Telit® wireless solutions
Making machines talk.®

⬤◯ UC864-E

UMTS | HSDPA 7.2 Compact

UC864-E

Telit

36.2 mm

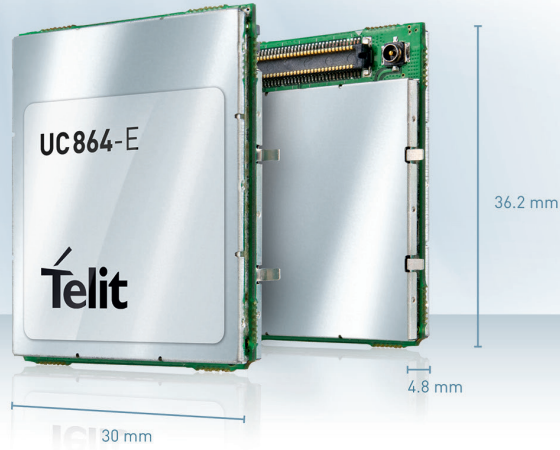4.8 mm

30 mm

Product Description

The UC864 series comprises 3.5G wireless modules featuring different bands and technical characteristics which vary according to requirements from regional and vertical markets.

The European variant UC864-E supports single-band 2100 MHz UMTS with quad-band fallback connectivity option over GSM/GPRS/EDGE.

Key Benefits

• Design once and deploy globally

• Regional and global variants meet a wide range of application requirements

• UC864-G ideally suited to provide customers with global network coverage and perfect for location based applications that require indoor fixes and simultaneous GPS with voice and data

• UC864-E-AUTO eliminates the need for an expensive coaxial RF cable, thanks to its landing pads for board-to-board RF mounting

• UC864-AK robustness for automotive applications

Family Concept

The UC864 product series comprises 3.5G wireless modules, designed to be fully compatible with Telit's GSM/GPRS and CDMA products in the xC864 board-to-board connector unified form factor, thereby ensuring our customers minimal integration costs to support different cellular technologies.

The extensive interface set, including IIC and user definable GPIO's, provides ease of integration of peripherals and actuators. Several versions of the UC864 with different feature sets are available, in order to satisfy both regional and global coverage requirements.

AVAILABLE FOR

⬤ EMEA

North America

Latin America

APAC

Korea

Australia

Combine your Cellular module with

⬤ Short Range modules

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QUALITY
INVESTMENT PROTECTION
BUSINESS SCALABLE
EASE OF INTEGRATION

ONE STOP.
ONE SHOP. NOW, INNOVATE!

●● **UC 864**-E

Product features

- HSDPA 7.2 Mbps
- UMTS/HSDPA (WCDMA/FDD) 2100 MHz
- Quad-band EGSM 850 / 900 / 1800 / 1900
- GPRS multi-slot class 12
- EDGE multi-slot class 12
- 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

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 236.8 kbps

GPRS
- Downlink up to 85.6 kbps
- Uplink up to 85.6 kbps
- PBCCH support

CSD
- Downlink/uplink up to 14.4 kbps
- Available modes of operation
  - AT commands on UART & data on USB
  - AT commands on USB & data on UART

Environmental

- Dimension: 30 x 36.2 x 4.8 mm
- Weight: 10 grams
- Extended temperature range
  -30°C to +80°C (operational)
  -40°C to +85°C (storage temperature)

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
- ITU-T V.24 serial link through CMOS UART, PCM interface
- Buzzer output

Approvals

- CE, GCF

Electrical & Sensitivity

- Output power
  - Class 4 (2 W, 33 dBm) @ GSM 850 / 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) @ EDGE 850 / 900
  - Class E2 (0.4 W, 26 dBm) @ EDGE 1800 / 1900
- Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.4 - 4.2 VDC
- Power consumption
  - Off: < 26 µA
  - Idle @ mode GSM: < 3.3 mA
  - Idle @ mode UMTS: < 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

- Sensitivity
  - -108.2 dBm @ WCDMA 2100 MHz
  - -107 dBm @ GSM 850 / 900 MHz
  - -106 dBm @ DCS1800 / PCS1900 MHz

Software

- MUX driver for WinCE
- RIL Driver for WinCE
- USB Driver for WinCE, WinXP/Vista/W7, Linux and QNX

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.