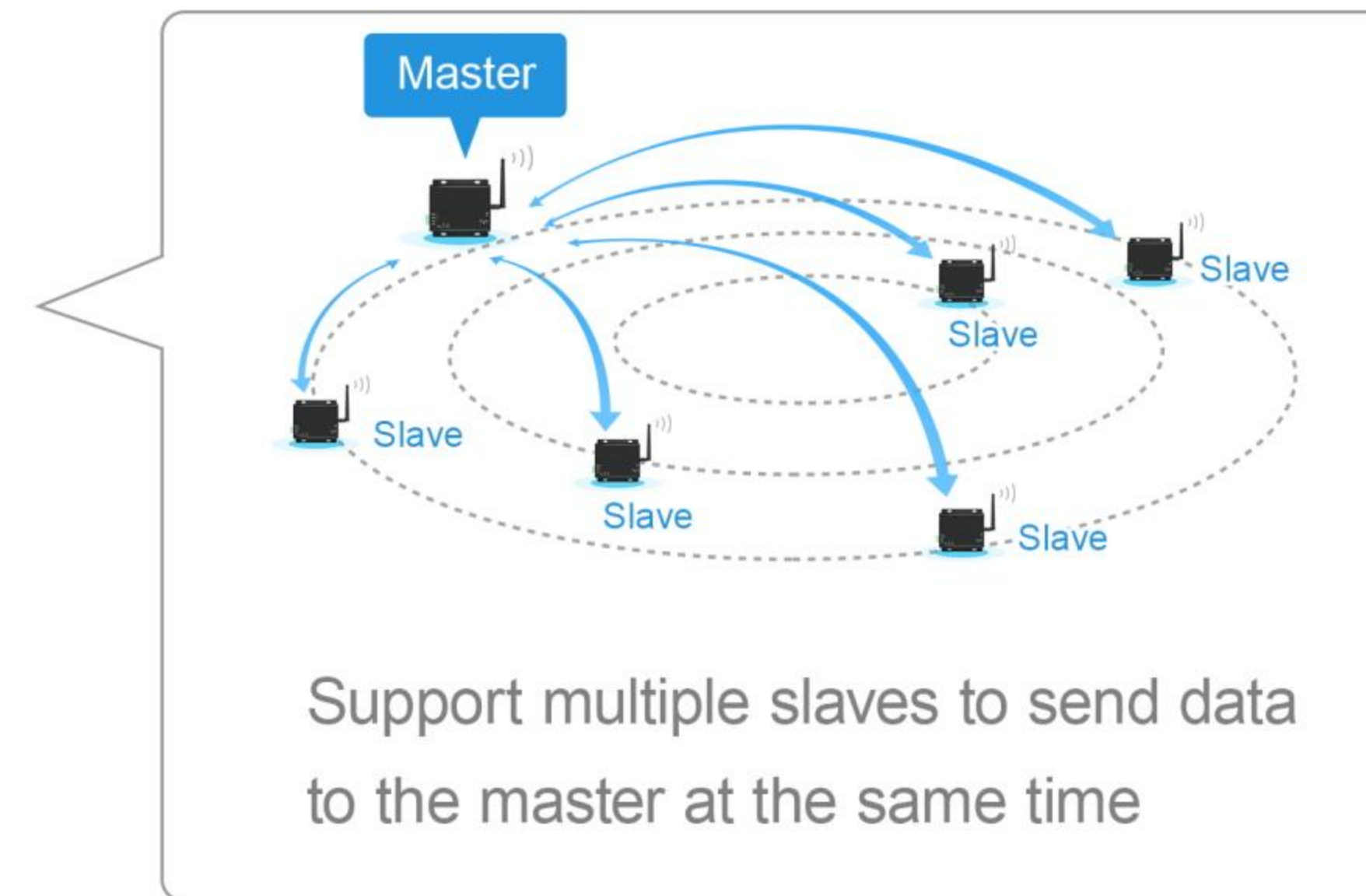4 Socket working methods
Support Ebyte Cloud Transmission

RF Ad Hoc Network

Wireless radio frequency ad hoc network series

Ebyte's radio frequency ad hoc network equipment adopts advanced radio frequency modulation, which has long transmission distance and strong anti-interference ability; at the same time, it is equipped with an easy-to-operate ad hoc network system, which is easy to use and fast in networking, and can adapt to most wireless networks. Application scenarios.

Application industries

Wireless alarm
Real-time alarm
Faster response

Industrial remote control
Improve work efficiency
Freely control

Smart home
Remote viewing
Intelligent control
Improve the quality of life

Building automation
Efficient management
Reducing costs

Master

Slave
Slave
Slave
Slave
Slave

Support multiple slaves to send data to the master at the same time

Multiple networks can run simultaneously in the same area

Star Ad Hoc Network DTU

Star Network System
Integrate coordinator and terminal
long-distance and high-speed
PC operation

One-master and multiple-slave

Star Network System
4G high-speed big data transmission
CSMA/CA carrier sense
Ebyte Cloud breaks the distance limit

Star Ad Hoc Network Module

One-master, multiple-slave star network applications
Support multiple slave data sending at the same time
Strict data check and automatic retransmission mechanism
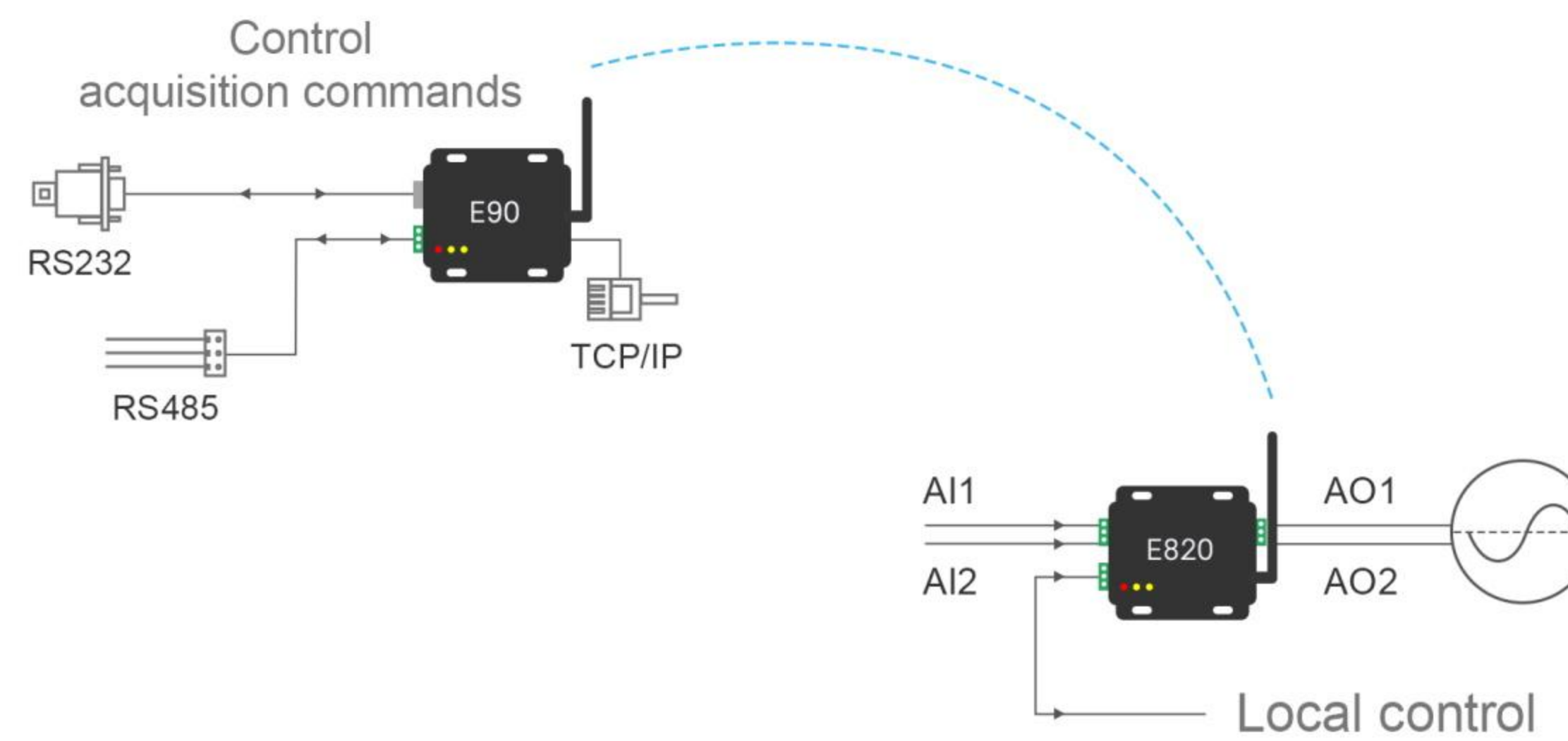RS232/RS485

Remote I/O

Sewage treatment plant solutions

In response to the continuous development of the country's emerging strategic industries, in order to change the current status of low efficiency and extensive operation of sewage treatment, Ebyte has launched remote I/O control equipment. The device can perform real-time operation of remote I/O devices through radio frequency, Ethernet, GRPS, etc., which effectively accelerates the response speed of system management and greatly improves the operation and maintenance capabilities of sewage treatment enterprises.

Application industries

Industrial remote control
Improve work efficiency
Freely control remote equipment

Bridge monitoring
Wireless transmission
online monitoring of real-time data

Smart agriculture
Temperature and humidity
data transmission

Wireless sensors
No wiring, more convenient
Adapt to more applications

❶ Wireless follow (replace traditional wired)

Up to **8** kilometers

AI1 AI2 E820 — E820 AO1 AO2
4~20mA   4~20mA

❷ Wireless acquisition control

Control acquisition commands
RS232 E90 TCP/IP
RS485

AI1 AI2 E820 AO1 AO2
Local control

Analog follow/control acquisition modem
Analog Wireless Data Transmission modem
Support ModBus-RTU
4-20mA
Wireless transmission 8KM

Ethernet switch I/O controller
Ethernet Switch I/O Controller
4-channel digital isolated input
4-channel digital isolated output
Ethernet transparent communication

4G network remote I/O controller
GPRS network remote I/O controller
4 AI+4 DI+4 channels relay output
Support Socket, support TCP/UDP
One key to restore factory settings