

Sagemcom

MS212

Mono Phase Smart Energy Meter



MS212 Products presentation

- New Generation of Multi-Energies
- Modular Communication module:
 - G3-PLC RF Hybrid
 - Cellular 2G/4G & NB-IoT
- Last Gasp
- DLMS Security Suite 0, 1 (ready for 2)
- Interoperability (DLMS/IDIS)
- Field Proven Datamodel

MECHANICAL CHARACTERISTICS	
Sealing method: Top cover and bottom cover are sealed together by ultrasonic welding. The terminal block cover is sealed by one dedicated screw and metallic ferrule.	
Connection diagram	BS or DIN
Cable size	35 mm ²

SPECIFICATIONS		
Communication interfaces	interfaces	<ul style="list-style-type: none"> • Optical port (IEC 62056-31) • PI DSMR • 2 auxiliary relays
	RF Hybrid G3-PLC	<ul style="list-style-type: none"> • 866-928 MHz • G3-PLC Alliance Standard • FCC/CEN-A
	Cellular Modem	<ul style="list-style-type: none"> • 2G/4G-LTE Modem - NB-IoT Modem • internal antenna plus SMA connection possible
Breakers	1 Internal load disconnector in Phase	<ul style="list-style-type: none"> • UC2 • Max metrological current: I_{max} = 60A • Max switching current: I_{max} = 90A

SPECIFICATIONS		
Basic Features	Voltage	120 - 240 V
	Current	5(60)A
	Max switching current per phase	90 A
	Frequency	50 Hz or 60 Hz ± 5%
	Accuracy	MID / IEC Class 1 Active Energy IEC Class 2 Reactive Energy
	Communication	Bidirectional
	Quadrants	Q1/Q2/Q3/Q4, Import/Export Energy
Environment	Events Management	Tamper event detection, recording and reporting
	Lifetime	15 years
	Operating temperature	-40°C / + 70°C
Customer Interaction	Humidity	< 95%
	Protection Index	IP 54
	Display	<ul style="list-style-type: none"> • LCD: Dot matrix 5 x 8 • Digit Size: 7x3 mm • Symbols: 48 (3 lines of 16) • Scrolling: auto and manual • Backlight: option, remotely configurable
	LEDs	<ul style="list-style-type: none"> • 1 for Active Energy • 1 for Reactive Energy
	Push Buttons	<ul style="list-style-type: none"> • Main button for scrolling and breaker connection • Sealable button for maintenance
	Reading without power	Internal battery

MAIN FUNCTIONALITIES	
Time of use	Programmable Load profiles: Capture list / capture COSEM objects / capture period
	Programmable Billing profiles: Capture list / capture COSEM objects / capture period
	Tariff management via built-in programmable output relay
	Calendar / Time of Use management
Power quality	Voltage Interruptions (Power down)
	Voltage Restoration (Power Up)
	Power Supply Quality
	Neutral current measurement
Security, integrity and verification	DLMS Security Suite 0, 1 (ready for 2)
	Auto diagnostic
	Data Storage strategy for integrity
	Local access to the meter by DLMS authentication Password (via the optical port)
Firmware and load management	Load Disconnection: locally and remotely
	Local and remote Firmware upgrade

Note: this list of functionalities is not exhaustive. Deeper features list and Security detail can be delivered on special demand under Non-Disclosure Agreement (NDA).

FRAUD DETECTION
Strong Magnetic field Detection
Magnetic field immunity
Top Cover and Terminal block cover opening/closing detection
Input - output swap detection
Phase - Neutral swap detection
Mains power cut detection
Power factor variation detection
Neutral Disturbance

CERTIFICATION
CE and IEC Declaration
UC2 (breaker) EN 62055-31 & IS15884
DLMS SECURITY suite 0, 1 (ready for suite 2)
MID Directive 2014/32/EU and the Radio Equipment Directive (RED) 2014/53/EU
DLMS CTT V3.0
LTE CAT NB2/NB1 (NB-IoT) / LTE CATM
G3 Alliance Certification
RED
Open to special Local/country Certification

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