

● ● **GL 865-QUAD**

GSM | GPRS Embedded



## Product Description

The GL865-QUAD features the same characteristics as its companion module, the GL865-DUAL, but includes all 4 GSM bands for global applications. It is compliant to the eCall European directive recommended for application developers targeting the rich upcoming European market for eCall tracking/safety devices.

## Key Benefits

- LCC form factor suitable for manual soldering and removal, so it can also serve low volume, niche applications
- Ready to be integrated in an electronic safety system installed inside vehicles, automatically calling emergency services in case of accident
- PYTHON Script Interpreter - customers can run their Python applications directly inside the module
- Premium FOTA Management - Easy firmware update by transmitting only a small delta file

## Family Concept

The Telit xL865 family was conceived to address system integrators and developers needing to start with low volumes (LCC mount) as well as those already running high volumes (VQFN mount). Its ultra-compact package allows integration into very small devices. The family includes products that are pin-to-pin and API compatible in GSM | GPRS, CDMA | 1xRTT and UMTS | HSPA.

## Telit m2mLOCATE

m2mLOCATE is a Telit cloud-based service that provides a device's position based on observed cellular Cell-IDs. Accessing a database of over 40 million cell-IDs globally, m2mLOCATE can provide a position for every use-case including indoors/underground, outdoors, and boundary situations.



## m2mAIR Ready

This product is capable of supporting the extensive suite of m2mAIR value-added services and connectivity you can use to enhance your application and boost your competitive advantage.

### AVAILABLE FOR

- EMEA
- North America
- Latin America
- APAC
- Korea
- Australia

### Combine your Cellular module with

- Short Range modules 
- GNSS modules 

[www.telit.com](http://www.telit.com)

### Complete, Ready to Use Access to the Internet of Things



Telit Modules + m2mAIR Value-Added Services including Connectivity

**m2mAIR**  
by Telit m2m experts



## ●● GL865-QUAD

### Product features

- LCC Castellation form factor
- Quad-band GSM | GPRS 850 / 900 / 1800 / 1900 MHz
- GSM | GPRS protocol stack 3GPP Release 4 compliant
- Control via AT commands according to 3GPP TS 27.005, 27.007 and Telit custom AT commands
- Serial port multiplexer 3GPP TS 27.010
- SIM access profile
- SIM application toolkit 3GPP TS 51.014
- DARP/SAIC support
- SMS Support
- SMS over GPRS
- 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
- Multiple audio profiles pre-programmed and fully configurable by mean AT commands
- DTMF
- SIM phonebook
- Fixed dialing number (FDN)
- Real-time clock
- Alarm management
- Network LED support
- IRA, GSM, 8859-1 and UCS2 character set
- Jamming detection
- Embedded TCP/IP stack, including TCP, IP, UDP, SMTP, ICMP and FTP protocols
- PFM (Premium FOTA Management) Over-The-Air Update service
- Remote AT commands
- Event monitor
- Telit's EASY features EASY SCAN<sup>®</sup> automatic scan over GSM frequencies (also without SIM card)

### Data

#### GPRS

- GPRS class 10
- Mobile station class B
- Coding scheme 1 to 4
- PBCCH support
- GERAN Feature Package 1 support (NACC, Extended TBF)

#### CSD

### Environmental

- Dimensions: 24.4 x 24.4 x 2.7 mm
- Weight: 2.8 grams
- Extended temperature range
- -40°C to +85°C (operational)
- -40°C to +85°C (storage temperature)

### Interfaces

- 8 I/O ports maximum
- Analog audio (balanced), digital audio
- 2 A/D plus 1 D/A converter
- Buzzer output
- ITU-T V.24 serial link through CMOS UART:
  - Baud rate from 300 to 115,200 bps
  - Autobauding up to 115,200 bps

### Approvals

- Fully type approved conforming R&TTE directive
- CE, GCF
- FCC, IC, PTCRB (North America)
- ANATEL (Brazil)

### Electrical & Sensitivity

- Output power
  - Class 4 (2W) @ 850/900 MHz
  - Class 1 (1W) @ 1800/1900 MHz
- Supply voltage range: 3.22 - 4.5 VDC (3.8 V DC recommended)
- Power consumption (typical values)
  - Power off: < 5 uA
  - Idle (registered, power saving): 1.5 mA @ DRX=9
  - Dedicated mode: 230 mA @ max power level
  - GPRS cl.10: 360 mA @ max power level

- Sensitivity:
  - 108 dBm (typ.) @ 850/900 MHz
  - 107 dBm (typ.) @ 1800/1900 MHz

### Software

- Python\* application resources
- Python\* script interpreter (module takes the application code directly in the Python\* language)
- Memory: 800 kB of NV memory for the user scripts and 1 MB RAM for the Python\* engine usage



### Join the Telit Technical Forum

For a quicker and more rewarding integration experience join the Telit Technical Forum. There you can browse the first open forum covering all m2m topics, get direct support by region (EMEA, North America, Latin America, APAC), take part in this quickly growing m2m community and exchange experiences.