

OUTAGE DETECTION SYSTEM SOM&GAD

SOM&GAD is an electricity outage detection system specifically designed for industry and electricity distribution grids. The wireless sensors (GAD) are placed on the outer insulation of the cable and the sensors detect voltage on the conductor only by touching the outer insulation. Each sensor is powered by Li-ion batteries and transmits the information via LoRa, therefore no cabling is necessary for the sensors. The LoRa gateway (SOM) collects the signals from each sensor then transmits them via Modbus protocol.

- Compact size and light weight
- Easily mounted inside LV panels (Retrofit possible)
- Sensors measuring voltage without touching inside conductor
- Sensors with Li-ion battery, no battery replacement up to 7 years
- Sensors with LoRa communication
- Communication with other LoRa devices (e.g. sensors, gateways etc.)



GENERAL

LoRa GATEWAY (SOM)

Operation Temperature	-20°C...+60°C
Protection Class	IP20
Mounting	DIN
Input Voltage	9 – 36 Vdc

VOLTAGE SENSOR (GAD)

Operation Temperature	-20°C...+60°C
Protection Class	IP20
Mounting	On cable insulation
Input Voltage	Li-ion battery 3.6V / 9Ah

DIMENSIONS AND WEIGHT

LoRa GATEWAY (SOM)

Height x Width x Depth	86x105x57mm
Weight	170 gr.

VOLTAGE SENSOR (GAD)

Height x Width x Depth	35x70x40mm
Weight	100 gr

COMMUNICATION

LoRa GATEWAY (SOM)

Protocols	Modbus, LoRa
Nr. of Antennas	1 piece(s)
Connector	RP-SMA-K

VOLTAGE SENSOR (GAD)

Protocols	LoRa
Nr. of Antennas	1 piece(s)
Connector	RP-SMA-K

CONNECTION INTERFACES

LoRa GATEWAY (SOM)

RS485	1 piece(s) (galvanic isolation)
Supply	2 pin terminal
External Memory	SD card slot

VOLTAGE SENSOR (GAD)

RS485	1 piece(s) (galvanic isolation)
Supply	2 pin terminal

AREAS OF USE

Electricity Distribution Grids
Power Plants
Industrial Facilities

