

## RTU-800H

# Industrial 4G Remote Terminal Unit (RTU)

Compact RTU Solution for Remote Monitoring,  
Industrial Automation and IoT Connectivity



## Product Overview

The **RTU-800H-4G Industrial RTU** is a compact and cost-effective remote terminal unit designed for reliable field data acquisition, wireless telemetry and industrial IoT applications.

With integrated **4G LTE CAT1 communication**, flexible serial interfaces and multiple industrial protocols, the RTU-800H-4G enables seamless connection between field devices, sensors and cloud/SCADA platforms.

Its compact DIN-rail design, wide voltage input and robust industrial performance make it suitable for remote monitoring applications in water management, environmental monitoring, industrial automation and smart infrastructure.

## Key Advantages

### Reliable 4G Connectivity

Stable wireless communication for remote and unattended sites.

### Flexible Protocol Integration

Supports MQTT, Modbus RTU, HJ212, SL651, DTU mode and custom protocols.

### Easy System Integration

Compatible with various RS485 sensors, meters and industrial devices.

### Store-and-Forward Data Protection

Automatically stores and retransmits data after network recovery.

### Compact Industrial Design

DIN-rail mounting and wide voltage input for easy deployment.

## Cost-effective IoT Deployment

Ideal solution for system integrators and industrial monitoring projects.

# Typical Applications

## Industrial IoT

Remote data acquisition and cloud connectivity.

## SCADA Systems

Field device communication and centralized monitoring.

## Remote Equipment Monitoring

Pump, motor, valve and equipment status monitoring.

## Pump Station Automation

Remote control and operational data collection.

## Water Management

River, reservoir and water-level monitoring.

## Environmental Monitoring

Air quality, weather and environmental data acquisition.

# System Architecture

# ZX-800H-4G System Architecture

Reliable Data Acquisition • Wireless Transmission • Cloud Connectivity



## Technical Specifications

| Parameter         | Specification        |
|-------------------|----------------------|
| Communication     | 4G LTE CAT1          |
| Power Supply      | 9 - 36 VDC           |
| Operating Current | ≤30 mA @ 12V         |
| Serial Interface  | RS485 / RS232 / TTL  |
| Digital Input     | 1 × DI (Dry Contact) |
| Digital Output    | 1 × DO               |
| Data Storage      | 16 MB                |

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| Parameter             | Specification       |
|-----------------------|---------------------|
| Installation          | 35mm DIN Rail       |
| SIM Card              | Nano SIM            |
| Antenna               | External 4G Antenna |
| Operating Temperature | -40° C ~ +85° C     |

## Communication Protocols

| Protocol        | Application                                |
|-----------------|--------------------------------------------|
| MQTT            | Industrial IoT cloud communication         |
| Modbus RTU      | Industrial sensor and device integration   |
| HJ212           | Environmental monitoring platforms         |
| SL651           | Hydrological monitoring systems            |
| DTU Mode        | Transparent serial-to-network transmission |
| Custom Protocol | OEM system integration                     |

## Advanced Functions

### 24-channel Data Mapping

Flexible Modbus data mapping for multi-device monitoring applications.

### Multi-server Data Reporting

Supports parallel communication with up to four central servers.

### Intelligent Alarm-triggered Sampling

Automatically increases acquisition frequency when abnormal conditions are detected.

### Local Data Logging

Stores historical process data for later retrieval and transmission.

## Why Choose RTU-800H-4G?

- ✓ Industrial-grade remote monitoring solution
- ✓ Reliable communication for unattended sites
- ✓ Flexible integration with sensors and platforms
- ✓ Suitable for OEM and system integration projects
- ✓ Designed for long-term field deployment

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