

# Kimbal's Remote Terminal Unit (RTU)

Smart Choice for Smart Grids





Powering the Future of Grid Intelligence with

# Reliable Automation & Smart Control



**Kimbal's Remote Terminal Unit (RTU)** is a sophisticated automation solution designed for substation automation, and remote monitoring. It may act as a substation controller, a bay controller or as a data concentrator between the substation process bus and the **SCADA (Supervisory Control and Data Acquisition)** systems, ensuring real-time data collection, analysis, and control.

With a modular and scalable design, our RTU seamlessly integrates into smart grids, and critical infrastructure enabling seamless integration between metering, grid automation, and remote monitoring for a more intelligent and connected power infrastructure.



# The Distinguishing Key Features

The RTU Built for the Next-Gen Grid



## Modular & Scalable Design

- Hot-swappable power supply, CPU, I/O, and communication modules
- Expandable architecture for centralized and distributed deployments



## Advanced Data Acquisition & Communication

- Multi-protocol support: IEC 60870-5-104/101, Modbus, MQTT, DLMS/COSEM
- Connectivity: RS-232, RS-485, TCP/IP, 4G LTE (dual SIM for redundancy)
- Configurable scanning resolution for real-time monitoring



## High-Performance Input/Output (I/O) Modules

- Configurable with multiple I/O combinations to meet diverse automation requirements.



## Cybersecurity

- Compliance: IEC 62443-4-2 cybersecurity standards
- Secure Boot, VPN, and encrypted communication (IPSec VPN, IEC 62351-3),



## Remote Management & Updates

- Secure over-the-air (OTA) firmware updates
- Built-in engineering tool for diagnostics and real-time monitoring

Applications from Substations to

# Industries & Smart Cities

## **Substation Automation**

Integration with IEDs, relays, and protection devices

## **Smart Grid & Distribution Automation**

Fault detection, load balancing, and energy optimization

## **Industrial Process Automation**

Monitoring of motors, pumps, turbines

## **Oil & Gas Pipeline Monitoring**

Remote control, leak detection, and compliance

## **Renewable Energy Monitoring**

Solar & wind farm integration into SCADA systems

## **Water & Wastewater Management**

Smart water distribution and pumping station control



When Innovation Meets

# Affordability & High Performance



Hot-swappable modules allow zero downtime maintenance



Edge processing capabilities for high-speed data analytics (10ms I/O scanning)



Seamless SCADA integration (IEC 104, MQTT)



Integrated Web Server & Engineering Tool for remote configuration



Highly competitive pricing compared to other brands in the market



# Who are we helping

Utilities, Industries & Smart Infrastructures  
Everywhere



Electric Utilities (Substation Automation,  
Distribution Automation, Renewable Energy)

Industrial Companies (Process Control, Manufacturing)



SCADA System Integrators & EPC Companies

Smart Cities & Infrastructure Monitoring Projects



Global Markets with smart grid adoption (India,  
North America, Europe, Asia)



What makes Kimbal RTU the

# Smart Choice?

## Scalability

Supports both small and large infrastructure deployments

## Interoperability

Works seamlessly with smart meters and existing automation infrastructure

## Security

Complies with global cybersecurity standards for safe remote access

## Cost Efficiency

Delivers high-end features at a lower cost than competitors

## Proven Expertise

Brought to you by market leaders in smart metering technology, ensuring reliability, agility and innovation

# Coming Upgrades

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Kimbal's RTU is built for  
scalability & sophisticated  
customization

- ✦ IEC 61850 Protocol Support for enhanced substation automation
- ✦ Redundant power supply and processor modules and related diagnostics

# Connect with Us!

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Start optimizing your energy consumption today.

## Namaste







