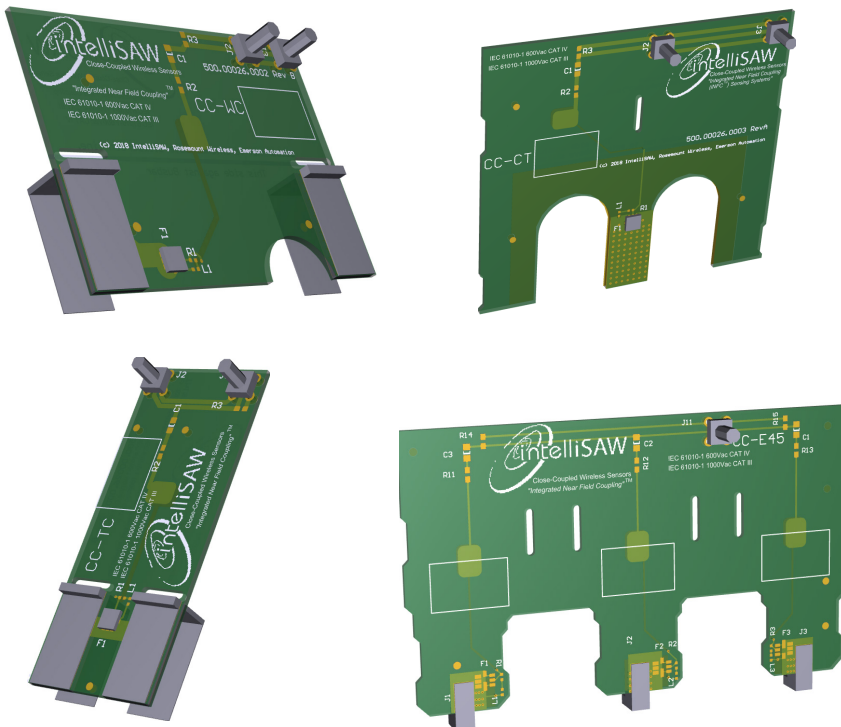


# LOW VOLTAGE ASSET MONITORING

## INTEGRATED NEAR-FIELD COUPLING (iNFC™) TEMPERATURE SENSORS



### FEATURES

- Multiple designs inspired by common low voltage assets.
- Easy and quick installation in new or retrofit equipment.
- Electrically isolated up to 1kv for most equipment.
- 100% passive, requiring no sensor power source or maintenance for installed life.
- Supports high sensor density within any asset.

## Low Voltage Critical Assets Monitoring

The IntelliSAW iNFC™ family of temperature sensors is the ideal method for continuous monitoring of low voltage critical asset hot-spots such as busbars, breaker arms, breaker contacts, and cables. Each sensor is designed for easy installation in the space-confined environment of low voltage equipment.

The low voltage family of temperature sensors has reinforced isolation per IEC 61010-1 of up to 1000V AC Cat III power, or up to 600V AC Cat IV power, making the design suitable and electrically isolated for nearly all LV applications.

# LOW VOLTAGE iNFC™ SENSORS

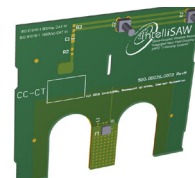
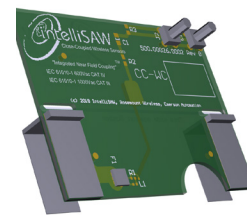
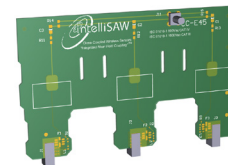
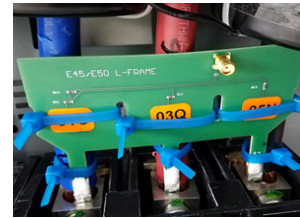
IntelliSAW low voltage temperature sensors provide monitoring data based on physical contact with live (powered) potential hot spots while still ensuring electrical isolation through the use of embedded Integrated Near-Field Coupling (iNFC™) wireless technology. iNFC™ allows for a high density of sensors in a single asset, ensuring all desired points can be monitored.

Multiple sensor designs are available to meet the requirements of the low voltage asset environment.

CC-E sensors are optimized for 3-phase molded case circuit breakers and contain three distinct temperature sensors, one for each cable termination.

CC-TC and CC-WC sensors are designed to monitor a single point by clipping directly onto a busbar, and they can be daisy-chained to monitor multiple hard-to-reach locations.

CC-CT sensors are designed to fit cleanly in between dual cable connections off a busbar stab.



## SPECIFICATIONS

### TEMPERATURE MEASUREMENTS

Range	-25°C to +125°C sustained, +155°C Intermittent
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)

### PHYSICAL

Rated Altitude	5000 M
Electrical Isolation (IEC 61010-1)	<600V AC CAT IV, <1000V AC CAT III
BIL peak voltage	20 kV
Exposed Materials	Stainless steel clips, brass plated SMA connectors, PCB

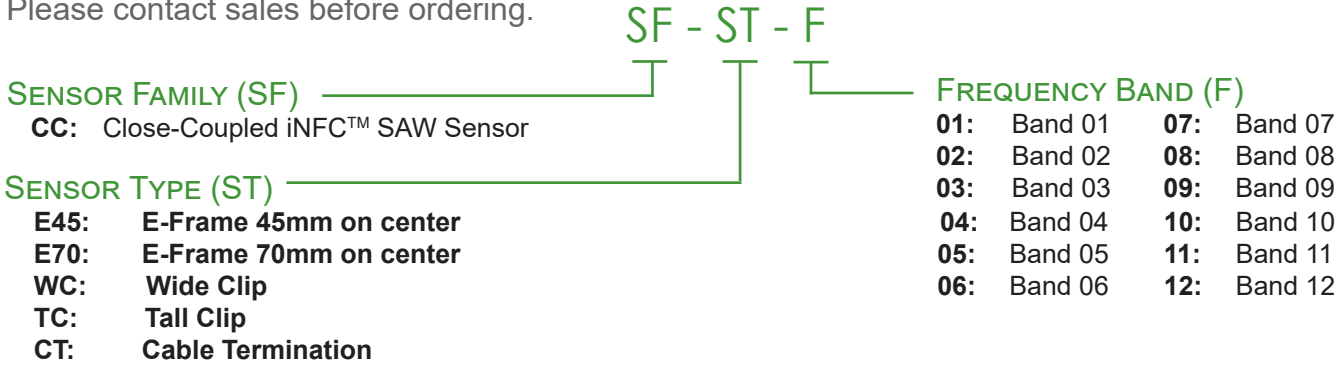
### MOUNTING

Recommended Mounting

**Embedded Clips:** Most CC sensors have clips to directly attach to bus work.  
**Cable Tie:** CC sensors have slots for cable ties 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.



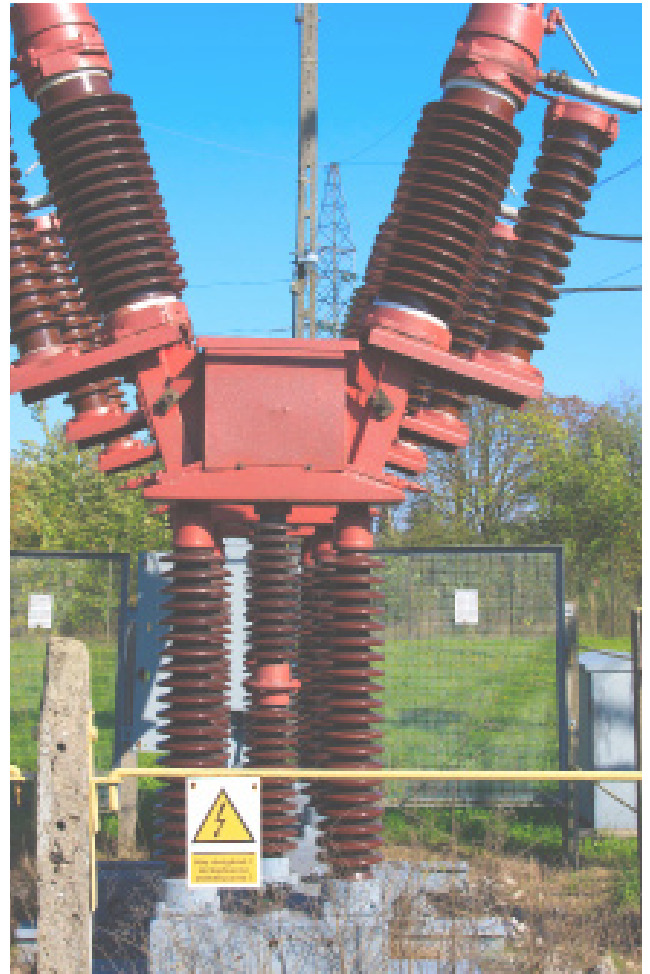
Frequency Bands are still used in the iNFC™ sensors for system commissioning and calibration. IntelliSAW iNFC™ sensors are not an intentional radiator, therefore ensuring EMC compliance, which also allows for high density sensor installations.

## 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 to protect the equipment and operators from harm due to induced voltages. Proper 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

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

