Sagemcom

SICONIA® Self-Contained Watthour meter

Type S022DLW and S023LW

SICONIA® Self-Contained Watthour meter Type S022DLW and S023LW 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 ksps 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	240V - 480V
	Frequency	60 Hz (+/-15%)
	Current Class	CL200 or CL320
	Operating System	Linux
	Real time clock	Less than 0,5s /day @ 23°C (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)
	Events Management	**Configurable event logbooks** • Standard event • Fraud detection event • Power Quality event • Communication event • Technical parameters change event
Environment	Operating temperature inside the meter	-40°C ... +85°C HR <95%, non-condensing
	Temperature sensor	Internal temperature survey Metrology compensation
Customer Interaction	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 simulating a push button
	Home area network	Wi-Fi enabled supporting Matter protocol Grid Apps enabled In home Intelligence Apps enabled
Communication interface	Optical communication port	ANSI Type 2 optical Port Protocol in conformance with ANSI C12.18 9600 or 19200 bauds 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
Breaker	Latching Relay	Remote disconnection and connection using a service switch integrated in the meter 6,000 cycles @ 200A, 240 Vac 60 Hz Only for CL200 meter

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 ksps

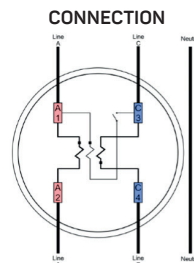## Security

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

Sagemcom Energy & Telecom SAS

Headquarters: 4 Allée Des Messageries

92270 Bois-Colombes - FRANCE

Tel : +33 (0)1 57 61 10 00 - Fax : +33 (0)1 57 61 10 01

www.sagemcom.com

Sagemcom