About Sagemcom - History

1924
Birth of Sagem

2008
Exit of Safran group, birth of Sagemcom

2011
The Carlyle group acquired 70% of Sagemcom

40 years experience in Telecom
23 million terminals shipped every year

Turnover: $1.4 billion

4000 employees in more than 40 countries

30% of employee shareholding

500 engineers in our R&D center in Rueil-Malmaison (France)
The values of Sagemcom group

- **AGILITY**: Mobilized for the best
- **EFFICIENCY**: Performance as a daily challenge
- **CREATIVITY**: Differentiate to create values
- **CLIENT CENTRIC**: The client at the center of our actions
- **TEAM POWER**: Talent committed to the most ambitious projects
Sagemcom’s ambition is to remain a leader in customized communications terminals with high added value.

Sagemcom operates on three markets:

**BROADBAND**

**ENERGY & TELECOM**

**INTERNET OF THINGS**
Sagemcom group turnover distribution

Turnover: $1.4 billion

- Broadband & residential terminals: 39%
- Digital set-top box: 41%
- Energy & Telecom: 20%
Our R&D organization

500 engineers in Rueil-Malmaison (France)
550 all around the world
Our manufacturing bases

- **Sagemcom Multi-Energy Industry**
  - Dinan - France

- **ROSTOCK (GERMANY)**

- **Sagemcom MANUFACTURING**
  - Ben Arous (Tunisia)
  - 2 100 people

- **High volumes**
  - 11M/year
  - Energy, RGW, STB

- **High volumes**
  - 10M/year
  - PARTNERSHIPS

- **High volumes**
  - 2M/year
  - STB, RGW

- **Sagemcom MANUFACTURING**
  - Manaus (Brazil)

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Sagemcom Energy&Telecom: our strengths

50 years experience in telecom infrastructure design and deployment

20 years experience in energy and smart metering

A unique competence in development, customization and integration of hardware and software solutions

A strong local footprint thanks to our engineers, technicians and project managers.
SAGEMCOM E&T International Presence

AFRICA:
- Benin
- Botswana
- Burkina Faso
- Cameroon
- Chad
- Congo
- D.R.C
- Gabon
- Ghana
- Ivory Coast
- Kenya
- Madagascar
- Mali
- Mauritania
- Mauritius
- Morocco
- Niger
- Senegal
- Tanzania
- Togo
- Tunisia

EUROPE:
- France
- Hungary
- Spain
- Slovakia

ASIA PACIFIC:
- Australia
- French Polynesia
- New Caledonia
Energy & Telecom: our range of products

Energy Department

- **End-2-End portfolio, including**
  - G3 and Prime PLC meter and communication
  - HES and AMR

- **Multi Utility solutions**
  - All metering tasks, all services
  - Leading gateway solution provider

- **Customer focused Metering systems**
  - Flexible and scalable for your needs
  - Proven in nearly all major European rollouts

- **Communication Solutions**
  - Connect everything, everywhere
  - Security for critical infrastructure

- **Grid control and management**
  - Supply and Demand
  - Stabilizing

- **Energy and Site Management**
  - Complete site control and management
  - Energy cost reduction
  - Prepared to manage massive information

NIS Department

- **Smart Site**
  - Radio Site Construction
  - Reinforcement

- **Remote Monitoring Systems (RMS)**
  - ESM-Vision

- **Power solution**
  - Power Solutions for Telecom and Rural

- **End to End Rural Electrification solution**
  - Power solutions
  - Distribution
  - Metering & payment
  - Management

- **Digital Terrestrial Television**

- **Fiber Rollout**
  - Fiber backbones
  - Fiber to the Home/Building/Curb/Base Station
  - Intelligent Traffic Systems

- **Managed Services**
  - Sites and Networks Audit
  - Energy design and optimization services

- **Grid Extension for Rural Electrification**
On Grid solution: Grid extension for rural electrification

• Full turnkey solution for grid extension (Low and Medium Voltage), including:
  • Engineering
  • Civil works
  • Logistics
  • Installation & commissioning of:
    • Power transformer
    • Cables
    • Pylon and protection
Off Grid solution: End to end solution for rural electrification

Smart village built around ESM-Power/R includes:

- Power Station for different services or applications
  - Households connection
  - Industrial/Telecom sites connection
- Power distribution for different applications:
- End users (prepaid) meters
- Meters for distribution monitoring
- End to end monitoring and control thanks to ESM-Vision
- Management of QoS per application
- Maintenance & operations
Off Grid solution : End to end rural electrification solutions

Rural station

Solar / Hybrid station

Power station management
Energy management

Distribution

LV/MV distribution

Metering

• Prepaid,
• Limiters,
• Smart rural meters

Rural Equipment

SHS : PV & box for Energy & services

Solar Street Light

water pumping
Off Grid solution: End to end rural electrification

Smart rural station

- Power production
- Energy management:
  - Power priorities management
  - Distribution management
  - Subscribers management

Power station management (ESM-Vision)

- SHS: Solar Home System
- Solar Street Light
- Solar water pumping

Distribution

- LV/MV distribution

Metering

- Prepaid meters
- Power, energy limiters

NG smart rural meters (distribution monitoring and prepaid for subscribers)

1: Telecom
2: Hospital
3: Rural
4: Street light
5: Water pumping
N: others
Sagemcom Energy & Site Monitoring Solutions

Energy, security, fuel

Local Interfaces:
- Ethernet – RS485
- WMBUS – DRY LOOP

Monitoring

SITES – SERVER connection
- Ethernet – 2G/3G – SMS

SERVER
Thanks to ESM-Vision, it’s possible to manage QoS per application

As an example:
- Telecom sites
- Hospital
- Rural distribution
- Irrigation, pumping water

Production & Distribution

Applications

- High power
  - High priority
  - (availability > 99%)

- Low power
  - High priority

- High power
  - Energy per day guaranteed

- Medium power
  - Best effort

- Other: pumping water,..
ESM-Power / R : Pre-payment

- User requests a recharge with mobile money service
- User receives back, the recharge code to input on the meter

Meter recharge request by user with Mobile Money

Mobile Money request processing

Based of amount of prepaid kWh, generation of an STS code or equivalent

Code generation

Recharge code sending by Mobile Money on user mobile

Recharge code input in the meter by the user
Thank you for your attention