Siretta

Enabling Industrial IoT

ZETA-N-UMTS
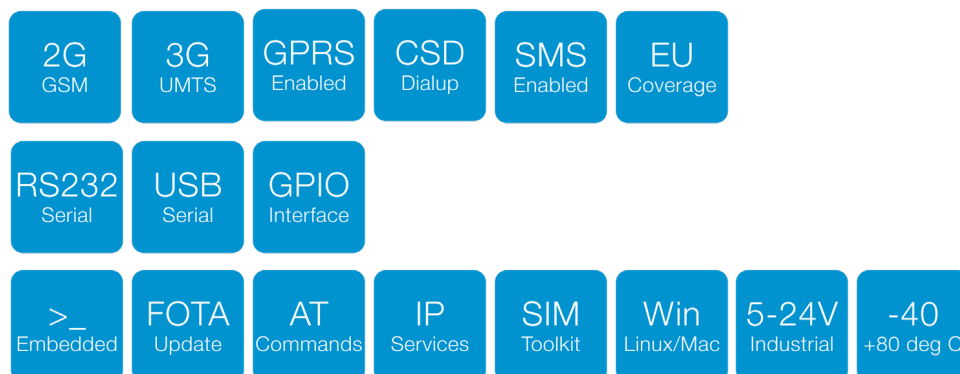## 3G / UMTS Industrial Modem with GPIO

General Description

The ZETA-N-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.

The device offers a high level of functionality in a compact "plug and play" housing and provides 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.
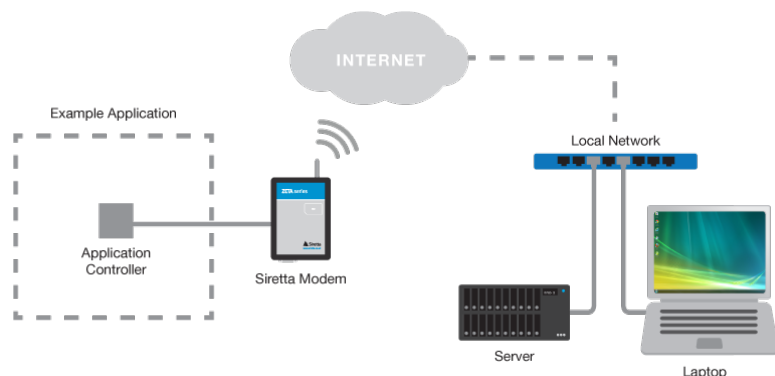
It is ideal for integrating in to a wide range of IoT applications that require reliable and stable data connectivity.

Features

2G GSM	**3G** UMTS	**GPRS** Enabled	**CSD** Dialup	**SMS** Enabled	**EU** Coverage
RS232 Serial	**USB** Serial	**GPIO** Interface			
>_ Embedded	**FOTA** Update	**AT** Commands	**IP** Services	**SIM** Toolkit	**Win** Linux/Mac

5-24V Industrial	**-40** +80 deg C

Featured Applications

- » Digital Signage
- » Car Parking Payment
- » Kiosks
- » Healthcare
- » Security Systems
- » Energy Utilities
- » Water Utilities

INTERNET

Example Application

Local Network

Application Controller

Siretta Modem

Server

Laptop

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

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 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: 104 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)