



# TS300S FUSE MONITORING SYSTEM

## DESCRIPTION

The Fuse Monitoring System, model TS300S Koala and its Supervision System, are intended to support the monitoring and maintenance activities of medium voltage power distribution networks (13.8kV to 34.5kV), and its field installation is performed using a ladder and a maneuver stick and it can be installed without interruption in the power supply.

The system detects cartridge displacement caused by the fuse link rupture, detecting and storing fuse trigger events in the distribution network and informing them in real time to the Distribution Operation Center. TS300S Koala generated messages are transmitted, stored and handled in a supervisory system and can be made available for viewing on a Tecsys web platform with complete security and reliability.

The supervision system can operate simultaneously with thousands of Koalas detectors installed in the power grid. The messages generated by Koalas are translated to Distributed Network Protocol (DNP3), a protocol widely used in Supervisory Control and Data Acquisition (SCADA). The channels, devices, and protocol point maps are configurable according to customer requirements.

# TECHNICAL SPECIFICATION

## TS300S Koala - Fuse Monitoring System

### FEATURES



- Status notifications every 12 hours;
- Immediate events notification from the distribution network;
- Use of Lithium Thionyl Chloride (Li-SOCl<sub>2</sub>) battery with 2000mAh charge;
- Autonomy up to 5 years\*;
- 3.6V main power source;
- 170mA maximum current;
- Operational voltage from 13.8 to 34.5kV;
- Minimum detection current of 1A;
- ISM transmission frequency range: 902.1375 to 904.6625MHz;
- Typical Transmission Power: + 22.5dBm;
- Operating temperature range: -30 to 65°C;
- Environmental weather resistant enclosure with IP-65 mechanical protection against dust and water jets, and resistant to ultraviolet irradiation (UVA / UVB);
- Installation in the distribution network made with ladder and maneuver stick;

\* Guaranteed 2 messages per day (status) and 10 monthly events

### SOFTWARE AND COMMUNICATION

- Wireless communication via Sigfox® network;
- Supervision system with protocol converter;
- Data available in DNP3 (Distributed Network Protocol) protocol;
- Configurable DNP3:
  - One or more communication channels;
  - One or more slave devices per channel;
  - Individual points map configuration;
- Supports synchronous and asynchronous events;
- Configuration and visualization of data provided on Web Interface;
- SQL database for event storage and configuration.

### TYPICAL APPLICATION

