

# Wireless Sensor Data Acquisition Box

MSE321M



MSE321M is a sensor data collection box based on EFR32FG series SoC developed and produced by Geniatech. 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.

- **Multi-protocol 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	S Mode: 868MHz Band
M-Bus	T Mode: 868MHz Band
	C Mode: 868MHz Band
	N Mode: 169MHz
LTE	Support:LTE Cat1 IInclude: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)

Connectivity	Support Z-Wave7 terminal equipment Support ZigBee3.0 terminal equipment Support LoRa terminal equipment Support BLE5.0
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### Mechanical properties

Size (mm)	130*70*22
Net Weight (g)	150
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

