

Sagemcom



SICONIA®
Elec

Siconia® Self-Contained Watthour meter

Type 12S-200

SPECIFICATIONS		
Basic Features	Service Type:	FM12S
	Rated Voltage:	120Vac-240Vac (-50% / +20%)
	Frequency:	60 HZ (+/-15%)
	Current Class:	CL 200
	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 120 seconds
	Accuracy for active energy:	In conformance with 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:	Voltage @240V Less than 1,5W / 2,5VA (without communication) 4,5W / 6,0VA (max value)
Environment	Events Management:	Configurable event logbooks <ul style="list-style-type: none"> • Standard event • Fraud detection event • Power Quality event • Communication event • Technical parameter change event
	Operating temperature inside the meter:	-40°C ... +85°C 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) Light sensor which acts like a push button, to select the display screens, without opening the cover.
Communication interface	Home area network:	Wi-Fi enabled supporting Matter protocol. Gird Apps enabled. In home Intelligence Apps enabled.
	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
Breaker	Modular Wide Area Network Communication module:	In conformance with ANSI C12.22 and ANSI C12.19 supporting LTE, CATM1 and RF Wi-SUN
	Latching Relay:	Remote disconnection and connection using a service switch integrated in the meter. 5,000 cycles @ 200A, 240 Vac, 60 Hz,

Technical features

TIME OF USE

- Calendar with 12 seasons profile, 12 weeks profiles and 30 days profiles
- 30 special days
- 6 registers rates
- Billing registers
- Critical Peak Pricing

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

- 2 Load profiles concurrent storage
- 20 configurable data channels
- 100,000 entries each
- Capture period configurable between 1-60 min
- Additional real time data profile 1-60 second data storage

GRID-EDGE COMPUTING

- Device Identification
- Power distribution monitoring

WAVEFORM

- Voltage and Current integrated on a period (16,67ms) curve
- Data sampling: 32 Ksps

Security

DATA ENCRYPTION

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

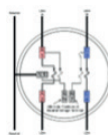
SAFETY

- In conformance with ANSI C12.1 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

CONNECTION



APPLICATION

