

# Sagemcom

## RSD

Remote Switching Sevice  
A smart grid sensor



  
SICONIA®  
Elec

RSD is used to replace traditional Ripple Control devices. This multi-functional remote relay module includes DLMS protocol and a communication modem supporting both PLC technology as well as point to point for cellular communication. This plug & play solution enables a secured remote two ways communication for controlling and monitoring the distribution network. RSD is a part of Sagemcom SICONIATM solution, fulfills any Smart Grid requirements and it is fully integrated into the Sagemcom Smart Metering and Smart Grid End to End Infrastructure. Load switching applications:

- Controlling and monitoring the distribution network
- Load Control Management
- Load Shedding
- Street Lighting
- Remote lighting of Traffic signs
- Monitoring of voltage quality
- Remote time synchronisation
- RTU remote actuator

## TECHNICAL FEATURES

### MAINS CHARACTERISTICS

- Nominal Voltage: 110-230V
- Nominal Frequency: 50-60 Hz
- 3 interchangeable and independent relays: Up to 40A
- Device Lifetime: 20 years
- 14 days of back-up RTC power supply
- Compact size: 85 x 180 x 65 mm
- Operating temperature range: -40° C / +70°C
- Protection index: IP63
- Robust mechanical design

### MAIN FUNCTIONALITIES

- Easy manual interchangeability of relays
- Daylight Time base : Astronomical Clock
- Internal lighting-up time table for Street Lighting
- Special days and public holidays configurable
- Anti-tamper: Magnetic field detection
- Anti-tamper: Top and Terminal covers open detections
- Load switching: according to timer program or on command from the remote Central System
- Remote Firmwares update
- Network voltage qualimetry
- Dual techno: PLC + Cellular
- Temperature sensor
- Brightness detection (day and night)
- PLC or RF repeater role
- Dedicated Smart Grid Gateway for the collect of last miles meters
- DLMS / COSEM standard based
- DLMS Security suite 0, 1 (Suite 2 ready)

### INTERFACES

- LEDs :
  - Relay Status / Position
  - Communication status (PLC / Cellular)
- Push Button: for quick auto-diagnostic
- Digital inputs: 3 inputs for external detection

### RELAYS

- Easy manual interchangeability of independant relays
- Type of relay: bistable
- Voltage: 110V -230V

- Max Switching current: configurable – 8/16/20/25/40A.
- 2 points configuration: Binary function "ON/OFF"
- 3 points configuration: "Reverse function" with a common point

### CERTIFICATIONS

- CE
- DLMS CTT 3.1
- G3-PLC Alliance (supported version: ITU-T G.9903 2015)
- Radio: RED / 3GPP
- PLC Bands: CENELEC A + FCC
- Compliant PRIME 1.3.6 & PRIME 1.4
- DLMS SECURITY suite 0, 1 (ready for suite 2)
- Open to special Local/country Certifications

### COMMUNICATION INTERFACES

- Local interface: Optical port (IEC 62056-21)
- RS485: serial bus port
- WAN interfaces:
  - Embedded G3-PLC Modem: PLC OFDM according to PLC G3-Alliance standard. CENELEC-A and FCC Bands (remotely configurable)
- Modular Cellular Modem:
  - LTE Cat M / NB1 / NB2 / 2G-3G-4G
  - Accessible SIM Card: 2FF type
  - Chip SIM card (optional): M2FF type
  - SMA connector for antenna extension
  - With a pin-to-pin compatible modem integration architecture for evolution to new technologies

### MECHANICAL CHARACTERISTICS

- Robust mechanical design
- Mounting: 3-points wall-mounting system or Rail DIN
- Compact size: Dimensions (WxHxD) 80 x180 x 60 mm
- Relative Humidity: 95% non-condensing over 24hours
- Ultrasonic welding of top and bottom covers

### PART NUMBERING

- RSD-XYZ
  - RSD: Device Family
  - X: number of Relays
  - YY: Max switching Current
- Example: RSD-325 (3 relays with Max current 25A)



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