Sony Ericsson

GM47/GM48

Big performance compact size

- 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

- Bluetooth and GPS interoperability

- USSD

- Developer's Kit

Trust Sony Ericsson to bring you outstanding quality and performance in the latest state-of-the-art radio device.

The new GM47/GM48 may be compact, (just 58 x 32 x 6.7mm), but it really packs a punch, with all the features you need at the heart of your M2M communications solution.

It can be used in virtually any imaginable application and is ideal for fleet and asset management, vending machines, security and alarm monitoring and more…

With dual GSM bandwith (EGSM 900/1800 MHz or GSM 850/1900 MHz) and the ability to send and receive data by SMS, CSD, HSCSD or GPRS, as well as handle voice calls, the GM47/GM48 is compatible with major communications standards worldwide.

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.

GM47/GM48

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:
- 3.4 – 4 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): 58 x 32 x 6.7mm

Operating temperature range: –25°C to +55°C

Storage temperature range: –40°C to +85°C

Weight: 18.5g (including shielding)

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 60 pins board to board connector including:
  – Power supply connection
  – 3/5V SIM interface with SIM detection
  – 2 microphone inputs and 2 speaker outputs
  – 4 x General Purpose I/Os
- 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
  – 3 x Analogue to Digital Converter
  – 1 x Digital to Analogue Converter
  – 1 x buzzer output