GSM | GPRS

GM862-QUAD
Modem

GM862-QUAD-PY
Modem

- Telit Unified AT Command Set
- Telit Firmware Management Services
- Quad Band GPRS
- GPRS Class 10
- Pin to Pin Backward Compatible
- RoHS Compliant
- On Board SIM Holder
- SIM Access Profile
- PYTHON* Script Interpreter
- Embedded FTP and SMTP Client
- Extended Temperature Range
- Extended RF Sensitivity
- Serial Port Multi-plexer (GSM 7.10)
- Embedded TCP/IP Stack

QUALITY, INVESTMENT PROTECTION, BUSINESS SCALABLE, EASE OF INTEGRATION

The GM862-QUAD module is the next generation of the GM862 product family continuing Telit's success in the field of easy-to-integrate GSM/GPRS modules for all industrial m2m applications.

The development focus of the GM862-QUAD was on pin-to-pin compatibility to existing GM862 products, while adding quad-band functionality and RoHS compliance. This translates into one consistent product offering for global GSM networks and provides for significant cost advantages with the savings in approvals and logistics costs.

The ruggedized design, extended temperature range, and integrated SIM card holder make the GM862-QUAD the ideal platform for medium volume projects. Additional features like jamming detection, integrated TCP/IP protocol stack, and Telit's Easy Scan® functionality feature extend capabilities without adding cost.

The GM862-QUAD-PY makes it possible to run customer applications inside the module, thus making the device a complete platform for customer solutions. State-of-the-art IIC interfaces provide connectivity to external peripherals such as sensors and displays.

All Telit modules, support Over-the-Air firmware update by means Telit Firmware Management Services (TFMS). Telit is able to update its products by transmitting only a delta file, which represents the difference between one firmware version and another.

As a part of Telit's corporate policy of environmental protection, Telit products comply to the RoHS (Restriction of Hazardous Substances) directive of the European Union (EU Directive 2002/95/EG).

Product features

- Quad-band EGSM 850 / 900 / 1800 /1900 MHz
- Output power
  - Class 4 (2W) @ 850 / 900 MHz
  - Class 1 (1W) @ 1800 / 1900 MHz
- Control via AT commands according to GSM 07.05, 07.07 and Telit enhanced
- Supply voltage range: 3.22–4.5 V DC (3.8 V DC recommended)
- Power consumption (typical values)
  - Power off: 26 uA
  - Idle (registered, power saving): ‹ 4 mA
  - Dedicated mode: 200 mA
  - GPRS cl.10 (max): 370 mA
- Serial port multiplexer GSM 7.10
- SIM access profile
- Sensitivity:
  -107 dBm (typ.) @ 850 / 900 MHz
  -106 dBm (typ.) @ 1800 / 1900 MHz
- Dimensions: 43.9 x 43.9 x 6.9 mm
- Weight: 19 grams
- Extended temperature range
  - 40°C to +85°C (operational)
  - 40°C to +85°C (storage temperature)
- RoHS compliant
- TCP/IP stack access via AT commands

Making machines talk.®

GM862-QUAD
Modem

GM862-QUAD-PY
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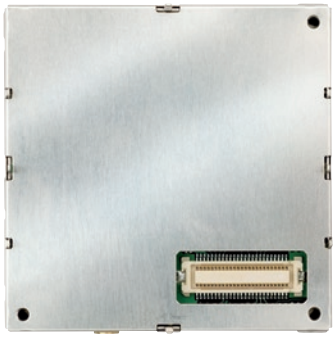

actual size

Interfaces
- 50-pin Molex connector
- 13 I/O ports maximum
- Analog audio (balanced and unbalanced)
- 1 A/D converter
- Buzzer output
- ITU-T V.24 serial link through UART:
  - CMOS level
  - Baud rate from 300 to 115,200 bps
  - Autobauding from 2,400 to 57,600 bps
- 50 Ohm MMCX antenna connector
- On board SIM card holder, 1.8 V / 3 V with real-time detection

Audio
- Telephony, emergency call
- Half rate, full rate, enhanced full rate and adaptive multi rate voice codecs (HR, FR, EFR, AMR)
- Superior echo cancellation & noise reduction
- Handset & hands-free operations
- DTMF

Approvals
- Fully type approved conforming with R&TTE directive
- CE, FCC, IC, GCF, PTCRB, Anatel

SMS
- Point-to-point mobile originated and mobile terminated SMS
- Concatenated SMS supported
- SMS cell broadcast
- Text and PDU mode

Circuit switched data transmission
- Asynchronous transparent circuit switched data (CSD) up to 14.4 kbps
- Asynchronous non-transparent CSD up to 9.6 kbps
- V.110

GPRS data
- GPRS class 10
- Mobile station class B
- Coding scheme 1 to 4
- PBCCH support

Fax
- Group 3, class 1

GSM supplementary
- Call forwarding
- Call barring
- Call waiting & call hold
- Advice of charge
- Calling line identification presentation (CLIP)
- Calling line identification restriction (CLIR)
- Unstructured supplementary services mobile originated data (USSD)
- Closed user group

Additional features
- SIM phonebook
- Fixed dialing number (FDN)
- Real-time clock
- Alarm management
- Battery management
- Network LED support
- IRA character set
- Jamming detection & report
- Embedded TCP/IP stack, including TCP, IP, UDP, SMTP and FTP protocols
- TFMS (Telit Firmware Management Services) Over-the-Air update

Python* application resources (GM862-QUAD-PY ONLY)
- Python* script interpreter (module takes application code directly in the Python* language)
- Memory: 1.9 MB of NV memory for the user scripts and 1.2 MB RAM for the Python* engine usage
- Over-the-air application SW update
- IIC Bus and SPI Bus controlled in Python*

python

Telit's EASY features
- EASY SCAN® automatic scan over GSM frequencies (with or without SIM card)

Order-No.
Please contact your Telit representative for order codes and all further information

Telit wireless solutions

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