

## Smart Circuit Breaker Product Brief

### PRODUCT BRIEF

RHF2SG03 Smart circuit breaker gateway is designed to connect and control RS485 circuit breaker which are widely used in Industrial or consume places, to realize efficient operation of the power system and Electrical safely, energy saving.

The main function of Smart circuit breaker gateway is Electricity usage information collection (including Electric energy, Active power, Reactive power, Power factor, Voltage, Current, Leakage current) , it can also control the circuit breaker switch Close or open, the circuit breaker control method can be remote command directly, or send rules to control locally, such as time-based rule task or link rule to base on other external input condition. Circuit breaker gateway use RS485 interface to connect with circuit breaker, and link to cloud management server through LTE Cat1, to achieve device management, data

management, remote control and Firmware OTA upgrade.

Smart circuit breaker gateway is 220V powered directly, and the power consumption will be less than 4W.

The operating temperature will be -30~70 °C , small size 100x36x67mm, and support DIN-Rail Mounting installation.



### APPLICATION

- Power control
- Electric energy monitoring
- Energy efficiency management
- Energy conservation and emission reduction
- smart building

### FEATURE

- ◆ Wireless Communication : 4G Cat-1
- ◆ LTE Cat.1 band :
  - LTE-FDD : Band1/3/5/8
  - LTE-TDD : Band34/38/39/40/41
- ◆ Network Transport Protocol : MQTT
- ◆ Antenna : External antenna
- ◆ SIM Card : Pluggable SIM ( Micro-SIM )

- ◆ Ambient Temperature sensor : external NTC input
- ◆ Hardware interface with Circuit breaker : RS485
- ◆ Binding relationship maintenance :  
Circuit breaker gateway as Master device can support maximal 247 Circuit breaker as slave device connected through RS485 interface. They should be bound in advance before use.
- ◆ Circuit breaker connection protocol : Modbus-RTU, DL/T 645.
- ◆ Circuit breaker information monitoring : online status, running time, switch status, power wire temperature, voltage, current, leakage current, Electric energy, Active power, Reactive power, Power factor.
- ◆ Circuit breaker control : Remote command directly, or send rules to control locally such as time-based rule task or link rule to base on other external input condition.
- ◆ Alarm report : Management Server can define custom alarm event and condition freely.
- ◆ Remote self-check : Can achieve circuit breaker self-check anytime from Management Server remotely.
- ◆ Circuit breaker gateway support Remote configuration and monitoring, and also firmware upgrade OTA.
- ◆ Power down event detection : Gateway can detect power down event and report to management server.
- ◆ LCD display : has LCD display to show circuit breaker working parameter
- ◆ Gateway power consumption: peak power <8W (MAX) , average <4W
- ◆ ESD protection class: contact discharge  $\pm 4\text{kV}$  , air discharge  $\pm 8\text{kV}$
- ◆ Operating temperature :  $-30\sim 70^{\circ}\text{C}$
- ◆ installation : DIN-Rail Mounting
- ◆ Protective earthing : Terminal connect to Earth

## ORDER INFORMATION

Model	Description
RHF2SG03	Smart circuit breaker gateway , RS485 interface , Cat-1 version

## CONTACT

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