

Sony Ericsson



GM27

New generation versatile module



Conceptual drawing

- Dual Band EGSM 900/1800 MHz, GSM 850/1900 MHz
- Voice, SMS and data – HSCSD (2+1)
- Tricodec (HR/FR/EFR)
- GPRS and Internet ready – P Channels
- Fully type approved for GSM Phase 2+ specifications
- USSD

The GM27 is the latest in an impressive, new generation of high-quality M2M radio devices from Sony Ericsson.

With its dual GSM bandwidth, the GM27 has the ability to send and receive data by GPRS, CSD, HSCD or SMS – as well as handle voice calls.

Exceptionally versatile, the GM27 can be used in a very wide range of applications including automotive, fleet and asset management, infotainment, security and alarms, hand-held devices and AMR, amongst others.

Although new, the GM27 also has the benefit of providing backward compatibility with the existing generation of GM22/GM25 products, both in terms of functionality and system interface.

The same levels of excellence that have been trademarks of Sony and Ericsson worldwide go into every radio device design. Sony Ericsson applies the same R&D and manufacturing expertise in these products as it does in its world-class mobile telephones.

Sony Ericsson is certified to the international standard ISO 9001.

GM27

Product features

Dual band GSM radio device (EGSM 900/1800 MHz or GSM 850/1900 MHz)
Compliant with ETSI GSM Phase 2+ standard (Normal MS)
Class 4 (2W @ 900 MHz)
Class 1 (1W @ 1800/1900 MHz)
Power supply:

- 5 VDC
- 250mA average current in voice communication (CS, average)
- 350mA average current in data communication (GPRS 4+1)
- <15mA in idle mode

Overall dimensions (excluding connectors): 106 x 50 x 16mm
Operating temperature range: -25°C to +55°C
Storage temperature range: -40°C to +85°C
Weight: <60g

Voice, Data, Short Message Service (SMS)

GSM 07.10 Multiplexing Protocol

Voice features

- Telephony
- Emergency calls
- Full Rate, Enhanced Full Rate and Half Rate (FR/EFR/HR)
- Echo Cancellation and Noise Reduction
- Dual Tone Multi Frequency function (DTMF)

Data features

- Data circuit asynchronous, transparent and non transparent up to 9.6 kbps
- HSCSD (2+1), up to 19.2 kbps
- GPRS Class B (4+1), 85.6 kbps – P Channels – Coding schemes CS1-CS4

Short Messages Service (SMS) features

- Text and PDU
- Point to point (MT/MO)
- Cell Broadcast
- Concatenation – up to 6 SMS

GSM Supplementary Services

- Call forwarding
- Call hold, waiting and multiparty
- Calling/called number identification
- Advice of charge
- USSD
- Alternate line service
- Customer service profile
- Preferred networks
- Operator selection
- Network registration
- Calling cards
- Call barring
- Call transfer

Other features

- ME + SIM phone book management – read/write/find, call screening, groups, personal rings, settings
- SIM Application Toolkit Class 2
- Real Time Clock
- Alarm management
- Software upgradeable
- Audio control
- Fixed dialling number
- UCS2 character set supported

Interfaces

- Single antenna interface (MMCX)
- Single 30 pins board to board connector including:
 - Power supply connection
 - 3/5V SIM interface with SIM detection
 - 1 microphone input and speaker output
- RS-232 serial link (2.7 V) supporting:
 - Remote control by AT commands (GSM 07.07 and 07.05)
 - Serial baud rate from 1200 to 460,800 bits/s
 - 2 x General Purpose Serial Interface
 - 1 x buzzer output



Sony Ericsson

Sony Ericsson Mobile Communications International AB