# DRC-009

## Smart Grid IoT Controller for Ring Main Units (RMUs)


Schneider (SM6)


ABB


SIEMENS



UNIQUE

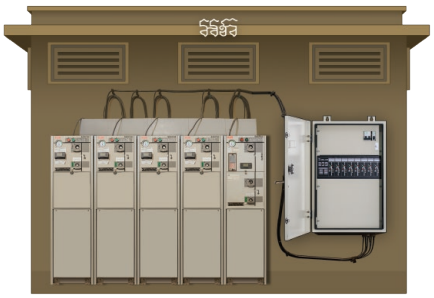
## Core Capabilities

- Remotely Open/Close the RMUs
- Receive Instant Alerts When Faults or Anomalies Occur in RMUs
- Monitor Real-time Grid Data for Faster Decision-Making




## Why Is It Required to Use the DRC-009 with Ring Main Units?

Designed to modernize multiple brands of Ring Main Units (RMUs) that are utilized in underground distribution networks, the DRC-009 is a smart grid IoT device solution that streamlines management processes and minimizes the needs for time-consuming on-site visits.



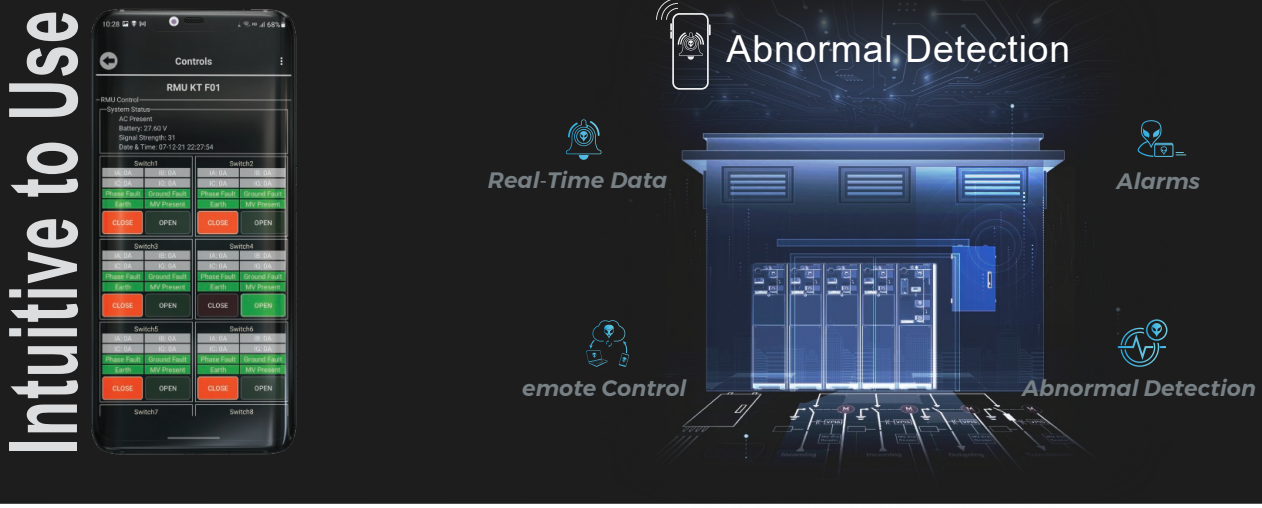
Imagine the real challenges of power disruption with RMUs that takes a long time for manual operations, and impacts both consumers and operator safety. The DRC-009 comes to solve these issues by providing advanced remote control capabilities, monitoring, and managing the systems in real time. With its innovative features, the DRC-009 enhances grid reliability and optimizes energy usage, allowing for quick decision-making that can prevent outages before they happen. This means not only reduced operational costs but also significantly lowered maintenance risks, ensuring that your infrastructure remains resilient and efficient.



▲ Testing DRC-009



▲ DRC-009




## What Are the Key Features of the DRC-009?

### Remote Control Capability

Operating the Open/Close switchgears of Ring Main Units on the medium voltage underground distribution line is quite a challenge and risk. VP.Start developed the DRC-009 to tackle these issues, enabling the operators to Open/Close up to 8 switches of RMU switchgear through RPM Grid, or the PLUM App.This advanced feature transforms from manual to digital operation, reducing long outage time and increasing network reliability.

### Instant Alarm Notifications

DRC-009 quickly detects faults and sends the fault information to the utilities' smartphone using the PLUM App or the RPM Grid system. The alarm clearly identifies the types of faults, including switchgear off, phase fault and ground fault. This advanced feature delivers secure, reliable RMU management.

## DRC-009 Alarms Notification




Switchgear Off | Ground Faults | Phase Fault

### Abnormal Detection

Normally, every electrical equipment always encounters some errors. Sometimes it was caused by a hardware error or the system didn't work. When the electrical equipment is broken, it affects the whole operation of the electricity distribution, causing long outages, high cost on maintenance and so forth. VP.Start designed the groundbreaking feature called Abnormal Detection to oversee and track the condition of the RMUs, ensuring that the RMUs' health is completely checked and providing instant alert if the errors occur. This process is very important for utilities to prevent big issues efficiently.

## Alarms When Anomalies Occur




Door Open | MCB Trip

### Real-time Data Monitoring

The DRC-009 enables operators to oversee the whole status of the RMUs in real-time through their smartphone (used with PLUM app) or through the RPM Grid System. This extensive data is very crucial to use for analysis and improve decision-making.

### Event Logs

This essential feature automatically records faults on the power lines and creates reports for analysis to improve grid management. It also tracks the operator's activities to ensure the system operations are secured.

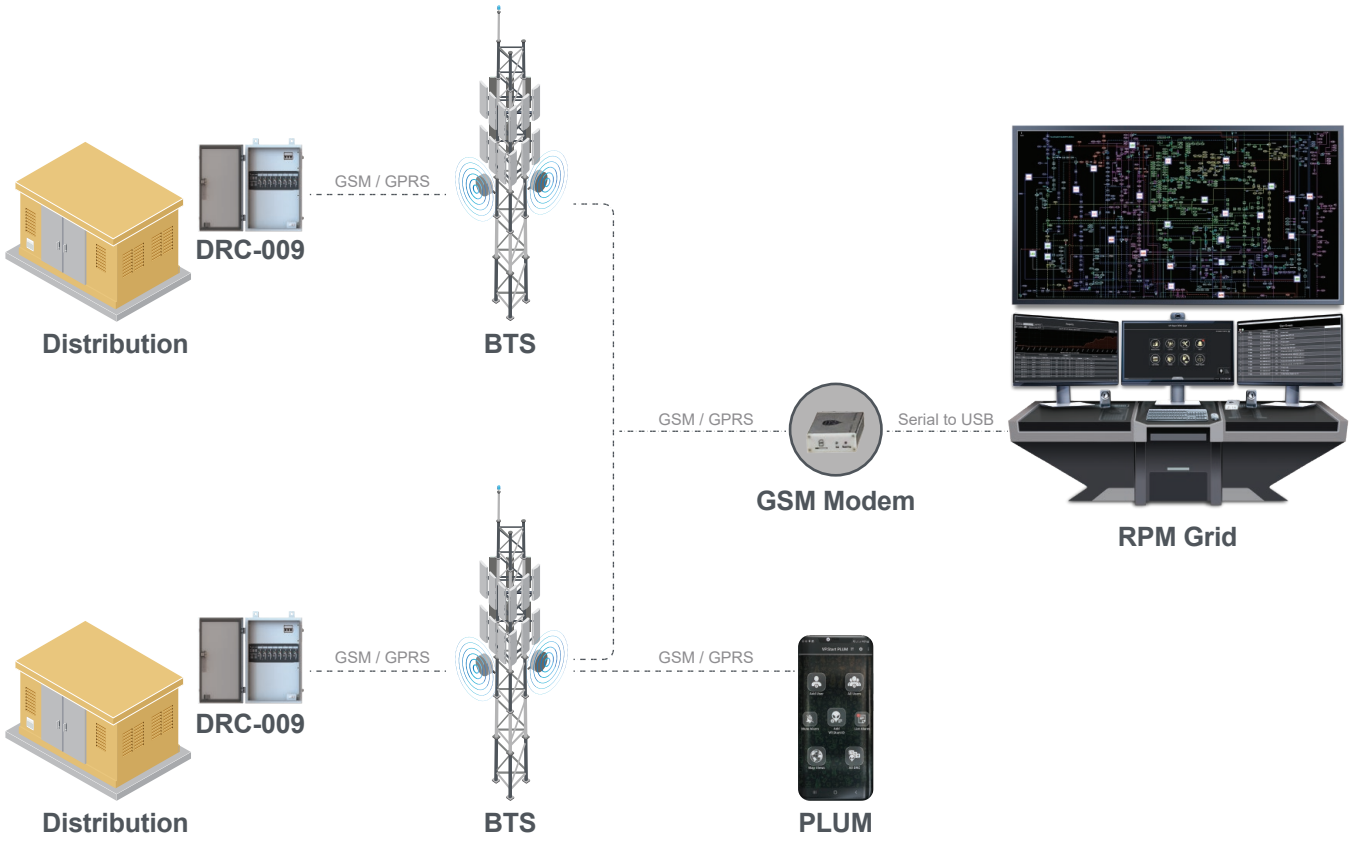
### Map view

The Map function is a user-friendly tool that allows operators to view the location of DRC-009 instantly using Google Maps. This advanced feature enables quick identification of fault locations and enhances operational efficiency.

### Single Diagram

Single Diagram is another effective feature that provides operators with a clear and effective way to manage the DRC-009 with RMUs via a schematic layout. This innovative feature increases the capabilities of RMUs management and enhances the process of spotting faults.

## System Architecture






▲ DRC-009 Installation with RMU