

Wireless 0-200AAC Current Meter - 617-200

Part Number: SS3-617-200

Overview

Swift Sensors Wireless 0-200AAC Current Meter measures the current consumption of high-power equipment and machinery, such as industrial generators, power distribution systems, entire kitchen appliance operations, server farms, industrial equipment, charging stations, and manufacturing systems. Clamp the split-core current transformer around a single live or neutral wire of the AC power system and close the latch for single-phase AC measurements. Users can set a threshold value and generate notifications if the measured value exceeds thresholds at user-defined inspection intervals of 1-30 minutes

Simple, Plug-and-Play Deployment

Place the small battery-powered sensor in the location or on the equipment you need to monitor. The Swift Sensors Gateway instantly identifies the sensor and establishes secure communication. No wires to connect. No software to install.

Sensors are powered with 2 AAA lithium polymer batteries with an average lifespan of 6 - 8 years. Sensors can be powered on or put into sleep mode by pressing the center of the sensor. A green LED in the sensor blinks when the sensor powers on, turns solid when transitioning to sleep mode, and will blink when the "Find my Sensor" command is sent from the Console. All sensors send encrypted data to the gateway.

Secure, Scalable, Cloud Architecture

The system is 100% cloud-managed. The gateway securely transmits sensor data to the Swift Sensors Cloud using 256-bit AES encryption. The system is scalable from a single sensor, one site application to multi-site enterprises with thousands of sensors.





Real-time Monitoring and Analytics with Actionable Data

Swift Sensors Console allows real-time asset monitoring and sophisticated analysis from anywhere – on a computer, tablet, or smartphone. Data analytics provide operational insights and deep visibility. SMS text, email, and phone call notifications can be set based on customizable threshold values and complex rules by individual sensors or sensor groups.

Applications

- ✓ Manufacturing and Production
- ✓ Facility Monitoring
- ✓ Museums
- ✓ Datacenters
- ✓ Warehouses
- ✓ Greenhouses
- ✓ Restaurants and Food Service
- ✓ Cold Chain Monitoring
- ✓ Transportation
- ✓ Building Management

Operational Specifications:

Power	1.8 - 3.6VDC, 0.045mW Average
Battery Type	AAA x2 Replaceable "L92" Lithium Polymer
Operating Voltage	1.8VDC - 3.6VDC
Avg. Current Consumption	16uA (Active), 500uA (Command ACK), <3uA(Sleep)
Operating Temperature	-40°C to +60°C (-40°F to +140°F) Defined by Batteries
Operating Environment	Indoor/Outdoor, 0-95%+ RH
Battery Life (Average)	6 - 8 Years
Communication Protocol	BLE/BT5 2.4Ghz
BLE Chipset	nRF52840
TX Strength	Default +8dBm
Range	70m - 90m (250ft - 300ft) Line-of-Sight 30m - 45m (100ft - 150ft) Non Line-of-Sight
Encryption	128-Bit AES Encryption
Button Press	Click to turn on. Press and Hold 2 sec to put in sleep mode
LED	Green LED: 2 sec. blinking when turning on Green LED: 2 sec. solid when entering sleep mode
Find My Sensor	Command from Console to blink sensor LED
Weight	56g (2 oz)
Dimensions	77.5mm x 57.5mm x 44mm (2.26in. x 1.73in. x 0.73in.)
Enclosure Material	ABS PA-765+
IP Rating	IP66
Connections	2m Length 22 - 24awg Alphawire EcoMini Insulated Split-Core Current Transformer attached to EcoMini Cable
Certifications   Industry Canada  	FCC ID: X8WBT840F IC ID: 4100A-BT840F CE Compliance: 2014/35/EU, 2014/53/EU, 2014/30/EU

Operational Specifications Cont.:

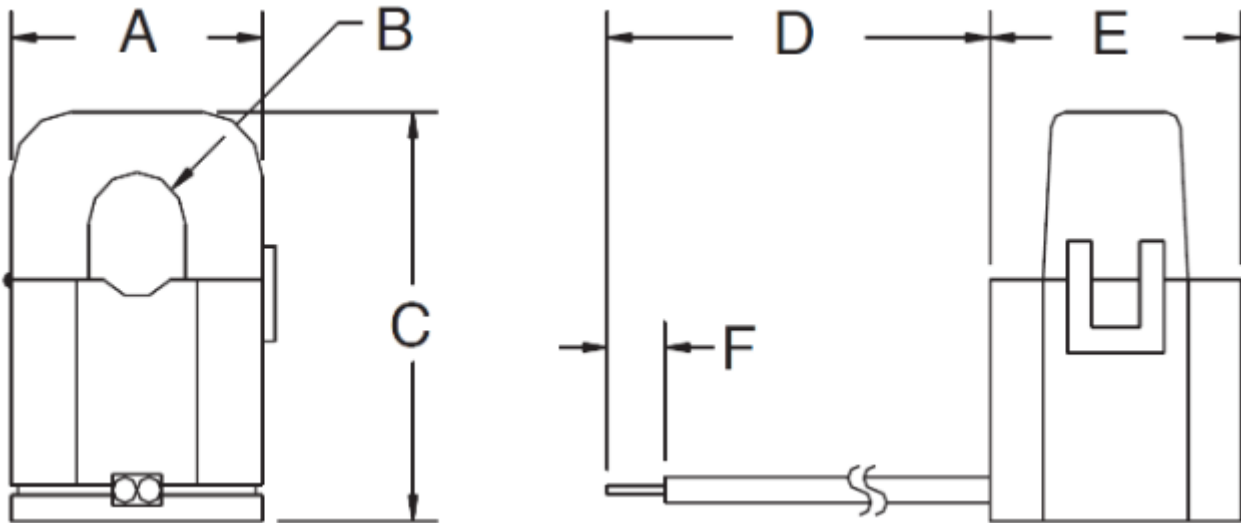
EMC Compliance	FCC Part 15 Class B
Flammability Rating	UL94-0V
Warranty	2-years

Measurements Specs:

Measurement	AC Current (Single-Phase)
Measurement Range	0-200Arms
Accuracy	+/- 1% 30-200Arms, +/-0.3Arms 10-30Arms*, +/- 0.2Arms <10Arms*
Precision	0.001AAC
Inspection Rate	1 - 30 Minutes, 5-Minute Default
Configuration	Clamped on Lead, Following K->L Bottom view diagram.

* <10% of CT range is inherently less-accurate, for any CT device.

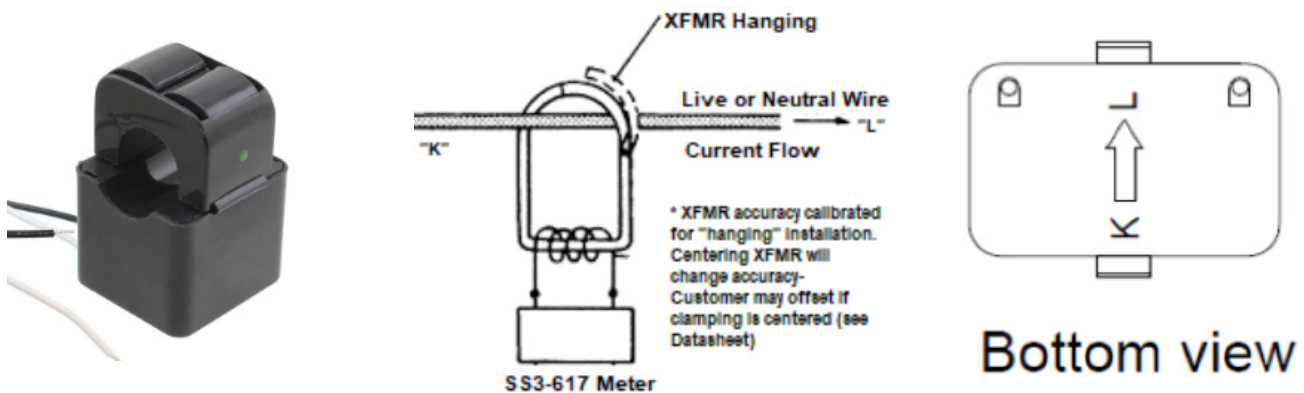
Current Transformer Dimension Table:



PRODUCT	A	B	C	D	E
SS3-617-30	19.2mm (0.76")	4.9mm (0.19")	31.5mm (1.24")	1-Meter (3.25')	20.8mm (0.82")
SS3-617-100	31.4mm (1.24")	15.7mm (0.62")	45mm (1.77")	1-Meter (3.25')	31mm (1.22")
SS3-617-200	45.2mm (1.78")	23.6mm (0.93")	65.5mm (2.58")	2-Meter (6.50')	34.7mm (1.37")

Application Diagram and Notes

1. SS3-617-200 Accuracy is defined by “hanging” application use. If Core is Centered, Provided Centering Offset can be applied.
2. CT Latch must be closed to obtain current readings. Keep CT latched whenever possible even while not in use, to prevent corrosion over time.
3. Clamping Direction: Clamp XMFR according to diagram below (Bottom-View). Current Direction should follow Bottom-View.



Swift Sensors Gateway

The Swift Sensors Gateway collects encrypted data from sensors located within the specified communication range (< 90m/300ft) and then transmits the sensor data to the Swift Sensors Cloud through either Ethernet, Wi-Fi, or cellular. The gateway auto-detects all sensors within range and will immediately establish secure communication without any user configuration or setup. Each gateway can support up to 150 Series 3 sensors.

Swift Sensors Console

All sensor data is logged and stored in the Swift Sensors Cloud. The Swift Sensors Console is configured to monitor and track all sensor data in the cloud. Multiple thresholds and alerts can be set separately for each sensor to supply notification via SMS text, email, or phone call. The console can be viewed in a web browser on a computer, tablet, or smartphone.

No programming is required to configure the console. An API to the Swift Sensors Platform allows integration with other data sources and 3rd-party data analytics tools.