



## ZETA-G-UMTS

3G / UMTS Industrial Modem with GPIO & GNSS

### General Description

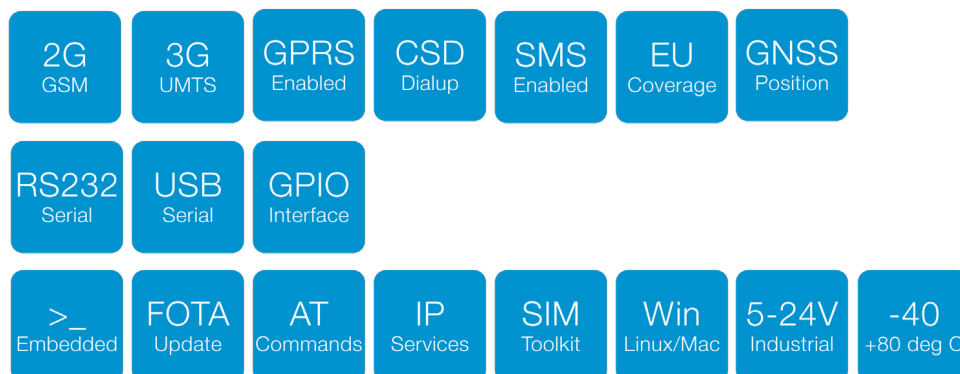


The ZETA-G-UMTS is an industrial modem designed for connecting equipment to the 3G/UMTS & 2G / GSM cellular network. It has a 7 band HSPA+ and quad band GPRS cellular engine, providing worldwide coverage in addition to cutting edge GPS for tracking or location based applications.

The device offers a high level of functionality in a compact "plug and play" housing, providing a GPS interface, RS232 & USB serial data interfaces in addition to a 10-way GPIO connector, which offers a secondary TTL serial port, general purpose IO and an ADC.

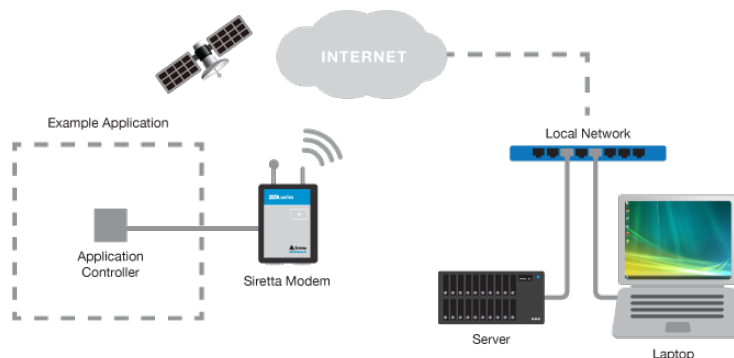
It is ideal for integrating in to a wide range of IoT tracking applications with reliable and stable data connectivity.

### Features



### Featured Applications

- » CCTV
- » Environmental Monitoring
- » Asset Tracking
- » Telematics
- » ANPR
- » Food and Beverage





## ZETA-G-UMTS

3G / UMTS Industrial Modem with GPIO & GNSS

### General Features

- » 7 Bands UMTS/HSPA+: 800/850, 900, AWS, 1700, 1900, 2100MHz
- » 4 Bands GSM | GPRS: 850/900/1800/1900MHz
- » SMS text and PDU message mode
- » SIM Access Profile
- » SIM Application Tool Kit 3GPP TS 51.014
- » Control via standard AT commands 3GPP TS7.005.27.007
- » Extended AT command set
- » Serial port multiplexer 3GPP TS27.010
- » IP stack with TCP and UDP protocol
- » Sensitive GPS Receiver
- »

### Interfaces

- » 1 x RS232 serial port interface (5-wire)
- » 1 x USB 2.0 FS
- » 1 x RJ12 power connection (5 - 42V)  
Nominal supply 12V  
Power on & power off control
- » 1 x SMA female cellular antenna connector
- » 1 x SMA female GPS antenna connector
- » 1 x SIM card reader (push-push) 3V, 1.8V
- » 5 x GPIO  
(Input 0-42V, Output 0-3.3V)
- » 1 x ADC (0-42V)
- » 1 x RS232 secondary serial port (3-wire TTL)
- » 3 x external LED status indicators (Blue, Red, Green)

### Environmental

- » Dimensions: 93mm x 67mm x 28mm
- » Weight: 107 grams
- » Extended Temperature Range: -40 to +85 deg C

### Data

- » HSPA category 6 in uplink and up to category 14 in downlink
- » Uplink up to 5.76 Mbps
- » Downlink up to 21.0 Mbps (high-end variants)
- » Downlink up to 7.2 Mbps (low-end variants))

### Approvals and Compliance

- » CE

### 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

#### Sensitivity

- » - 111 dBm @ UMTS
- » - 109 dBm @ GSM 850 /900 MHz
- » - 110 dBm @ DCS1800 /PCS1900 MHz

### Application Resources and Drivers

#### AppZone C

- » Programming language: C
- » IDE: Eclipse
- » Dedicated File System: 5MB
- » Separate App. RAM Space: 2MB

#### USB Drivers

- » Windows 7/8/10 driver support
- » Linux native support (CDC ACM)

### GPS/GLONASS Receiver

- » SUPL 1.0, L1 1575.42 MHz, Datum WGS-84
- » High sensitivity for indoor reception, better than -165dBm with A-GPS
- » GPS Cold Start Autonomous (acquisition sensitivity) -147dBm
- » GPS Hot Start Autonomous -161dBm
- » GPS tracking mode -166 dBm
- » Supports multi-channel GPS
- » GPS NMEA 0183 O/P format
- » Positional Accuracy: 3m
- » Time to first fix from  
Cold Start 42s  
Warm Start 30s  
Hot Start: 1.8s