



Sony Ericsson

GT47/GT48

Intelligent and Versatile Control Terminal



- Self-contained Control Terminal
- Access to embedded microcontroller for hosting applications*
- Easy and cost-effective application development using M2mpower
- Wide and useful range of I/Os
- Dual Band EGSM 900/1800 MHz (GT47) or GSM 850/1900 MHz (GT48)
- Data, Fax, SMS and Voice
- GPRS Class B (4+1) – P Channel Support
- GT47 Type Approved for GSM Phase 2+ standards
- GT48 FCC/PTCRB and major carriers approved

* Accessible when the GT47/GT48 is used together with M2mpower

The GT47/GT48 is an intelligent GSM/GPRS control terminal that encapsulates everything you need for wireless M2M capability in one compact unit. In conjunction with Sony Ericsson's M2mpower package the GT47/GT48 can host and control your wireless application, minimising the need for extra components. Alternatively, it can be used as a standalone and powerful GPRS modem with its intrinsic TCP/IP stack.

The GT47/GT48 breaks through the entry barriers to M2M communications by minimising investment and reducing total system costs. Not only is it intelligent but the GT47/GT48 is self-contained with its own SIM card reader and standard connector interfaces, minimising the need for further hardware development. Its wide and useful range of I/Os can be re-configured to add functions and features that make your M2M solution both innovative and cost-effective. The M2mpower package enables you to develop and embed your application directly onto the GT47/GT48, requiring less development resources, shortening time to market and reducing total solution costs.

Adaptable and easy to use, the GT47/GT48 can be used in a multitude of wireless applications including fleet and asset management, vending, security and alarm monitoring, e-maintenance and other telemetry applications. The ease of application development and hosting on the GT47/GT48 even opens the door to provide M2M solutions in areas of personal leisure (e.g. boats and caravans) and around the home.

With dual band 900/1800 MHz (GT47) and 850/1900 MHz (GT48) versions available, your applications can be used all over the world.

M2M Com Product Unit of Sony Ericsson Mobile Communications is ISO-9001 Certified.

GT47/GT48

Product features

- Dual Band GSM/GPRS Control Terminal and Serial Modem (EGSM 900/1800 [GT47] or GSM 850/1900 [GT48])
- Hosting services for embedded applications
- Compliant with 3GPP GSM Phase 2+ (GCF-CC v3.8.1 [GT47]/NAPRD v.2.7.0 [GT48] standard) (Small MS)
- RF Output power
 - Class 4 (2W) @ 850/900 MHz
 - Class 1 (1W) @ 1800/1900 MHz
- Supply Voltage 5V – 32V
- Overall dimensions (excluding connectors): 77 x 67 x 26mm
- Temperature range:
 - -20°C to +55°C (full spec)
 - -30°C to +75°C (reduced spec)
 - -40°C to +85°C (storage temperature)
- Weight: < 110g

Interfaces

- Data: 15 way High Density D-sub female
- Power and Extended I/O: 5V – 32V DC (RJ12)
- Audio 4-wire Handset Interface (RJ9)
- Antenna: 50Ω (FME male)
- SIM card reader: 3V/5V interface with SIM detection
- LED interface
- 4.8V power output (via HD15)

Data I/Os

HD15

- 1 x full RS232 – (9-signal)
- 1 x ADC/digital input
- 2 x digital inputs[±]
- 2 x digital outputs[±]
- 1 x 4.8V DC output (<75mA)[†]

^{*} Reconfigurable as 1 x RS232 i/f, 4-signal, with CTS/RTS

[†] Reconfigurable as 1 x digital output

RJ12

- 1 x digital output (switch to GND)
- 1 x digital output (switch to V_{IN})
- 1 x digital input

Data features

- CSD asynchronous – non transparent up to 9.6 kbps
- HSCSD (2+1), up to 28.8 kbps
- GPRS Class B (4+1), up to 85.6 kbps*
 - P Channel Support
 - Coding schemes CS1 – CS4
- GSM 07.10 Multiplexing Protocol

* Requires network support

Short Message Service (SMS) features

- Text and PDU
- MO/MT & CBM
- Cell Broadcast
- Concatenation – up to 6 SMS

Voice features

- Telephony
- Emergency calls
- Full Rate, Enhanced Full Rate and Half Rate (FR/EFR/HR)
- Dual Tone Multi Frequency function (DTMF)
- GT48 supports AMR

Fax features

- Fax Group 3, Class 1 & 2

Embedded Applications

- Intrinsic functions: to support applications such as metering, vending, security, telematics
- OTA script download
- E-Maintenance

TCP/IP

- Intrinsic TCP/IP protocol stack

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
- Call barring
- Call transfer

Other features

- Power save mode
- V_{IN} (input voltage) surveillance feature
- ME + SIM phone book management – read/write/find, call screening, groups
- SIM Application Toolkit Class 2
- Real Time Clock
- Software upgradeable
- Audio control
- Fixed dialing number
- UCS2 16 bit data supported
- GPS interoperability
- Commercially available accessories
- Optional: Support for I²C serial bus



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