

KOALA TS300S

IoT System for Monitoring Electrical Protection Devices



The IoT Electrical Protection Device Monitoring System, model TS300S Koala, together with the Supervision System, is designed to monitor and maintain medium-voltage power distribution networks (13.8 kV to 34.5 kV).

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Smart Power

DESCRIPTION

The TS300S Koala IoT Electrical Protection Device Monitoring System, together with the Habitat Supervision System, is designed to monitor devices in medium-voltage power distribution networks (13.8 kV to 34.5 kV). The TS300S Koala is extremely versatile and can be used in a variety of situations. Its coupling system allows installation without interrupting the power supply, which reduces operating costs and simplifies the process.

Equipped with a variety of internal sensors, the TS300S monitors multiple essential parameters, detecting events such as the breaking of fuse links, recloser opening and closing operations, the opening of underground gallery covers, among others. This information is transmitted in real time via a Low Power Wide Area Network (LPWAN) directly to the Distribution Operations Center.

The messages generated by the TS300S are processed, stored and managed by the Habitat Supervision System, which offers secure and reliable visualization via an intuitive web interface. As well as monitoring events in real time, Habitat also manages the connected devices and is scalable according to the operator's needs.

Habitat is capable of operating simultaneously with thousands of Koala detectors installed on the power grid, guaranteeing efficiency on a large scale. The messages received from the Koalas are converted to the Distributed Network Protocol (DNP3), a standard widely used in SCADA (Supervisory Control and Data Acquisition) systems. All of the protocol's channels, devices and point maps can be configured according to the customer's specific needs.



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TECHNICAL SPECIFICATION

TS300S Koala - IoT System for Monitoring Electrical Protection Devices

FEATURES



Status updates every 24 hours;

Envio imediato de eventos da rede de distribuição;

Utilização de bateria de Lítio - Cloreto de Tionila (Li-SOCl) com capacidade de carga de 2600mAh;

Autonomy up to 10 and 15 years*;

3.6V power supply;

Maximum current 200mA;

Operating voltage from 13.8 to 34.5 kV;

Minimum detection current 1A;

Operating temperature range: -15 to 65 °C;

Environmental weather-resistant enclosure, with IP-65 mechanical protection against dust and water jets, and resistant to ultraviolet irradiation (UVA/UVB);

Dimensions: H: 100 mm; W: 48.64 mm; D: 90 mm (with stand);

Average equipment weight: 0.144 kg.

	Sigfox	LoRa
Transmission frequency range (MHz)	RC2: 902,2 a 904,6 RC4: 920,8 a 923,3	915 a 928
Typical transmission power	+22,5dBm	+22,5dBm

*Guaranteed 1 message per day (status) and 10 monthly events.

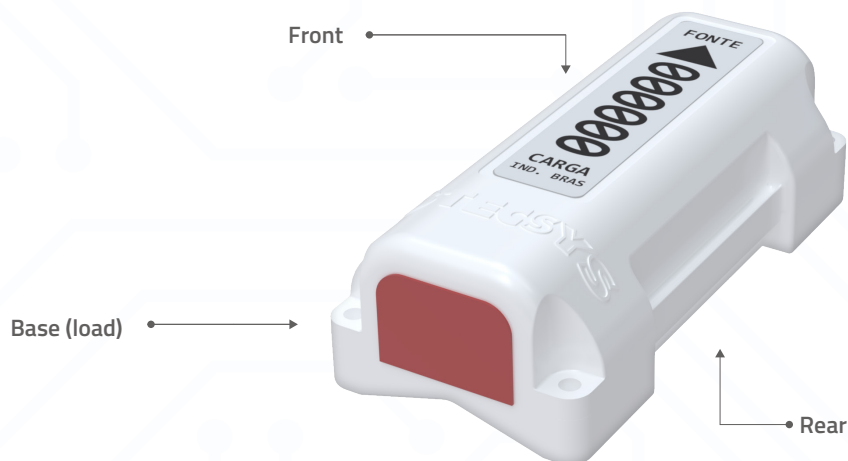
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TECHNICAL SPECIFICATION

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SOFTWARE AND COMMUNICATION

Wireless communication through Sigfox or Lora;	
Supervisory 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;
Support for synchronous and asynchronous events;	
Configuration and visualization of data provided on Web interface;	
SQL database for storing events and configuration;	

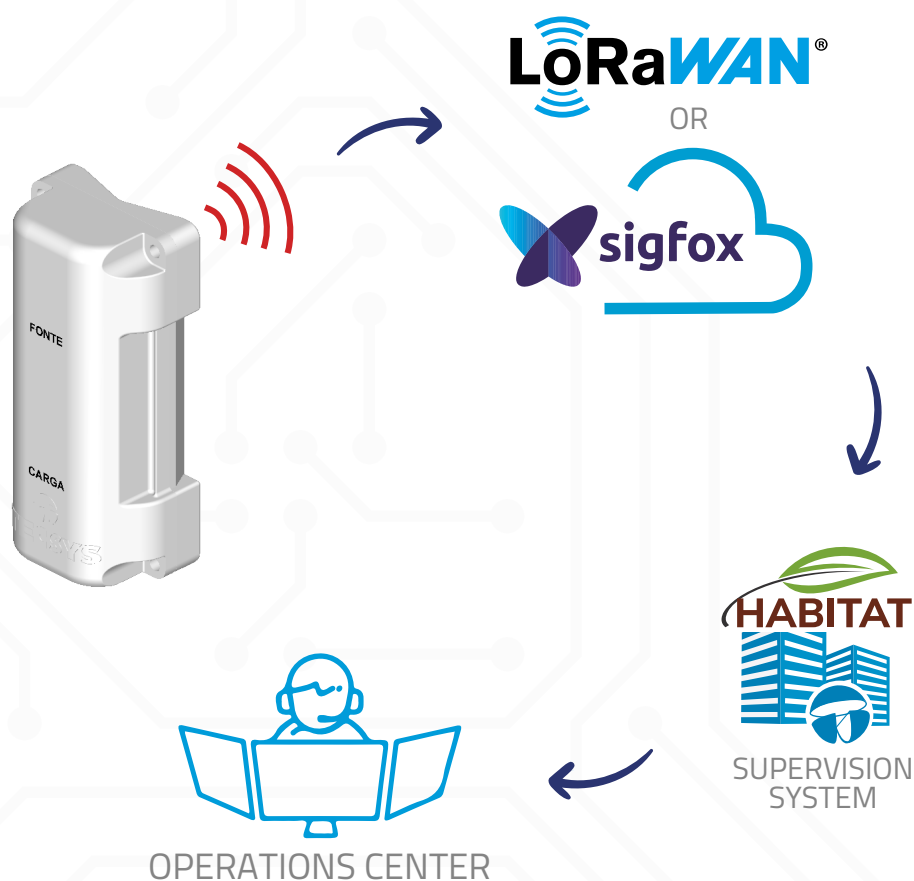


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TECHNICAL SPECIFICATION

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APPLICATION



UPDATED VERSIONS OF THIS MATERIAL CAN BE DOWNLOADED FROM OUR WEBSITE