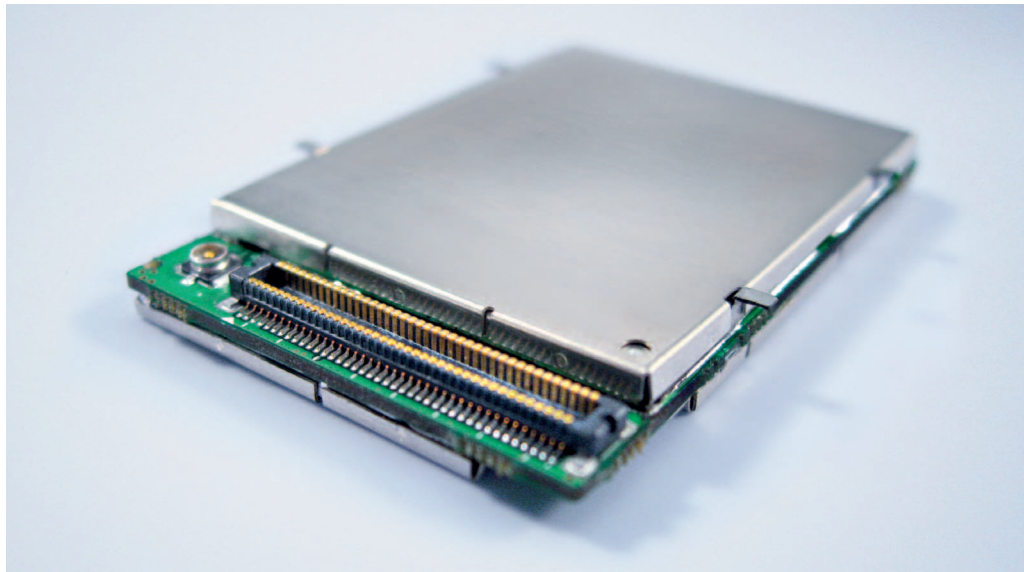
















# UMTS | HSDPA 7.2

## UC864-G Compact



-  Ultra Compact
-  12 Channel GPS Receiver
-  Telit Unified AT Command Set
-  Telit Unified Form Factor
-  Multi Band
-  Tri Band UMS|HSDPA 7.2
-  Quad Band Edge
-  Quad Band GPRS
-  RoHS Compliant
-  80 Pin Connector
-  USB 2.0 Full Speed Compatible
-  Extended Temperature Range
-  Extended RF Sensitivity
-  Embedded TCP/IP Stack



The UC864-G is a 3.5G wireless data module designed to be fully compatible with Telit's GSM/GPRS and CDMA products in the compact, unified form factor family. This enables integrators and developers to design their applications once and take advantage of the truly global coverage and service flexibility afforded by the combination of the two most prevalent cellular technologies worldwide.

The UC864-G was designed for applications requiring global portability afforded by a radio structure comprised of quad-band support to GSM/GPRS/EDGE and tri-band UMS/HSDPA. With its ultra-compact design, and extended operating temperature range, the Telit UC864-G is the perfect platform for medium-to-high-volume m2m applications and mobile data and computing devices.

Additional features such as, integrated TCP/IP and UDP, integrated full 12-channel high sensitivity GPS functionality for indoor fixes and simultaneous GPS with voice & data, one DAC channel and a three channel ADC provide extended functionality, adding value to the end application without adding cost.

The UC864-G is designed to provide customers with global network coverage. It's also fully backward compatible to existing EDGE and GSM/GPRS networks through accomplished quad-band radios. The extensive interface set, which includes IIC and user definable GPIO, provides ease of integration of peripherals and actuators.

As part of Telit's commitment to protecting the customer investment in developing and deploying Telit based solutions, the UC864-G supports Over-the-Air firmware update by means Premium FOTA Management. By embedding RedBend's vCurrent® agent, a proven and battle-tested technology powering hundreds of millions of cellular handsets world-wide Telit is able to update its products by transmitting only a delta file, which represents the difference between one firmware version and another.

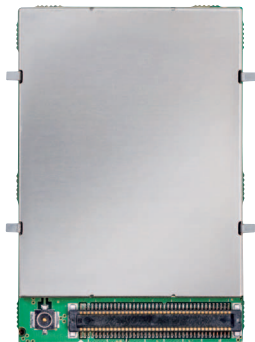
As a part of Telit's corporate policy of environmental protection, all Telit products comply to the RoHS (Restriction of Hazardous Substances) directive of the European Union (EU Directive 2002/95/EG).

### Product features

- HSDPA 7.2 Mbps
- UMS/HSDPA (WCDMA/FDD) 850 / 1900 / 2100 MHz
- Quad-band EGSM 850 / 900 / 1800 / 1900
- GPRS multi-slot class 12
- EDGE multi-slot class 12
- Dimension: 30 x 45 x 4,8 mm
- Weight: 12,8 grams
- Extended temperature range -30°C to +80°C (operational) -40°C to +90°C (storage temperature)

# UC864-G

Compact



actual size

### GPS receiver

- GPS power consumption:  
Operating current: 100 mA  
plus 20 mA max for external antenna
- High sensitivity for indoor reception,  
up to -157 dBm (with active antenna)
- Accuracy < 3 m
- Extremely fast TTFF's at low signal levels
- Hot start autonomous < 1 s
- Warm start autonomous < 32 s
- Cold start autonomous < 40 s
- Supports 12-channel GPS,  
L1 1575.42 MHz
- GPS NMEA 0183 output format
- Date WGS-84
- Dedicated GPS AT commands
- Low power consumption

### Interfaces

- 80-pin Molex connector
- 1.8/3V UICC SIM card interface
- 22 GPIOs, 3 A/D and 1 D/A converter
- USB 2.0 full speed interface
- 50 Ohm murata GSC antenna connector  
for GSM/UMTS and GPS
- ITU-T V.24 serial link through CMOS  
UART, PCM interface
- Buzzer output

### Approvals

- CE, GCF, R&TTE, PTCRB, FCC

### Data

- HSDPA
  - Downlink up to 7.2 Mbps
  - Uplink up to 384 kbps
- WCDMA
  - Downlink/Uplink up to 384 kbps
- EDGE
  - Downlink up to 236.8 kbps
  - Uplink up to 118 kbps
- GPRS
  - Downlink up to 85.6 kbps
  - Uplink up to 42.8 kbps
  - PBCCH support
- CSD
  - Downlink/uplink up to 14.4 kbps

### Electrical

- Output power
  - Class 4 (2 W, 33 dBm) @ GSM850 / 900
  - Class 1 (1 W, 30 dBm) @ GSM 1800 / 1900
  - Class 3 (0.25 W, 24 dBm) @ UMTS
  - Class E2 (0.5 W, 27 dBm) @ EDGE850/900
  - Class E2 (0.4 W, 26 dBm) @ EDGE1800/1900
- Sensitivity
  - -108.2 dBm @ WCDMA 850/1900/2100 MHz
  - -107 dBm @ GSM 850 / 900 MHz
  - -106 dBm @ DCS1800 / PCS1900 MHz
- Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.4 - 4.2 VDC
- Power consumption
  - Off: < 26  $\mu$ A
  - Idle @ GSM Mode: < 3.3 mA
  - Idle @ UMTS Mode: < 4.1 mA
  - WCDMA voice channel < 690 mA  
@ worst network conditions
  - GSM voice channel < 317 mA  
@ worst network conditions
  - WCDMA data channel < 680 mA  
@ worst network conditions
  - HSDPA channel < 730 mA  
@ worst network conditions
  - GPRS Class 12 < 790 mA  
@ worst network conditions
  - EGPRS Class 12 < 560 mA  
@ worst network conditions

### Additional features

- Voice and SMS
- TCP stack with IP and UDP protocols
- Standard and extended AT command set
- Minimal power consumption
- PFM (Premium FOTA Management)  
Over the Air Update
- MUX driver for WinCE
- RIL Driver for WinCE
- USB Driver for WinCE, WinXP/Vista/W7,  
Linux and QNX.

### Order-No.

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

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