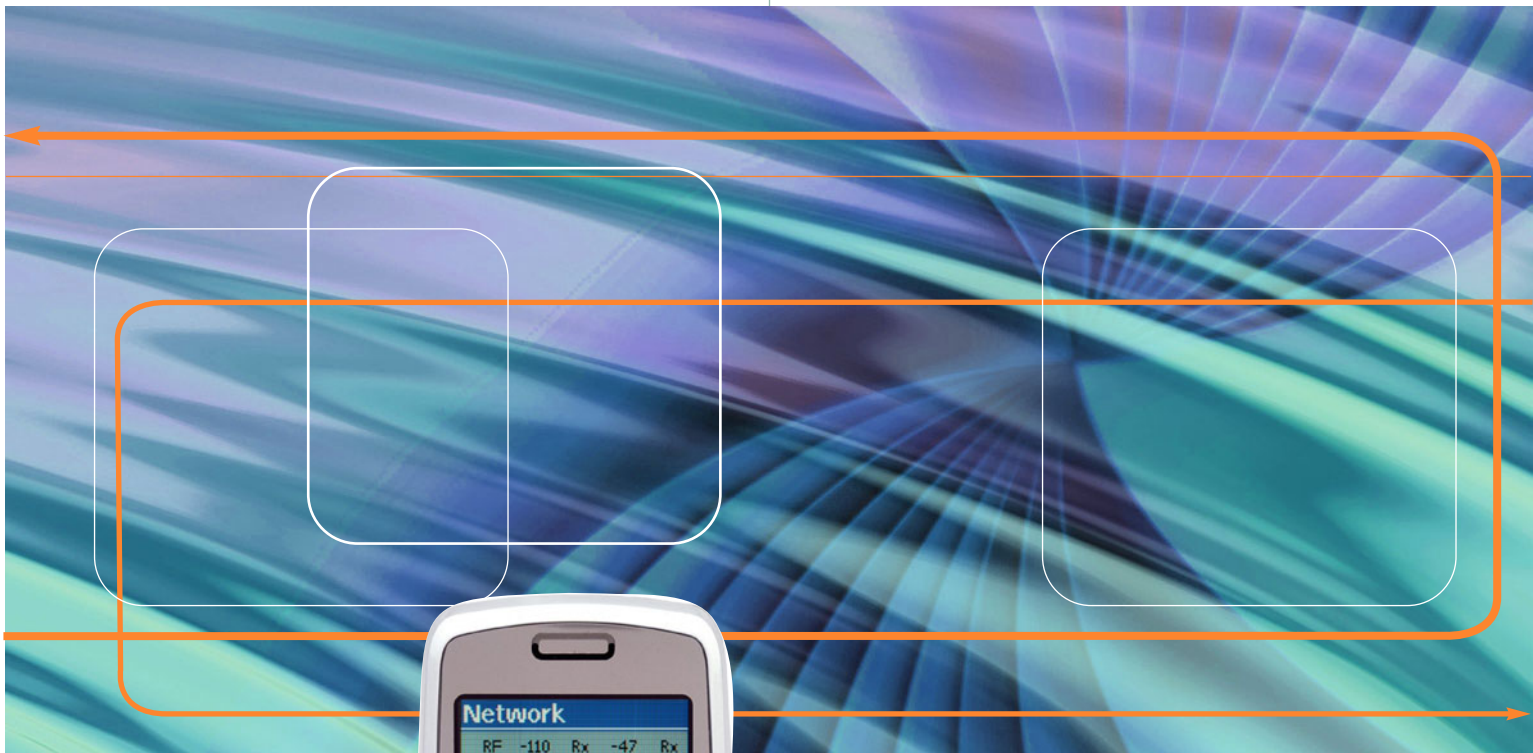


SAGEM OT 200 PRODUCT LINE

The SAGEM Engineering mobile



Network			
Serving cell			
PBCCH	782	Idle	
Rx	-63		
C1	18	BSIC	7.7
C31	9	C32	18
RM	-101	RA Col.	00
CI	077C	TS	0
LAI	208-20	035	
Back		Options	

Data transfer			
Downlink	TF		
TS			
CS	-	2	2
Uplink	TF		
TS			
CS	-	-	-
Alloc	Dyn		
Back			

- 2 and 2,5G capability
- Real time network monitoring
- Open interface for external trace processing and logging
- Large color display for friendly real time measurements
- Trace storage



SAGEM

Technical features

Engineering capability

- Forcing functions
 - BCCH
 - Cell bar access
 - Frequency band (GSM/PCS/DCS)
 - Handover
 - GPRS coding scheme
 - GPRS multislot class

Scanning

- Scanning (by band or by set of frequencies)
- BSIC

Layer 3 message control

- Suppress, modify, create

2G trace description

- Radio environment information
 - Received level
 - C/I measurement
 - Serving/neighbouring cell frequency
 - Cell reselection parameters

Mobility management information

- Authentication
- Ciphering
- Location (Cell Identity, LAC, MCC, MNC)

Protocol messages monitoring

- Layer 2: LAPD-m
- Layer 3: RR, MM, CM

Quality of Service

- Downlink signaling counter
- Frame Erasure Rate
- Codec state (HR, FR, EFR, AMR)
- DTX state

2,5G trace description

- Radio environment information
 - Received level
 - Serving/neighbouring cell frequency
 - Cell reselection parameters

GPRS Mobility management information

- Identity
- Location (Cell Identity, RAC, LAC, MCC, MNC)

GPRS Session management information

- PDP QoS
- IP Address
- Location (Cell Identity, RAC, LAC, MCC, MNC)

RLC/MAC information

- Packet channel information: frequency, timing advance, time slots
- Radio quality information: BER, Sign var, C value

Protocol messages monitoring

- RLC/MAC: control blocks, data blocks
- GMM/SM: GPRS attach, PDP activation

Quality of Service

- RLC throughput, Block error rate, Block retransmission rate
- LLC throughput, frame retransmission rate



2 and 2,5G capability

The SAGEM test tools are designed to fulfil the operators and integrators requirements and to provide the best solution to operate and maintain GSM and GPRS networks.

Real time network monitoring

SAGEM OT 200 range gives all trace information for investigation or quality monitoring. GSM/GPRS software provided with the mobile enables visualisation, recording and replay of all information.

Open interface for external trace processing and logging

The physical interface, based on standard serial interface, makes easier the use of the terminal in trace or transfer mode.

Trace storage

Capability to store in the mobile alone measurements made in real time. The data are download in a computer using the data interface in trace mode.

GSM/GPRS range:

SAGEM OT 290 (GSM-DCS/PCS)

Technical features:

- MMS
- WAP over CSD/GPRS
- Protocol analysis
- Quality of service information (GSM/GPRS)
- Class 10 (4+1/3+2)
- Simultaneous data transfer and trace information
- GSM/GPRS forcing functions (Ch, Band,...)
- C/I measurement
- Scanning capabilities
- Radio environment survey

SAGEM OT 230 (GSM-DCS/GSM-PCS)

- A field oriented product for easy testing and performance analysis
- Data session with GSM/GPRS trace information available on the mobile display
- The engineering realtime cost effective solution
- Graphical color display

GSM range:

SAGEM OT 260 (GSM-DCS/PCS)

Technical features:

- Serial port for data transfer (CSD) or trace information
- GSM forcing functions (Ch, Band,...)
- Scanning capabilities
- WAP over CSD
- MMS
- Protocol analysis
- Quality of service information
- E-GSM supported
- C/I measurement
- Radio environment survey

GSM/GPRS Trace visualisation software:

SAGEM OT Drive compatible with OT 260 and 290

A real time investigation tool for easy testing and performance monitoring:

- Complete trace display in information windows
- Session logging and replay for post analysis
- Forcing functions and scanning control



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SAGEM SA Mobile Phones Division

Phone. +33 1 40 70 63 63 Fax +33 1 40 70 66 40 www.sagem.com

Head office: 27, rue Leblanc - 75512 PARIS CEDEX 15 - FRANCE

SAGEM SA - Société anonyme à directeur et conseil de surveillance
au capital de 36 405 229 € - 562 082 909 R.C.S. PARIS

