

RTU-900H, RTU-900H-TFT

Industrial IoT Remote Terminal Unit (RTU)

Advanced Data Acquisition & Remote Monitoring Solution



RTU-900H Industrial IoT Remote Monitoring RTU



RTU-900H-TFT Industrial IoT RTU with TFT Display

Industrial IoT Remote Monitoring RTU

Product Overview

The RTU-900H is a high-performance Industrial IoT Remote Terminal Unit (RTU) designed for remote monitoring, intelligent data acquisition, and distributed control applications.

Featuring an industrial-grade 32-bit processor, embedded real-time operating system, and reliable communication modules, the RTU-900H provides stable operation in harsh industrial environments.

With flexible I/O interfaces, multiple communication options, and comprehensive protocol support, the RTU-900H enables seamless integration with sensors, field devices, SCADA systems, and cloud platforms.

Key Features

Flexible Connectivity

- 4G LTE / Ethernet / LoRa communication
- Multiple wired and wireless connectivity options
- Reliable remote data transmission

Powerful Data Acquisition

- RS485 ×3
- RS232
- TTL
- AI / DI / DO interfaces
- Relay outputs
- Supports various industrial sensors

Multi-Protocol Compatibility

Supports:

- Modbus RTU
- Modbus TCP
- MQTT
- Hydrological protocols
- Environmental monitoring protocols
- Custom protocols

Edge Intelligence

Built-in edge processing functions:

- Data filtering
- Threshold alarm
- Local calculation
- Flow calculation
- Logic control

Industrial Reliability

Designed for demanding field applications:

- Wide voltage input: 9 – 32 VDC
- Operating temperature: -40° C to +85° C
- ESD protection
- Stable long-term operation

Typical Applications

Water Resources Monitoring

Real-time monitoring of:

- Water level
- Rainfall
- Flow
- Reservoir conditions

Flood Early Warning

Remote monitoring stations for:

- Rivers
- Reservoirs
- Flood control systems

Infrastructure Monitoring

Applications include:

- Dam safety monitoring
- Bridge structural health monitoring
- Slope monitoring
- Geotechnical monitoring

Industrial Automation

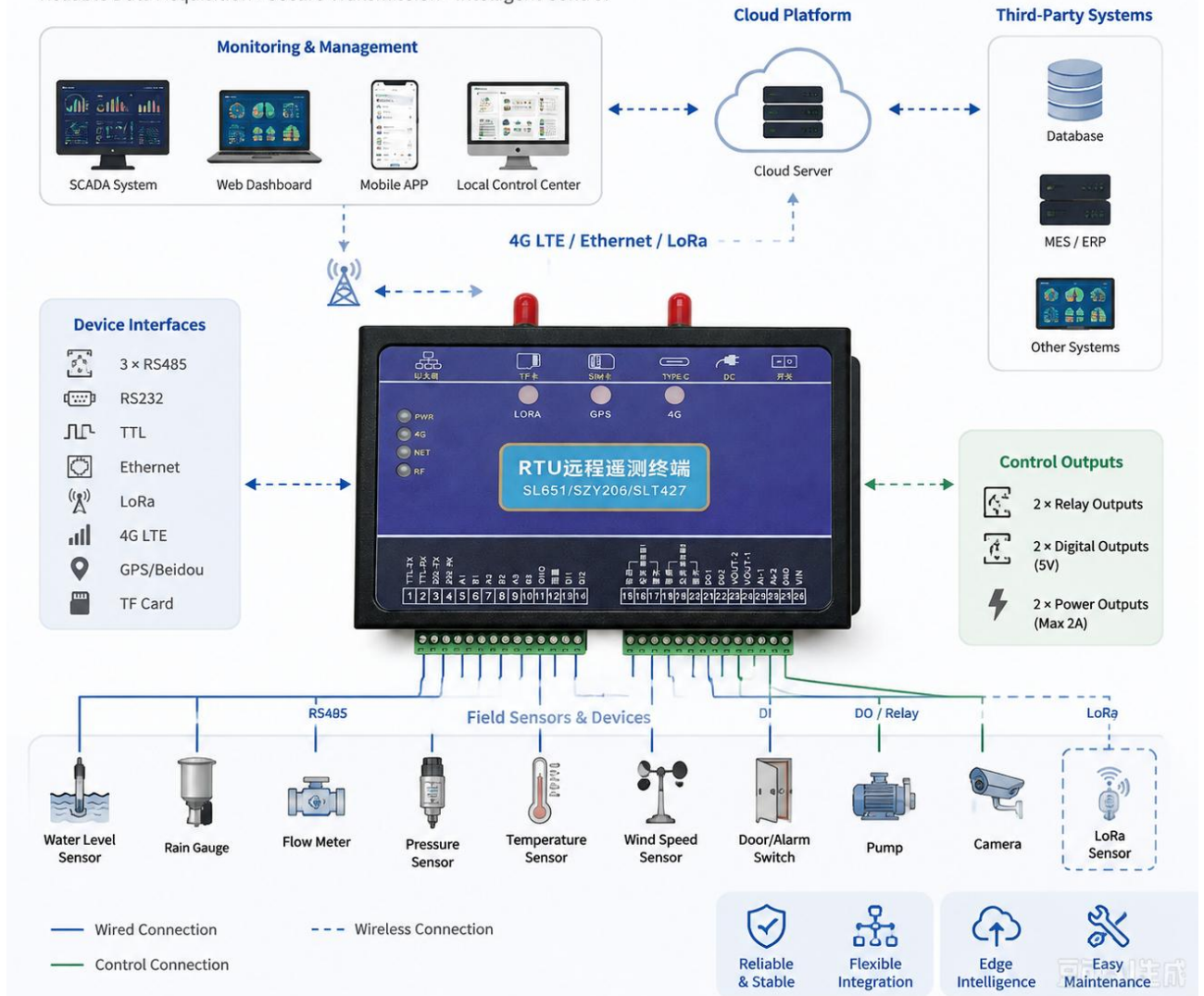
Applications include:

- Remote pump stations
- Pipeline monitoring
- Utility monitoring

System Architecture

ZX-900H System Architecture

Reliable Data Acquisition • Secure Transmission • Intelligent Control



Technical Specifications

Communication

Item	Specification
Cellular	4G LTE
Wireless	LoRa
Ethernet	10/100M TCP/IP
Protocols	Modbus RTU/TCP, MQTT

Interfaces

Interface	Quantity
RS485	3
RS232	1
TTL	1
AI (4–20mA)	2
DI	2
DO	2
Relay Output	2

Processing & Storage

Item	Specification
CPU	Industrial 32-bit Processor
SRAM	512KB
Flash	16MB
Storage Expansion	Micro SD Card up to 128GB

Advanced Functions

Multi-Server Data Reporting

Supports simultaneous data transmission to multiple monitoring platforms.

Store-and-Forward

Automatically stores data during communication interruptions and uploads historical records after reconnection.

Camera Trigger Function

Supports industrial camera connection through RS232/RS485 for synchronized image and data monitoring.

OEM / ODM Capability

Available services:

- Firmware customization
- Protocol customization
- Hardware customization
- Cloud platform integration

Why Choose HUENTROPY

Reliable Industrial IoT Solutions

- ✓ Professional RTU development experience
- ✓ Flexible customization capability
- ✓ Competitive OEM solutions
- ✓ Stable hardware and firmware
- ✓ Technical support for system integration partners

Contact

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