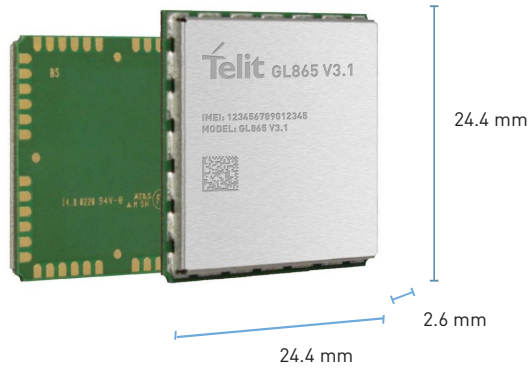


# GL865 V3.1

GSM | GPRS Embedded



## Product Description

The GL865 V3.1 is the new Telit GSM/GPRS product series recommended for new designs for deployment in those regions where there is still a long way to go before 2G sunset and for those "lite" IoT applications for which there is no point in moving out from cost-optimized 2G modules to oversized and more expensive 3G/4G modules. These new modules are available both in dual-band and quad-band variants for global coverage. The GL865 V3.1 modules maintain full hardware and software compatibility with the previous GL865 V3, thereby providing a direct replacement path. Simple drop-in migration and technology upgrade path to 3G high-speed performance is also available with pin-to-pin compatible HSPA companion module UL865.

The product is highly recommended for new designs requiring GSM|GPRS coverage and 3G scalability in a compact and robust QFN package delivering easy integration and reduced impact on final application costs.

## Key Benefits

- Seamless upgrade path for applications currently using other modules of the GL865 series
- Recommended for new 2G cost-sensitive designs
- Recommended platform for applications requiring ultra low power consumption
- Ideal solution for applications in security alarm systems, automated meter reading, and POS terminals.
- Easy to bundle-design with Telit's GPS or GPS | GLONASS receivers for applications requiring location awareness such as fleet management and track-and-tracing

- Complete SMT platform for m2m solutions running the customer application inside the module with embedded Python Script Interpreter
- Premium FOTA Management - Easy Firmware update Over-The-Air by transmitting only a small delta file

## Variants

Premium FOTA Management - Easy Firmware update Over-The-Air by transmitting only a small delta file. Limited operator coverage in North America due to 2G footprint reduction policies.

## IoT Connectivity Ready

This product is capable of supporting the extensive suite of IoT Connectivity 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

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



## GL865 V3.1

### Product Features

- VQFN form factor
- Dual band 900/1800 MHz or Quad band 850/900/1800/1900 MHz GSM | GPRS
- 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
- TCP/IP stack access via AT commands
- SIM application toolkit 3GPP TS 51.014
- DARP/SAIC support
- 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
- Embedded DTMF decoder
- Point-to-point mobile originated and mobile terminated SMS
- Concatenated SMS supported
- SMS cell broadcast
- Text and PDU mode
- SMS over GPRS
- 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
- 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

### Data

- Asynchronous non-transparent CSD up to 9.6 kbps
- V.110
- GPRS class 10
- Mobile station class B
- Coding scheme 1 to 4
- PBCCH support
- GERAN Feature Package 1 support (NACC, Extended TBF)

### Environmental

- Dimensions: 24.4 x 24.4 x 2.6 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 (1.8 V logic level)
- 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 RED directive
- GCF

### Electrical & Sensitivity

- Output power
  - Class 4 (2W) @ 850/900 MHz
  - Class 1 (1W) @ 1800/1900 MHz
- Supply voltage range:  
3.2 - 4.5 VDC (3.8 V DC recommended)
- Power consumption (typical values)
  - Power off: 2 uA (typical)
  - Idle (registered, power saving):  
0.8 mA DRX = 9
  - GPRS cl.10: 300 mA @ max power level
- Sensitivity:
  - 108 dBm (typ.) @ 850/900 MHz
  - 107 dBm (typ.) @ 1800/1900 MHz

### Software

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

**QUESTIONS? VISIT [WWW.TELIT.COM/CONTACT-US](http://WWW.TELIT.COM/CONTACT-US)**

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