

# SAGEM MO200 GSM/GPRS Module

## PRODUCT SYNOPSIS



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### FEATURES SUMMARY

**Embedded GSM, GPRS Class 10 Module**  
**RoHS Compliant**  
**Quad-band 850/900/1800/1900Mhz**  
**Extended temperature range (from -25°C up to +70°C)**  
**Low power consumption (less than 2mA in Idle mode)**  
**Digital Audio interface**  
**Ultra high connectivity**

- Integrated TCP-IP stack and MMS Client
- Enhanced interface for direct connection to GPS devices



### DETAILED SPECIFICATIONS

GENERAL CHARACTERISTICS	
<b>Size</b>	
Dimension (LxWxH, mm)	54 x 34 x 3 mm
Weight (g)	10g
Volume (cm3)	5.5
<b>Connectivity</b>	
Technology	Connector
Number of pins	120
Antenna connection	50 ohms, coaxial cable or contact plate



RADIO LINK	
<b>GSM</b>	
GSM Band - True quad-band for global deployment	850Mhz, 900Mhz, 1800Mhz, 1900Mhz
Automatic switching between bands	Yes
Voice codec's	HR, EFR, FR, AMR
<b>GPRS</b>	
PBCCH supported	Yes
GPRS Class	B (suspend/resume supported)
GPRS Multistat Class	Class 10 (3+2 & 4+1)
GPRS Baud Rates	Down Link up to 85.6 kbps, Up Link up to 42.8 kbps
<b>Others</b>	
EDGE	No
UMTS	No

POWER MANAGEMENT	
<b>Power supply</b>	
Power supply DC voltage (min / max / nominal)	3.45V / 4.5V / 3.8V
Available power supply outputs	Yes, 2
<b>Power Management</b>	
Autonomous sleep mode management	Yes
Inhibition of sleep mode (hardware and software)	Yes
Negotiation between DTE and DCE	Yes
<b>Power Consumption</b>	
Consumption in "communication mode"	280mA average, 2200mA peak during TX slot
Consumption in "standby mode" (can still receive a call)	< 2mA
Consumption in "off mode"	120uA
<b>Battery charging function</b>	
Battery charging algorithm embedded in the software	Yes
Battery type recommended	Li-Ion or LI Polymer *

INTERFACE with EXTERNAL CPU	
<b>Command and data interface</b>	
Multiplexed serial interface	Yes (07.10 MUX Interface)
2nd serial interface	Yes
<b>V24 flow control</b>	
Flow control Module => DTE	Yes: hardware and software
Flow control DTE => Module	Yes: hardware and software
<b>Command set</b>	
AT commands Set	07.05, 07.07, v25ter
Multiplexing	07.10

AUDIO INTERFACE	
<b>Audio interface</b>	
Analogue audio interface	2
Type of audio input/output	Differential
Digital audio interface	Yes
<b>Audio settings</b>	
Microphone sensitivity setting	Yes
Speaker gain setting	Yes
Acoustic echo cancellation	Yes
<b>Audio features</b>	
Ringtones management	Yes
Dedicated audio channels (handset, headset, car kit, hands-free)	Yes



GSM STANDARD FEATURES & CALL MANAGEMENT	
<b>Call Management</b>	
Automatic answer	Yes (data calls only)
Internal phonebook	Yes
Call history (dialled, received and missed)	No
CLIP / CLIR / COLP / COLR	Yes
Call waiting / call hold	Yes
Conference call	Yes
Call forwarding	Yes
Call barring	Yes
Forbidden list	No
<b>Supplementary Services</b>	
FDN	No
USSD	Yes: Phase 2+
Sim card tool-kit	Yes: Class 3 Release 99
AoC	Yes
MESSAGING	
<b>Messaging</b>	
SMS	Yes: (text mode and PDU mode)
Concatenated SMS	Yes: up to 16
EMS	No
MMS	Yes: (optional dedicated AT commands)
DATA	
<b>Data / Fax</b>	
Built-in data / fax Modem	Yes
Data over CSD 9.6kbps	Yes
Data over GPRS	Yes
<b>WLAN</b>	
WiFi (802.11b,a) interface design	Yes: (with ATMEL WiFi chipset)
WiFi (802.11b,a) ready AT commands	EAP SIM
<b>Bluetooth</b>	
Bluetooth interface design	Yes: (with TI chipset), for audio application
Bluetooth ready AT commands	Yes: (DAI commands)
<b>Built-in Communication Protocols</b>	
IP	Yes
TCP Sockets	Yes
FTP	Yes
LOCALISATION	
<b>Localisation Features</b>	
SMS CB	Yes
Cell ID	Yes
Network cells measurements	Yes
GPS interface design	Yes: (with Infineon /Global Locate chipset)
GPS ready AT command set	Yes: (NMEA commands)
	
STAND ALONE APPLICATION	
<b>Stand Alone Application</b>	
Flash file system	No
Embedded customers application	No: (See MO230)
<b>Java</b>	
Protocol supported	No: (See MO230)
Available size for user's midlets	No: (See MO230)
Available GPIO	N/A
AT commands emulation	N/A
Firmware upgrade Over The Air	N/A
SECURITY	
<b>Security</b>	
Sim lock	Yes: (under certain condition)
Device lock	Yes
DEVELOPMENT TOOLS	
<b>Extensive Documentation</b>	
Dummy space samples	Yes
Hardware specification documentation	Yes
Application Notes	Yes
Comprehensive AT commands list	Yes
<b>Comprehensive Suite of Development Tools</b>	
Evaluation / development board	Yes
Evaluation software tools (TCP-IP, MMS, 07.10 protocol, ...)	Yes
Upgrade tools	Yes
<b>Java Applications</b>	
Software development kit	No
Java application manager	No
<b>Smart Phone / PDA</b>	
Microsoft Windows Mobile Compliant	Yes
Microsoft RIL drivers	Yes
<b>Modem, PC cards</b>	
PC tools for modem management	Yes: (licensed by third parties)
	

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components

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