**Key Benefits**

- Worldwide UMTS/HSPA and GSM/GPRS/EDGE coverage
- Minimal SMT form factor ideal for small end products with tight space
- Seamless drop-in migration to GSM/GPRS module
- Super slim 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 a cost effective and ultra-compact UMTS/HSPA module featuring a maximum data rate of 7.2Mbps downlink and 5.76Mbps uplink. Designed to be compatible with Quectel GSM/GPRS M95 module in the compact and unified form factor, 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 CE, Linux, Android/eCall) extend the applicability of the module to a wide range of M2M applications such as handheld device, tablet, telematics, metering, security and surveillance system, and industrial PDA.
**General Features**

<table>
<thead>
<tr>
<th>Frequency Bands</th>
<th>U95-E</th>
<th>900/2100MHz@UMTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U95-A</td>
<td>900/1800MHz@GSM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>850/1900MHz@UMTS</td>
</tr>
<tr>
<td>HSUPA</td>
<td></td>
<td>Release 7 (category 6)</td>
</tr>
<tr>
<td>HSDPA</td>
<td></td>
<td>Release 7 (category 8)</td>
</tr>
<tr>
<td>EDGE</td>
<td></td>
<td>Downlink only</td>
</tr>
<tr>
<td>GPRS</td>
<td></td>
<td>Multi-slot Class 12</td>
</tr>
<tr>
<td>UMTS</td>
<td></td>
<td>Release 99/7</td>
</tr>
<tr>
<td>GSM</td>
<td></td>
<td>Release 99/4</td>
</tr>
<tr>
<td>Supply Voltage Range</td>
<td>3.3V~4.3V, 3.6V typ.</td>
<td></td>
</tr>
<tr>
<td>Operation Temperature</td>
<td>-40°C~+85°C</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>19.9mm x 23.6mm x 2.2mm</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 2.5g</td>
<td></td>
</tr>
<tr>
<td>Control via AT commands</td>
<td>3GPP TS27.007, 27.005 and other enhanced AT Commands</td>
<td></td>
</tr>
</tbody>
</table>

**Electrical Characteristics**

- **Output Power**
  - Class 3 (24dBm+1.7/-3.7dB) for UMTS bands
  - Class 4 (33dBm±2dB) for GSM 900
  - Class 1 (30dBm±2dB) for GSM 1800

- **Consumption**
  - 70μA at power off
  - 0.96mA at GSM sleep, DRX=9
  - 1.15mA at UMTS sleep, DRX=9
  - 212mA at GSM voice, max power
  - 586mA at UMTS voice, max power
  - 490mA at GPRS data, max power
  - 524mA at HSDPA, max power
  - 563mA at HSUPA, max power

- **Sensitivity**
  - -130dBm (UMTS 900/2100)
  - -110dBm (UMTS 850/1900)
  - -109.5dBm (DCS 1800)
  - -110.5dBm (EGSM900)

**Interfaces**

- **USB**
  - 2.0 High Speed

- **Audio Digital**
  - Digital Audio through PCM Interface (optional)

- **U2C**
  - 1, Full Functions

- **I2C**
  - 1

- **PCM**
  - 1

- **USIM**
  - 1.8V/3.0V

- **NETLIGHT**
  - Indication for Network Status

- **STATUS**
  - Indication for Power On and Off Status

**Certification**

- **Approval**
  - CE/GCF/FCC/IC/ICASA/PTCRB/AT&T/Rogers

**Special Features**

- **Drivers**
  - USB Serial
    - Windows XP, Windows 7, Linux2.6/3.0, Android 2.3/4.0/4.2

- **Firmware Update**
  - Firmware Update via USB and UART Interface

- **RAMFile**
  - RAM File System Access and Management

- **DFOTA**
  - Delta Firmware Upgrade Over The Air