DRC-002

Smart Grid IoT Controller for Load Break Switch (LBS)





UNIQUE

Core Capabilities

- Remotely On/Off the LBS" "Receive Instant Alerts When Switchgear Off Occurs
- Receive Instant Alerts When Faults or Anomalies Occur
- Monitor Real-time Status of the LBS for Faster Decision-Making



What Makes the DRC-002 Special?

Traditionally, when a power outage occurs, utility linemen must travel to the site and manually operate the Medium-Voltage Load Break Switch (LBS) using a hot stick. When an outage happens during heavy rain, thunderstorms, or other hazardous conditions, this approach can put personnel at risk while also increasing restoration time and operational costs. The DRC-002 Smart Grid IoT Controller turns an existing LBS into an intelligent, remotely controllable grid asset—without requiring utilities to replace their existing infrastructure. When an abnormal condition or fault occurs, utilities can receive real-time alerts and remotely operate the LBS through a smartphone using the PLUM App or through the RPM Grid System from a control room. This means the grid can sense, communicate, and respond without waiting for people to physically reach the site. What makes the DRC-002 particularly innovative is its ability to work flexibly with different models of LBS already deployed across power networks. Instead of rebuilding the grid from the ground up, the DRC-002 turns what utilities already have into a smarter, more connected, stepping toward data-driven grid modernization: reducing unnecessary field intervention, improving operator safety, shortening outage response time, lowering operational costs, and maximizing the value of existing infrastructure.



▲ DRC-002 Tasting



▲ DRC-002 Remote Control for Load Break Switch (LBS)



What Are the Key Features of DRC-002?

Real-time Data Monitoring

With the DRC-002, utilities can oversee the power supply status anytime quickly. They can know the LBS switchgear position (On/Off) by using either our intuitive PLUM mobile application or with the RPM Grid System.

Remote Control Capability

Electrical grid operators can remote control the LBS switchgear operation (ON/OFF) in real-time from their home or working office using either the PLUM mobile app or the RPM Grid System. This modernization is very beneficial for utilities to manage and control their grid network, reducing operational costs while enhancing safety for field personnel.

Alarm

In terms of faults, the DRC-002 will send an alarm notification quickly to the operators. Those events include MV Absence and Switchgear Off. This groundbreaking feature comprehensively alerts the operators to what is happening on the power lines, enabling them to take immediate action to reduce power disruption.

Abnormal Detection

The DRC-002 proactively provides abnormal detection happening on Load Break Switches, instantly alerting operators to internal issues for rapid analysis and resolution including Switchgear Maintenance, Batter Low, Gas Low, and Door Open . This critical feature helps prevent serious equipment failures while extending device lifespan through optimized maintenance—enhancing both system resilience and operational efficiency.

DRC-002 Alarms Notification



MV Absence



Switchgear Off



Switchgear Off



MV Absence



Switchgear Maintenance

User Events:

User Events is the essential feature that provides operators with the history of their activities. This record is a crucial part of operational security, allowing identification of who operated or changed settings in case of any issues.

Reports:

When there is a power disruption, the DRC-002 will record that issue and keep it as a report. This vital feature will become a required document for analysis to improve the grid management.

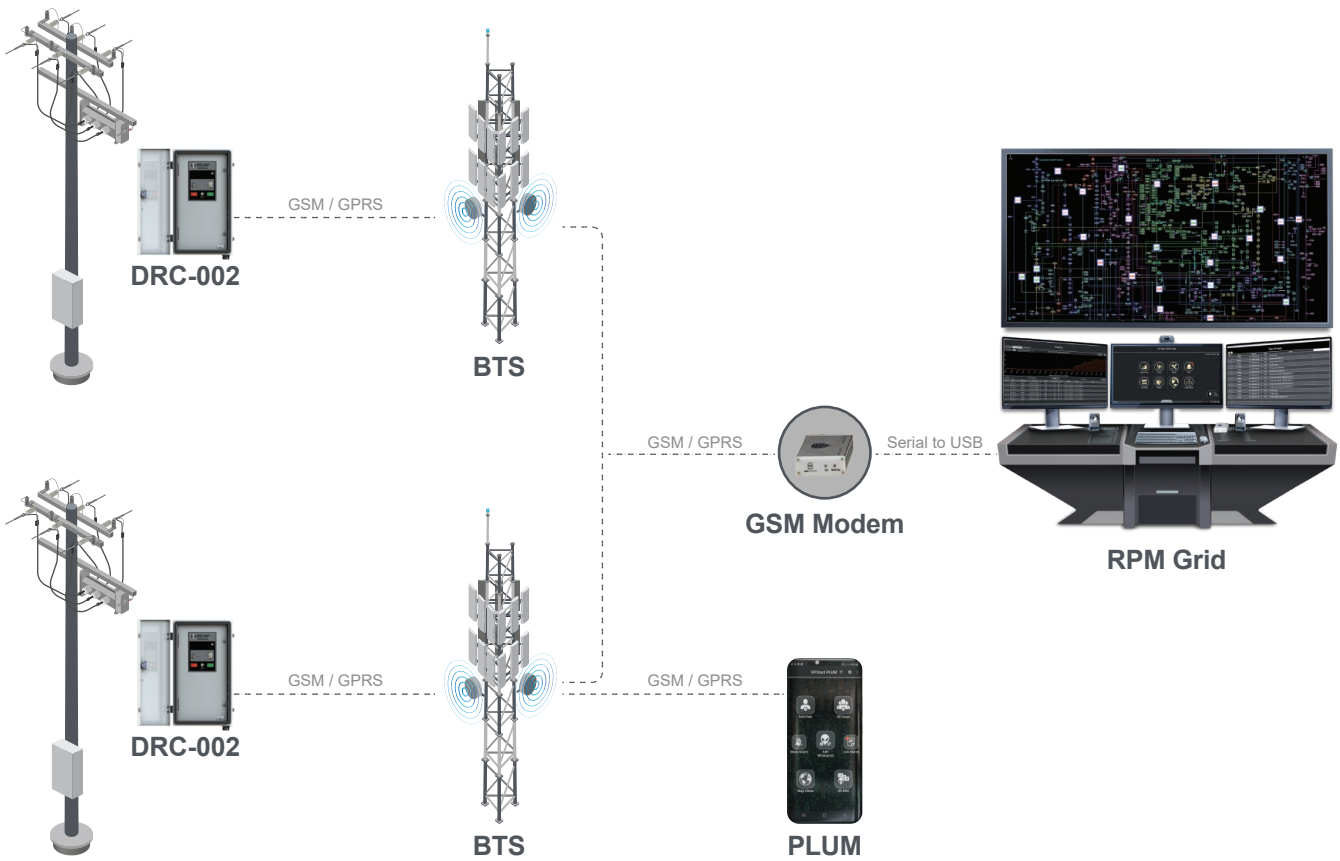
Map:

Map function allows the operators to pinpoint the actual location of DRC-002 in Google Map. They also can identify the fault in the impacted area when any disruption happens.

Single Diagram:

With the Single Diagram feature, operators can easily view the location of DRC-002 in a simple schematic layout. This makes it quick and easy to spot the location of any faults.

System Architecture





▲ DRC-002 Connecting