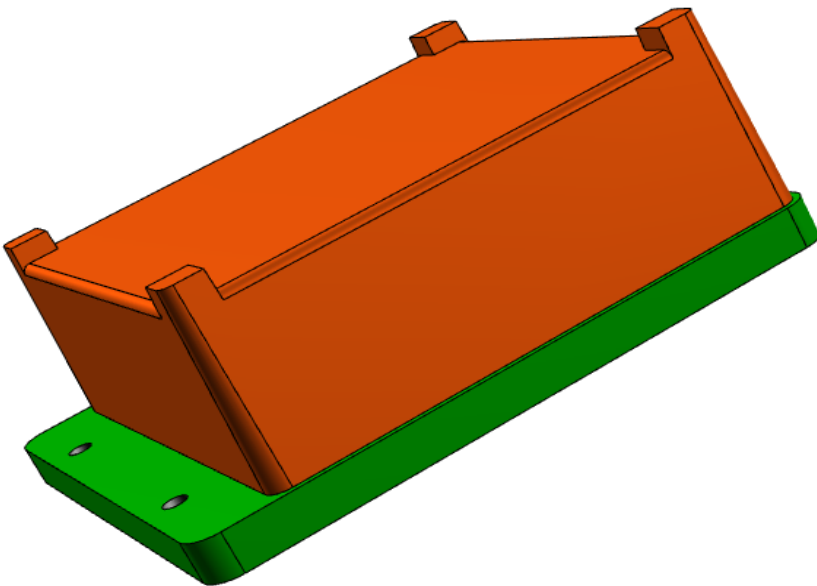


# CRITICAL ASSET MONITORING

## LOW-PROFILE TEMPERATURE SENSORS



### FEATURES

- **100% passive.**  
No power source required
- Designed and type tested for low and medium voltage applications
- Small, simple to fit existing asset structures
- Low-profile design ideal for breaker arm installation.
- 20+ year operational life expectancy

## Ideal for Critical Assets

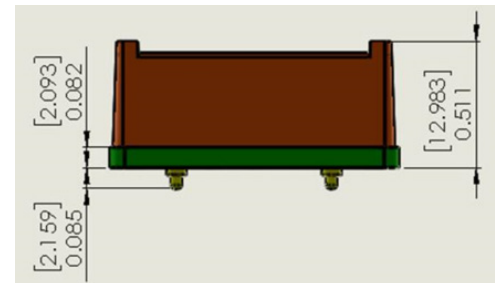
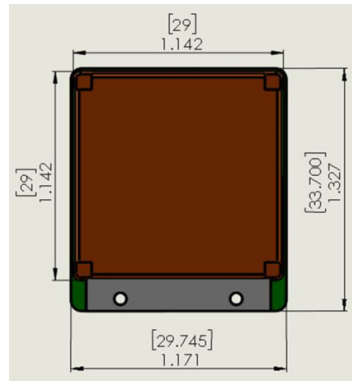
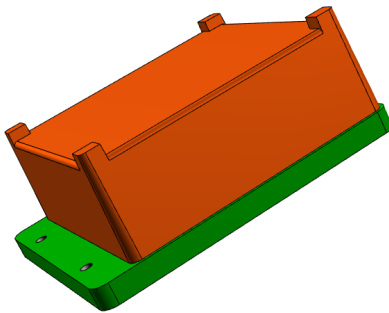
The IntelliSAW temperature sensors are the ideal method for real-time, continuous monitoring of low and medium voltage critical asset hot-spots such as bus bars, breaker arms, breaker contacts, and cables.

Surface acoustic wave (SAW) technology enables a 100% wireless, passive (no power required) continuous temperature monitoring sensor. The SAW sensors were specifically designed for electrical power assets with basic insulation levels (BIL) up to 185kV.

# SAW SENSORS: LOW-PROFILE (LP)

The Integrated Antenna SAW Sensors are the most reliable method of thermal monitoring in a wide range of electrical power critical asset applications including switchgear, breaker arms, bus ties, bus ducts, transformers, and generator circuit breakers.

The sensors seamlessly interface to all IntelliSAW Critical Asset Monitoring systems and provide up to twelve measurement locations per asset.



## SPECIFICATIONS

### TEMPERATURE MEASUREMENTS

Range	-25°C to +155°C
Resolution	± 0.2°C
Accuracy	
Standard Range (0 to 80°C)	± 2°C
Full Range	± 4°C
Number of Sensor Channels	12 (non-overlapping channels)
Sensor Frequencies	Between 425 MHz to 442 MHz

### PHYSICAL

Cover Material	Polyphenylene Sulfide (PPS)
International Protection (IEC 60529)	IP 30
Cover Dielectric Strength	18 kV
Dimensions	29.7 W × 33.7 L × 13.1 H (mm)
Dimensions	30.5 W × 53.5 L × 35.5 mm H

### MOUNTING

#### Recommended Mounting

**Cable Tie:** 5.5 W × 1.65 mm Thick (Max)

Non-conducting ETFE, 150°C operating temperature (McMaster-Carr 70215K93)

**Bonding Tape**

3M VHB 4646 Bonding Tape (150°C operating temperature)

## MODEL NUMBERS

Not all model combinations are stocked.  
Please contact sales before ordering.

### SENSOR FAMILY (SF)

**LP:** Low-Profile SAW Sensor

### FREQUENCY BAND (F)

**01:** Band 01   **04:** Band 04   **07:** Band 07   **10:** Band 10  
**02:** Band 02   **05:** Band 05   **08:** Band 08   **11:** Band 11  
**03:** Band 03   **06:** Band 06   **09:** Band 09   **12:** Band 12

SF - F

### SENSOR GROUPING

01, 03, 05

02, 04, 06

07, 09, 11

08, 10, 12

When commissioning a system, care must be taken not to duplicate same sensor frequency bands within a given asset. IntelliSAW recommends selecting sensors based on their groupings for optimal performance. Please contact sales for more details.

## SAFETY

IntelliSAW systems are installed in close proximity to medium and high voltage electric power equipment. Qualified personnel need to observe industry standard safety practices that will protect the systems and operators from harm due to induced voltages. Proper antenna installation and system safety grounding is crucial to operator safety and system reliability.

## HOMOLOGATION

System integrators and installers are responsible for adhering to all regional regulations concerning the import, installation and operation of IntelliSAW Critical Asset Monitoring systems.

## CONTACT

### IntelliSAW Inc.

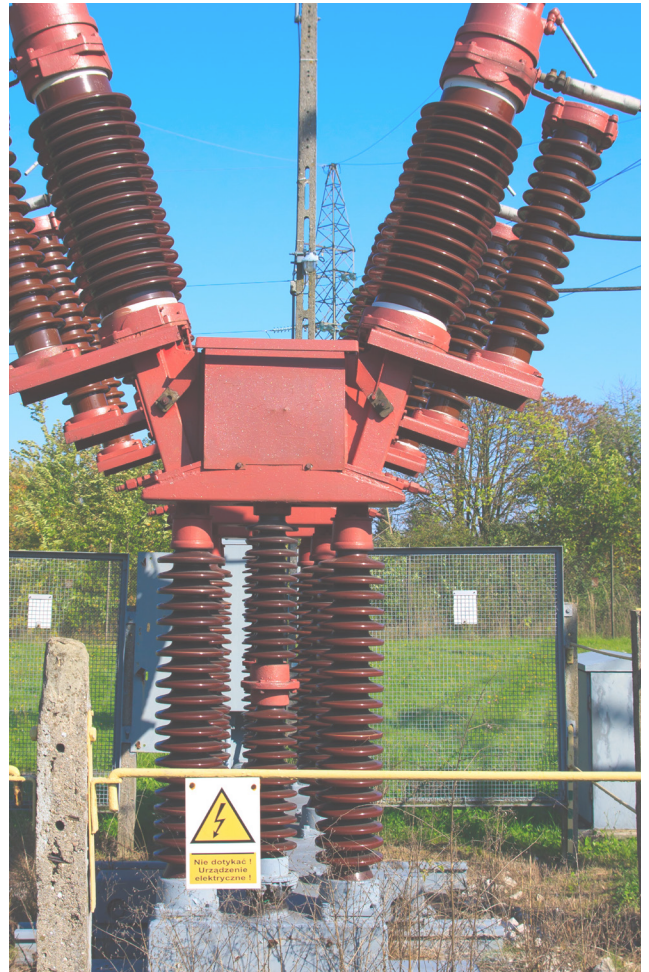
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Visit [www.intellisaw.com](http://www.intellisaw.com) for regional distributor locations and details

