

# Mini SmartEnergy Sensor (SEM-0x0A5-00)

## Quick Reference Guide

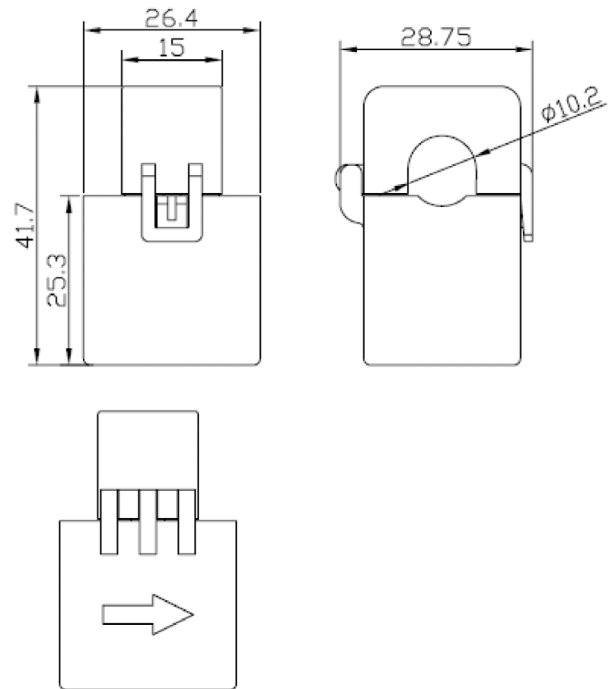
### Box Contents

- Mini SmartEnergy Sensor [SEM-020A5-00]
  - (5) SmartEnergy Sensor (SEM-020A5-00)
- Mini SmartEnergy Sensor [SEM-050A5-00]
  - (5) SmartEnergy Sensor (SEM-050A5-00)

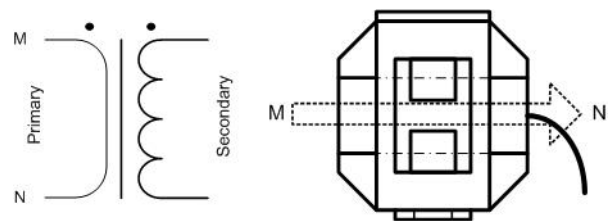
### Specifications

Environmental				
Temperature	-4° to 131° F (-20°C to +55°C )			
Humidity	10% to 90% RH (non-condensing)			
Location	Indoor Use Only			
Dimensions and Weights				
	Height	Width	Depth	Weight
SEM-020A5	1.64 in (41.7mm)	1.03 in (26.4mm)	1.13 in (28.75mm)	0.29 lbs (0.13 kg)
SEM-050A5	1.64 in (41.7mm)	1.03 in (26.4mm)	1.13 in (28.75mm)	0.29 lbs (0.13 kg)
Shipping	11.0 in (27.94cm)	11.0 in (27.94cm)	7.0 in (17.78cm)	1 lb (0.45 kg)
Features				
Primary Input	SEM-020A5 - 20A SEM-050A5 - 50A			
Output	0.333V at rated current			
Max Amp	40/100			
Linearity Range	±1% from 5% to 130% of rated primary current			
Frequency Range	50 to 400 Hz			
Max. Operating Voltage	720 VAC			
Dielectric Withstand Voltage	4,000V for 10 seconds			
Dielectric Resistance	100 MOhms @500VDC			
Accuracy Class	0.5, 1.0 (IEC 61869-2)			
Accuracy	< 1%			
Phase Angle	< 120 minutes			
Leads	0.61m (2ft), AWM 1015, Twisted Pair, 0.34mm <sup>2</sup> (22AWG), 600V			

### Outline Drawing



### Polarity Drawing



### Regulatory

Safety and Emissions



RoHS

Compliant

## Safety and Handling



### ELECTRIC SHOCK!

- The 120/240V AC, 60 Hz source power poses an electrical shock hazard that has the potential to cause serious injury to installers and end users.
- A licensed electrician is required to install any Savant Power devices. Isolate and turn off power at the main breaker panel prior to installing any electrical devices.



### ELECTRIC SAFETY!

1. Before starting a wiring installation or addition, consult a local building or electrical inspector for current National Electrical Code requirements. Local codes vary, but are adopted and enforced to promote safe electrical installations. A permit may be needed to do electrical work, and some codes may require an inspection.
2. Always disconnect power before working with any electrical equipment and do not work with equipment that is energized.
3. It is good practice to check for voltage or current using a voltmeter and/or ammeter to ensure electricity is disconnected.
4. Observe all local and national electrical codes.
5. Observe all applicable NEC code rules and design practices to determine the correct wire gauge.
6. Wear proper PPE equipment such as insulated rubber gloves, safety glasses, and rubber soled footwear when working. Refer to NFPA 70E (Handbook for Electrical Safety in the Workplace) for more information.
7. Always use insulated tools while working with electricity.
8. Ensure all equipment is properly grounded.