

# Wireless Sensor Data Collection System

SBC32IM



SBC32IM is a sensor data collection system developed and produced by Geniatech based on the EFR32FG series of SoC. It can support the wireless M-Bus protocol, and also supports the expansion of other mainstream wireless protocols, such as: Z-Wave, ZigBee3.0, BLE5.0, LTE cat1, etc.; it is also compatible with traditional wired protocols, such as M-Bus to choose from. It is an ideal choice for wired meter reading, wireless meter reading, and sensor protocol forwarding solutions.

## Multicore Protocols Processor

- Proprietary Protocols
- Wireless M-Bus
- Selected IEEE 802.15.4g SUN-FSK PHYs
- Low Power Wide Area Networks

## Balance of consumption and performance

Provides industry-leading energy efficiency, ultra-fast wakeup times

## Configuration and compatibility

Pin-compatible across EFR32FG families  
Up to 256 kB of flash and 32 kB of RAM

## Customizable

Customizable hardware interface functions  
board functions.  
Structure of the custom.

## Software and hardware encryption

- General Purpose CRC
- Random Number Generator
- Hardware Cryptographic Acceleration

## Scalability

Support: Z-Wave, ZigBee3.0, BLE5.0, LTE cat1  
Support: RS232/485, M-Bus, IIC, PWM, GPIO

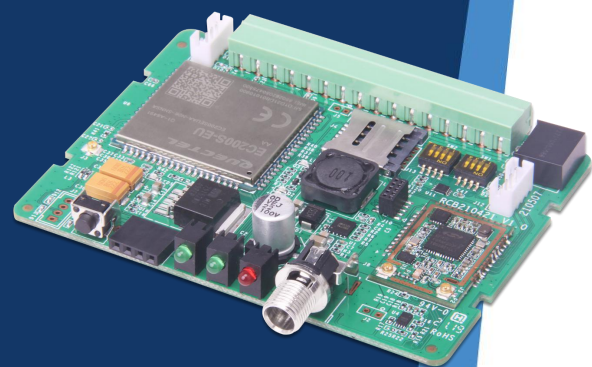
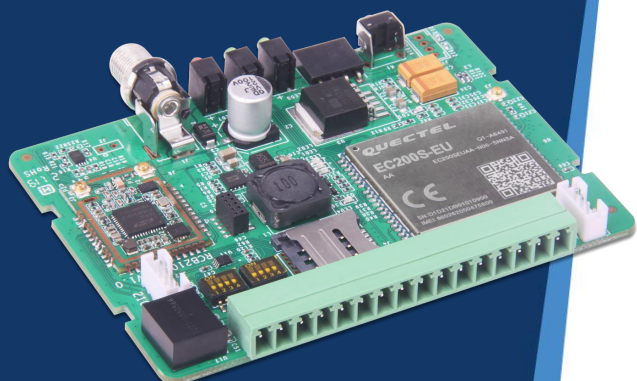
## application

- Smart metering
- Sensor data forwarding
- Tracking system
- Commercial and retail lighting
- Electronic shelf label

## Enterprise service

Provide comprehensive quality assurance,  
technical support and mass production  
services

# Product Specification



Processor	32-bit ARM® Cortex®-M4 core
CPU Frequency	40MHz
WDT	Support
M-Bus	Support
Wireless M-Bus	Support S Mode: 868MHz Band T Mode: 868MHz Band C Mode: 868MHz Band N Mode: 169MHz
LTE	Support:LTE Cat1 Include:LTE-FDD/LTE-TDD/GSM
RS-232/RS485	Support
GPIO	Support:AIO/DIO/PWM
I2C	Support
Battery	Support(Support power report)

**GT-IoT(uart\*1;spi\*1; GPIO\*1)**  
Support Z-Wave7 terminal equipment  
Support ZigBee3.0 terminal equipment  
Support LoRa terminal equipment  
Support BLE5.0

## Mechanical properties

Size (mm)	93*68
Net Weight (g)	65
Power	12V/1.5A
Wide working range	Consumer (-40° C to 85° C Tj) Industrial (-40° C to 105° C Tj)
RoHS and Reach compliant	Yes