

## GSM | GPRS

### GC864-QUAD Compact

### GC864-PY Compact



Ultra Compact

Telit Unified AT Command Set

Telit Unified Form Factor

Telit Firmware Management Services

Quad Band GPRS

GPRS Class 10

RoHS Compliant

SIM Access Profile

PYTHON\* Script Interpreter

80 Pin Connector

Embedded FTP and SMTP Client

Extended Temperature Range

Extended RF Sensitivity

Serial Port Multiplexer (GSM 7.10)

Embedded TCP/IP Stack

optional  
 Integrated SIM holder

The new GC864 product family is one of the smallest GSM/GPRS quad-band modules with industrial connectors in the market.

With its ultra-compact design and extended temperature range, the Telit GC864-QUAD is the perfect platform for medium-volume m2m applications and mobile data devices. Additional features such as integrated TCP/IP protocol stack, SIM Holder on the board (only for GC864-QUAD with SIM holder variant) and serial multiplexer give extend functionality of the application at no additional cost.

The GC864-PY makes it possible to run the customer's application inside the module, thus making it one of the smallest, complete platforms for m2m solutions. State-of-the-art SPI and 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, all 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 enhancements
- Serial port multiplexer GSM 7.10
- SIM access profile
- Supply voltage range: 3.22-4.5 V DC [3.8 V DC recommended]
- TCP/IP stack access via AT commands
- Power consumption (typical values)
  - Power off: < 26 uA
  - Idle (registered, power saving): < 4 mA
  - Dedicated mode: 200 mA
  - GPRS cl.10: 370 mA
- Sensitivity:
  - 107 dBm (typ.) @ 850 / 900 MHz
  - 106 dBm (typ.) @ 1800 / 1900 MHz
- Dimensions: 30 x 36.2 x 3.2 mm
- Weight: 6.1 grams
- Extended temperature range
  - 40°C to +85°C (operational)
  - 40°C to +85°C (storage temperature)
- RoHS compliant

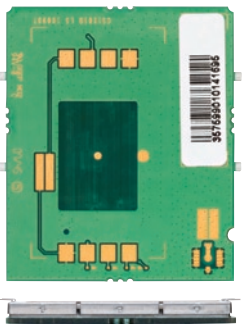


## GC864-QUAD

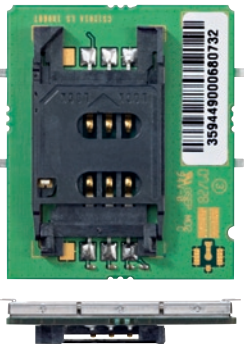
Compact

## GC864-PY

Compact



actual size GC864-QUAD



GC864-QUAD with SIM holder

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Distributed by:

**Interfaces**

- 80-pin Molex connector
- 22 I/O ports maximum
- Analog audio (balanced and unbalanced)
- 3 A/D plus 1 D/A converters
- 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 murata GSC antenna connector

**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
- CE, GCF, FCC, PTCRB, IC, 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
- SIM Holder (only for GC864-QUAD variant with SIM holder)
- 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 (GC864-PY ONLY)**

- Python\* script interpreter (module takes the 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\*

**Telit's EASY features**

- EASY SCAN® automatic scan over GSM frequencies (also without SIM card)

**Order-No.**

Please contact your Telit representative for order codes and all further information



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