RAK8213 mPCIe cellular IoT module (BG96 based) with GNSS, NB-IoT, USB2.0 CatM1&NB1 and EGPRS

The RAK8213 is a LTE Cat M1/Cat NB1 module based on the Quectel BG96 with a standard PCI Express® MiniCard form factor (Mini PCIe). Supports EGPRS network at the same time, can offer the highest data rate of 300Kbps downlink and 375Kbps uplink.

RAK8213 built-in GNSS module can support GPS, GLONASS, BeiDou/Compass, Galileo, QZSS, integrated GNSS greatly simplifies product design and provides faster, more accurate and more reliable positioning.

The module has a variety of power modes that can meet most of the application scenarios. And provides pin-to-pin compatibility with the Quectel LTE module EG91/EG95, Cat NB1 (NB-IoT) module BC95, UMTS/HSPA module UG95/UG96 and GSM/GPRS module M95.

Rich Internet protocol, industry-standard interfaces (USB/UART/I2C/Status indicators) and rich features (applicable to Windows XP, Windows Vista, Windows 7/8/8.1/10, Linux drivers for Linux and Android) Modules that extend applicability are suitable for a wide range of M2M applications such as wireless POS, smart metering, and tracking.

Key Benefits

- LTE Cat. M1/Cat.NB1/EGPRS module with Mini PCIe form factor, optimized for M2M and IoT applications.

- Ultra-low power consumption.

- USB Drivers and support 2.0 high speed interface.

- Quectel Enhanced AT commands.

- Robust mounting and interfaces

Interface

- USB 2.0 with High Speed up to 480Mbps

- UART × 1

- PCM* × 1

- (U)SIM Interface × 1(One Micro SIM on board by default)

- NETLIGHT for Network Status Indication

- STATUS for Power ON/OFF Indication

- Main and GNSS Antenna Interfaces

Applications

- Netbooks, notebooks
- Remote monitoring
- Onboard
- Wireless POS
- Smart meter reading
- Wireless routers, switches