



ZETA-G-GPRS

2G / GSM Industrial Modem with GPIO & GNSS

General Description

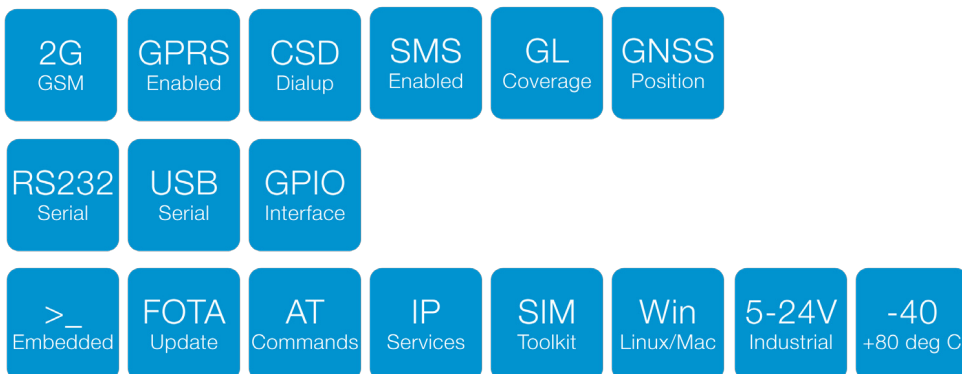


The ZETA-G-GPRS is an industrial modem designed for connecting equipment to the 2G / GSM cellular network. It has a global coverage quad band GPRS class 10 cellular engine offering CSD fall back. The ZETA-G-GPRS incorporates a full GNSS receiver which supports GPS, Glonass and Galileo for advanced tracking applications.

The device offers a high level of functionality in a compact "plug and play" housing and provides a GPS(GNSS) 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.

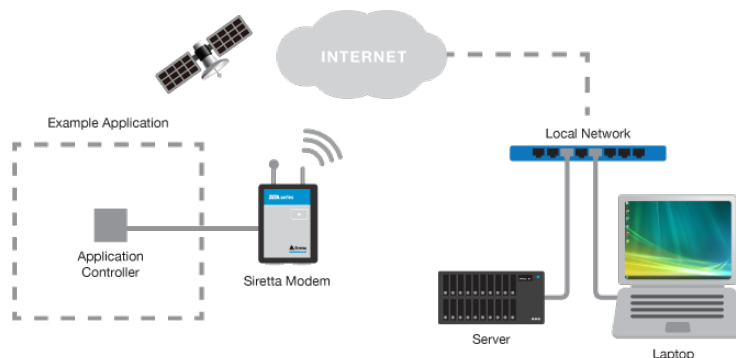
It is ideal for integrating in to a wide range of IoT tracking applications

Features



Featured Applications

- » Asset Tracking
- » Telematics
- » ANPR
- » Agriculture
- » Security Systems
- » Food and Beverage





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General Features

- » 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
- » Embedded UDP/TCP/FTP/SMTP stack
- » A-GPS: Ephemeris file injection

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

GPRS Data

- » Quad Band GPRS class 10
- » Mobile station class B
- » Coding scheme 1 to 4
- » PBCCH support
- » GERAN Feature Package 1 support (NCC, Extended TBF)
- » CSD

Approvals and Compliance

- » CE

Sensitivity

Output power

- » Class 4 (2W, 33dBm) @ GSM 850/900
- » Class 1 (1W, 30dBm) @GSM 1800 / 1900

Sensitivity

- » -107dBm @ GSM 850 / 900 MHz
- » -107 dBm @ DCS 1800 / PCS 1900 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

- » Freq. Band: GPS(I1), Glonass(L1,FDMA), Galileo(E1)
- » Standards: NMEA, RTCM
- » 32 Channel GPS Architecture
- » Sensitivity: Acq. -146dBm, Nav. -160dBm, Tracking -162dBm
- » Positional Accuracy: (CEP50): 1.5m
- » Accuracy: Speed: <0.05m/s, Heading: <0.01 deg
- » Time to first fix(@-130dBm)
Hot Start: 1s
Cold Start: < 35s