

# Sagemcom



  
SICONIA®

## SICONIA® Transformer-Rated Watthour meter

Type S090LW

# SICONIA® Self-Contained Watthour meter Type S090LW in conformance with ANSI C12.1[2022] and ANSI C12.10[2001(R2021)]

The new generation of Sagemcom ANSI smart meters will drive the transformation in home energy management and grid-edge computing. High processing power and high-resolution waveform at 16 kbps enable real-time device identification, advanced analytics, and artificial intelligence (AI). Low latency communication via Wi-Fi makes it possible to manage electric vehicle chargers and distributed energy resources (DERs), while also providing consumers with greater awareness and insights to balance their demands according to their preferences.

SPECIFICATIONS		
Basic Features	Service Type:	FM2S
	Rated Voltage:	4W WYE 69,3/120V and 120/208V – 277/480V 4W Delta 60(104)/120V and 120(208)/240V – 240(416)/480V
	Frequency:	60 Hz (+/-15%)
	Current Class:	CL20
	Operating System:	Linux
	Real time clock:	Less than 0,5s /day @ 73°F (5,78 ppm) Drift < 0,15s /°K /24h Time stamp maintained for 2 years, by battery
	Last Gasp:	Power outage notification up to 90 seconds
	Accuracy for active energy:	In conformance with ANSI C12.1 and ANSI C12.20 CA 0.2 (accuracy class 0,2%)
	Accuracy for reactive energy:	In conformance with IEC 62053-24 Cl. 1 (accuracy class 1%) Current range 1,5 - 30 (210) A
	Power Consumption:	@ Nominal Voltage Less than 1.5W / 2.5VA (without communication) 4.5W / 6.0VA (max value)
Environment	Events Management:	<b>Configurable event logbooks</b> • Standard event • Fraud detection event • Power Quality event • Communication event • Technical parameters change event
	Operating temperature inside the meter:	-40...+185°F HR <95%, non-condensing
Customer Interaction	Temperature sensor:	Metrology compensation
	Graphical LCD Display:	Energy registers on 9 digits in kWh (more than 20 years without rollover) Voltage and current presence and direction Quadrant information Display scroll sequence programmable (factory or end user) Push Button in front face or Light sensor, which acts like a push button
Communication interface	Home area network:	Wi-Fi enabled supporting Matter protocol Grid Apps enabled In home Intelligence Apps enabled
	Optical communication port:	ANSI Type 2 Optical Port supporting 9600 or 19200 bauds Compliant to wireless Handheld Unit (HHU) Mechanical interface in conformance with ANSI C12.10
	Modular Wide Area Network Communication module:	Supporting LTE Cat.M1, NB-IoT and RF mesh Wi-Sun Compliant to DLMS/COSEM North America GCP

## Technical features

### TIME OF USE

- Calendar with 12 season-profiles, 4 week-profiles and 24 day-profiles
- 30 special days
- 8 registers rates
- Up to 36 Billing registers

### POWER QUALITY

- In conformance with the IEC 61000-4-30 standard class A
- Integrated on 12 periods (200ms @60Hz)
- Harmonics up to rank 50
- Dip, swell and voltage interruption
- Voltage unbalance
- Rapid voltage change
- Voltage harmonics by rank and THD
- UTC time synchronization

### CONFIGURABLE LOAD PROFILES

- 3 Load profiles concurrent storage
- 50 configurable data channels
- Capture period configurable between 1 and 60 min

### GRID-EDGE COMPUTING

- Device Identification
- Power distribution monitoring

### WAVEFORM

- Voltage and Current integrated over a period
- Data sampling: 16 kbps

## Security

### DATA ENCRYPTION

- AES standard
- Cryptographic functions
- Firmware update over the air (FOTA) with signature management

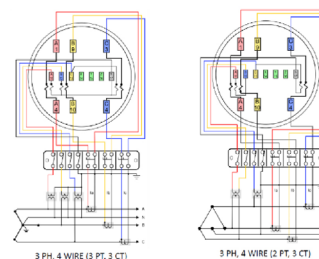
### SAFETY

- In conformance with ANSI C12.1, UL2735c and UL2735
- Impulse voltage 6kV in conformance with IEC 61180-1
- Surge 4kV in conformance with IEC 61000-4-5

### ANTI-TAMPER

- Super-Magnet detection
- Top Cover insertion/removal survey
- Motion detection
- Hot Socket detection

### CONNECTION



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