

Quectel UG95

UMTS/HSPA Module

UMTS/HSPA



Dual-mode&Dual-band
for UMTS&GSM



HSPA 7.2Mbps



LGA Package



Embedded Abundant
Protocols



eCall*



Tiny Size



USB 2.0 High Speed
Compliant Interface



USB Drivers



Quectel Enhanced
AT Commands



Key Benefits

- ☞ Worldwide UMTS/HSPA and GSM/GPRS/EDGE coverage
- ☞ Minimal SMT form factor ideal for smart terminal devices
- ☞ Easy drop-in migration from GSM/GPRS module
- ☞ Super slim and low profile in LGA package
- ☞ High-quality data and image transmission even in hazard conditions and dark environment
- ☞ Fast time-to-market:
 - Reference designs, evaluation tools and timely technical support minimize design-in time and development efforts
- ☞ Robust mounting and interfaces

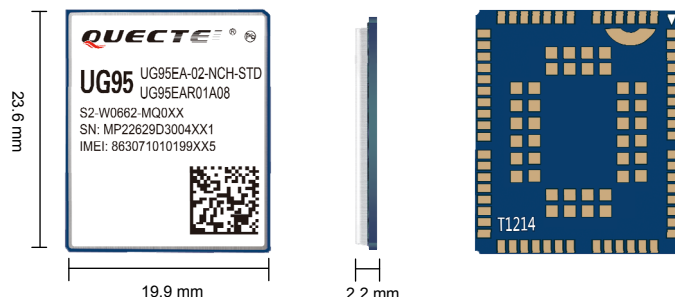
UG95 is an ultra-small UMTS/HSPA module based on the latest Intel® Wireless Communications Chipset. It features a maximum data rate of 7.2Mbps downlink and 5.76Mbps uplink. Designed to be pin to pin compatible with Quectel GSM/GPRS M95 module, it provides a flexible and scalable platform for migrating from GSM/GPRS/EDGE to UMTS/HSPA. This enables integrators and developers to design their applications once and take advantage of true worldwide coverage and service flexibility afforded by the combination of the two most prevalent cellular technologies worldwide.

The tiny profile of 19.9×23.6×2.2mm in cost optimized SMT form factor and highly integration level enable integrators and developers to easily design their applications and truly benefit from the module's small size, low power consumption and mechanical intensity. Its advanced LGA package allows fully automated manufacturing for high-volume applications.

A rich set of Internet protocols, industry-standard interfaces (USB/UART/I2C/Status Indicator/PCM) and abundant functionalities (USB drivers for Windows XP, Windows 7, Windows 8*, Windows CE, Linux, Android/eCall) extend the applicability of the module to a wide range of M2M applications such as tablet PC, wireless POS, routers, telematics, mobile computing devices, security systems and metering.

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UMTS/HSPA Module



General Features

Frequency Bands	UG95-E 900/2100MHz@UMTS 900/1800MHz@GSM UG95-A 850/1900MHz@UMTS 3G only
HSUPA	Release 7 (category 6)
HSDPA	Release 7 (category 8)
EDGE	Downlink only
GPRS	Multi-slot Class 12
UMTS	Release 99/7
GSM	Release 99/4
Supply Voltage Range	3.4V ~ 4.3V, 3.8V typ.
Operation Temperature*	-35 °C ~ +70 °C
Dimensions	19.9mm×23.6mm×2.2mm
Weight	Approx. 2.5g
Control via AT commands	3GPP TS27.007, 27.005 and other enhanced AT Commands

Specifications

SMS	Point-to-point MO and MT SMS Cell Broadcast Text and PDU Mode												
DATA	<table border="0"> <tr> <td>HSUPA</td> <td>Max.5.76Mbps</td> </tr> <tr> <td>HSDPA</td> <td>Max 7.2Mbps</td> </tr> <tr> <td>UMTS</td> <td>Max.384Kbps (DL)/Max.384Kbps (UL)</td> </tr> <tr> <td>EDGE</td> <td>Max.236.8Kbps (DL)</td> </tr> <tr> <td>GPRS</td> <td>Max.85.6Kbps (DL)/Max.85.6Kbps (UL)</td> </tr> <tr> <td>CSD</td> <td>64 Kbps</td> </tr> </table>	HSUPA	Max.5.76Mbps	HSDPA	Max 7.2Mbps	UMTS	Max.384Kbps (DL)/Max.384Kbps (UL)	EDGE	Max.236.8Kbps (DL)	GPRS	Max.85.6Kbps (DL)/Max.85.6Kbps (UL)	CSD	64 Kbps
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Protocols	TCP/UDP/PPP/MMS*/SMTP*/FTP*/SSL*												

Special Features

Drivers	USB Serial	Windows XP, Windows 7, Windows 8*, Linux2.6/3.0, Andriod2.3/4.0/4.2
eCall*		Accident, Emergency Services
Firmware Update		Firmware Update via USB and UART Interface
QuecFile*		File System Access and Management
QuecFOTA*		

Electrical Characteristics

Output Power	Class 3 (24dBm +1/-3dB) for UMTS bands Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz
Consumption	70µA@Power off 0.96mA@GSM sleep, DRX=9 1.15mA@UMTS sleep, DRX=9 212mA@GSM voice, max power 586mA@UMTS voice, max power 490mA@GPRS data, max power 524mA@HSDPA, max power 563mA@HSUPA, max power
Sensitivity	-110dBm@UMTS 900/2100MHz -110.5dBm@UMTS 850/1900MHz -110.5dBm@DCS 1800MHz -109.5dBm@EGSM 900MHz

Interfaces

USB	2.0 High Speed
Audio Digital	Digital Audio through PCM Interface (optional)
UART	1×Full Functions
I2C	
PCM	
USIM	1.8V/3V
NETLIGHT	
STATUS	Indication for Power On and Off Status

Certifications

Ongoing	CE/GCF/FCC/PTCRB/AT&T
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* Under development

