

OUTAGE DETECTION SYSTEM

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)

Operating Temperature	-20°C... +60°C
Protection Class	IP20
Mounting	DIN Rail
Supply Voltage	9 - 36 Vdc

VOLTAGE SENSOR (GAD)

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

DIMENSIONS AND WEIGHT

LoRa GATEWAY (SOM)

Height x Width x Depth	86 x 105 x 57mm
Weight	170 gr

VOLTAGE SENSOR (GAD)

Height x Width x Depth	35 x 70 x 40mm
Weight	100 gr

SOM & GAD



COMMUNICATION

LoRa GATEWAY (SOM)

Protocols	MODBUS, LoRa
Number of Antennas	1 piece
Connector	RP-SMA-K

VOLTAGE SENSOR (GAD)

Protocols	LoRa
Number of Antennas	1 piece
Connector	RP-SMA-K

CONNECTION INTERFACES

LoRa GATEWAY (SOM)

RS485	1 piece (galvanic isolation)
Supply	2 pin terminal

VOLTAGE SENSOR (GAD)

RS485	1 piece (galvanic isolation)
Supply	2 pin terminal

AREAS OF USE

- Electricity Distribution Grids
- Power Plants
- Industrial Facilities

