# Sagemcom

# XS212

Single Phase Smart Energy Meter



- Cellular communication LTE Cat M / NB1 / NB2
  - Automatic Switch Cat M/NB1/NB2
  - eSIM MFF2 eUICC
- Last Gasp & Neutral current measurement
- DLMS Security suite 0 or 1 or 2
- Multi-energy : WMBUS 868 MHZ

SPECIFICATIONS			
Basic Features	Voltage:	230V	
	Maximum current:	60A or 80A or 100A	
	Max switching current per phase:	80A or 100A or 120A	
	Frequency:	50 Hz +/- 3 Hz (6%)	
	Active Energy:	EN50470-3 Class B	
	Reactive Energy:	IEC 62053-23 Class 2	
	Quadrants:	Q1 / Q2 / Q3 / Q4, Import / Export Energy	
	Real Time Clock:	Supercap: 15 years / 15 day <b>OR</b> Battery 3 years	
	Lifetime:	> 15 years	
Environment	Operating temperature:	-40°C/+70°C	
	Humidity:	< 95%	
	Protection Index:	IP 54	
	Fire protection:	5-VB (UL94)	
Customer Interaction	Display:	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:	1 for Active Energy 1 for Reactive Energy	
	Push Buttons:	Main button for scrolling	

MECHANICAL CHARACTERISTICS				
<b>Sealing method:</b> 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:	DIN 43856			
Mounting:	DIN 43857			
Cable size:	4 – 35 mm²			
Terminal Screws	2 screws M6 (Pozidrive) or 1 screw M8 (Pozidrive)			
Size (H*W*D)	205 x 130 x 82 mm (incl. 50mm free space)			

INTERFACES			
Integrated communication interfaces	Maintenance interface:	Optical port (IEC 62056-31)	
	HAN customer interface:	P1 DSMR 5.0.2 or RJ45/RS485	
	Cellular Modem:	LTE Cat M & NB2/NB1 (NB IoT) or LTE Cat-1 Band 3, 8, 20 Embedded Modem and internal antenna. SMA connector for external antenna	
Switchs	1 Auxiliary Relay	Monotable 3A/230V	











# Technical features



#### 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 & LTE MONITORING**

- · Voltage Interruptions (Power down)
- · Voltage Restoration (Power Up)
- · Power Supply Quality
- · Last Gasp
- · LTE Monitoring Profile

#### **SECURITY, INTEGRITY AND VERIFICATION**

- · DLMS Security suite 0 or 1 or 2
- · Auto diagnostic
- · Calibration mode
- $\boldsymbol{\cdot}$  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
- $\cdot$  Local and remote Firmware upgrade

## FRAUD DETECTION

- $\cdot \, \mathsf{Magnetic} \, \mathsf{field} \, \, \mathsf{Detection} \,$
- · Magnetic field immunity
- $\cdot$  Top Cover and Terminal block cover opening/closing detection
- · Input output swap detection
- · Phase Neutral swap detection
- $\cdot$  Mains power cut detection
- · Power factor variation detection

### CERTIFICATION

- $\cdot$  MID Directive 2014/32/EU and the Radio Equipment Directive (RED) 2014/53/EU
- · CE Declaration
- · DLMS CTT V3.0
- · LTE CATM / LTE CAT NB2/NB1 (NB-IoT)
- ·RED
- · UC3 (breaker) EN 62055-31
- DLMS Security suite 0 or 1 or 2
- $\cdot \, \mathsf{Local}/\mathsf{Country} \, \mathsf{Certification} \, \mathsf{on} \, \mathsf{demand} \,$

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).

### **CORE ARCHITECTURE**

High speed future proof Cortex™-M4 core microprocessor, integrating crypto/hash processor providing hardware acceleration for AES 128, 192, 256, Triple DES, and hash (MD5, SHA-1) and supporting BSI crypto standard.

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