

# SAGEM MO300 / XS300

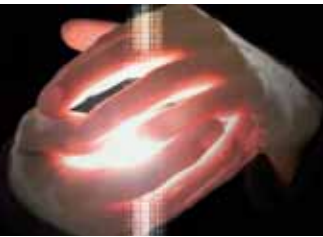
EDGE M2M modules

Give a soul to your machines



FREEDOM OF SPEECH  
FOR SMART MACHINES



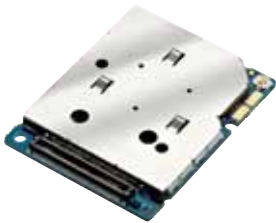


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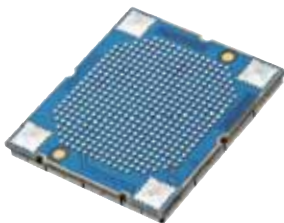
## EDGE M2M modules

GSM, GPRS, EDGE Class 10  
Full Quad band 850/900/1800/1900 MHz  
Very small form factor  
Low power consumption (< 2mA in Idle mode)  
Digital Audio interface  
Complete embedded Internet connectivity  
Ruggedized design for automotive & industrial applications

Available in 2 form-factors:



MO300: connector-type



XS300: BGA package

SAGEM introduces its new EDGE family for all your M2M applications: smaller, faster and more powerful, SAGEM MO300 & XS300 bring new possibilities to your developments!

**Moreover, by choosing SAGEM, you decide to choose:**

- A world class manufacturer who controls its own production capacity
- A technology validated and approved worldwide
- A top of the range technical support
- The highest standards of quality

**Also available and compatible with MO300 / XS300:**

**MO300E / XS300E: all MO300 / XS300 features with a Linux OS to run customer applications inside the module.**

## TECHNICAL FEATURES

### ENVIRONMENT

- 80 Pins Industrial approved Connector
- Size ( L x W x H mm): 43.1 x 34 x 3.2
- Operational Temperature range: -30°C / +75 °C
- Power supply DC voltage (min / max / nominal): 3.3 V / 4.5 V / 3.8 V
- Antenna Connection & Detection through RF connector or Antenna pad
- Full Type Approved: R&TTE, GCF, PTCRB, FCC, Rohs Compliancy
- Consumption in Standby mode (can receive a call): < 2 mA
- Consumption in off mode: < 50 µA
- Autonomous sleep mode management by Hardware or Software
- Enhanced mechanical integration for ruggedised environment
- Temperature Sensor (for MO300)
- Possibility to mount sim card holder on the back (for MO300)

### RADIO LINK

- Full Quad Band: EGSM 850, 900, 1800, 1900
- Output Power: Class 4 (2W) for 850 / 900 Mhz ; Class 1 (1W) for 1800 / 1900 Mhz
- EDGE/ GPRS Multislot Class: class 10 (3+2 & 4+1)
- EDGE baudrates: DL up to 236.8 kbps, UL up to 118.4 kbps
- GPRS baudrates: DL up to 85,6 kbps, UL up to 42,8 kbps
- EDGE Coding Scheme: MCS1 to MCS9
- GPRS Coding Scheme: CS1 to CS 4
- Mobile Station Class B

### DATA INTERFACES

- 1 USB 2 Full speed and 2 serial Interfaces
- Full Hardware and Software Flow Control
- AT commands set: GSM 07.05; 07.07; 07.10, Proprietary AT commands
- Multiplexing 07.10 serial interface
- Data over CSD 9,6 kbps
- Complete internet connectivity embedded: TCP, FTP, UDP, SMTP, POP3...
- 12 general I/O

### AUDIO INTERFACE

- Voice codecs: HR, EFR, FR, AMR
- 2 Differential analog audio interfaces
- Echo Cancellation & Noise reduction
- 1 Digital audio interface
- Dedicated audio channels (handset, headset, car kit, hands-free)

### GSM FEATURES

- Automatic hang up for Data call
- Internal Phonebook
- CLIP / CLIR / COLP / COLR
- Call wait / call hold, Conference call
- Call forwarding, Call Barring
- Supports of: FDN, USSD, Sim Toolkit, AoC
- Module reset/alarm based on RTC

### MESSAGING

- PDU and Text mode SMS support
- Voicemail indicator (CPHS)
- MMS support (dedicated AT commands)

### LOCALIZATION

- SMS CB, Cell ID
- Network cells measurements

### SECURITY

- Sim lock supported
- Device lock possibility
- Dedicated TAC for Customization purpose
- Sim 3V & 1.8 V supported

### DEVELOPMENT AND SUPPORT TOOLS

- Extensive Documentations: HW Specs, Application Note, AT command List, pedagogical documentations
- Development board
- Evaluation software tools (TCP-IP, MMS, 07.10 protocol, ...)
- Audio settings tool
- Upgrade tools
- Design, Certification & production support

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