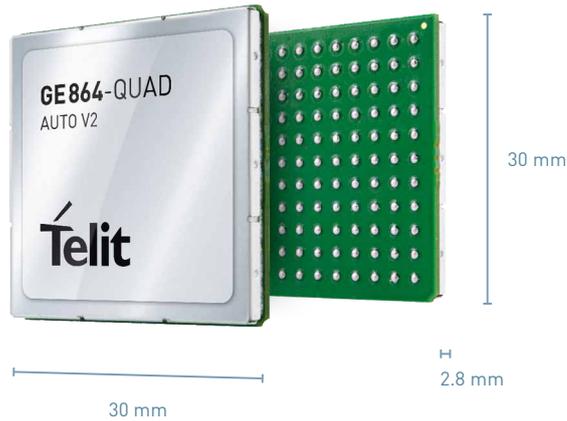


# GE864-QUAD AUTO

GSM | GPRS Embedded



## Product Description

The GE864-QUAD AUTO V2 is an extra-rugged member of the GE864 product series incorporating quad-band and very low power consumption, developed to meet the most demanding automotive requirements. The GE864 sub-compact form factor allows integration of automotive and other applications requiring assured extended operating temperature range and mechanical ruggedness for the small dimensions of electronics bays in trucks, automobiles, and other mobile platforms. With compliance to the eCall directive, the GE864-QUAD AUTO V2, is ready to be integrated in electronic vehicle safety systems for use throughout Europe and globally with your market's implementation of regional safety protocols.

## Key Benefits

- RUN AT Remote Command and Event Monitoring services
- Premium FOTA Management - Easy firmware update by transmitting only a small delta file
- Ideal for all automotive m2m markets, both OEM and aftermarket
- BGA compact and shock/vibration resistant form factor for automotive applications
- Ready to be integrated in automatic vehicle accident & emergency calling systems

## Family Concept

The GE864 quad-band GSM | GPRS series of cellular modules includes a standard variant, an ATEX certified variant, an automotive variant and a GPS-equipped variant; all featuring a common 30 x 30 mm footprint, low profile BGA package. This allows developers and integrators to easily drop in different variants of the GE864 family with little design and integration time and effort.

## Telit IoT LOCATE

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

## 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

### Combine your Cellular module with

Short Range modules



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

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



# GE864-QUAD AUTO

## Product Features

- Quad-band EGSM 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 (3.8 V DC nominal)
- Unified Telit AT command interface
- Control via Remote AT commands
- SMS support
- SMS over GPRS
- DARPA/SAIC support
- e-Call compliant according to 3GPP TS 26267
- 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
- DTMF
- SIM phonebook
- Fixed dialing number (FDN)
- Real-time clock
- Alarm management
- Real-time AT message/warnings upon reaching temperature limits
- 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)
- PIN Protection
- ESD protection level 4
  - Contact up to +-4kV
  - Air up to +-8kV
  - Contact antenna pin up to +-15kV

- EMC protection
  - All pins have HBM filtering
- Telit's EASY features EASY SCAN® automatic scan over GSM

## 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: 30 x 30 x 2.8 mm
- Weight: 4.2 grams
- Extended temperature range
  - 40°C to +85°C (operational)
  - 40°C to +90°C (storage temperature)

## Interfaces

- 9 I/O ports maximum
- Analog Audio (balanced and unbalanced)
- 2 A/D and 1 A/D converters
- Digital Audio interface
- 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 with R&TTE directive
- CE, GCF, FCC, PTCRB, IC, Anatel
- Environmental tests
  - ISO 16750-1:2006
  - ISO 16750-3:2007
  - ISO 16750-4:2010

## Electrical & Sensitivity

- Output power
  - Class 4 (2W) @ 850 / 900 MHz
  - Class 1 (1W) @ 1800 / 1900 MHz
- Power consumption (typical values)
  - Power off: < 62 uA
  - Idle (registered, power saving): < 1.5 mA
  - Dedicated mode:
    - < 240 mA @ max power level
  - GPRS cl.10: < 420 mA @ max power level
- Extended supply voltage range: 3.22 - 4.5 V DC
- Sensitivity:
  - 107 dBm @ 850 / 900 MHz
  - 106 dBm @ 1800 / 1900 MHz



## 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 IoT topics, get direct support by region (EMEA, North America, Latin America, APAC), take part in this quickly growing IoT community and exchange experiences.