



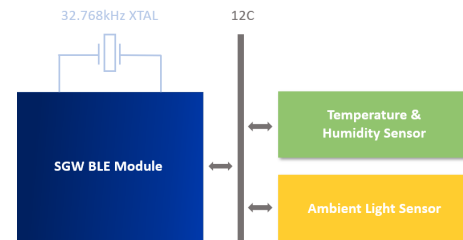
SGW8130 BLE Tag

Low maintenance versatility

The SGW8130 BLE Tag is a multi-purpose BLE device with both sensor and beacon capabilities, designed for indoor applications with its integrated antenna. It reports ambience data (temperature, humidity and light intensity), or simply transmits BLE signals for further analysis and interpretation, depending on your requirements.

Use as a complete solution with our SG Wireless Gateways, or have it customized as an easy, long-lasting integration into your own system.

- BLE 5.0 solution with integrated antenna
- All-in-one temperature, humidity and light sensor
- Tri-color LED indicator
- Over 100m range in open space
- Powered by 1 x CR2032 battery
- Over 3 years' battery life in typical beacon setting
- Customizable form factor



SGW8130 Block Diagram

Typical Applications

1. Room temperature and humidity monitoring



2. Indoor asset tracking



Features

Chipset	Powered by Nordic's nR52840 Bluetooth® 5/BLE SoC
Description	Complete BLE RF solution with integrated antenna
Technology	BLE 5 ready with Beacon advertising data packet format
Power Input	CR2032 battery, CR2032W battery
Bluetooth	Bluetooth 5.0
Sensor	Temperature & humidity sensor and light sensor
LED	Tri-color LED indicator in red, green and blue
DIMENSION	37mm x 36.4mm x 11.5mm

Specifications

Absolute Maximum Rating	
Power Supply	CR2032 battery
Operating Temperature	-20°C to 80°C (-40°C to 125°C with CR2032W battery)

Electrical Specification	
Core Module	SGW BLE Module
Current Consumption	Part number-dependent, refer to Current Consumption

BLE RF Performance	
Radio Operating Frequencies	2402MHz ~ 2480MHz
Radio On-air Data Rate	1Mbps
Transmit Power	0dBm powered by nRF52840
Antenna	Onboard PCB antenna
Range	Up to 100 meters (open space at 0dBm)

Sensors	
Temperature Range & Precision (SGW8130A and SGW8130B)	0°C – 60°C, ±0.3°C; -40°C – 125°C, ±2°C
Humidity Range & Precision (SGW8130A and SGW8130B)	0 – 100% RH, ±3%
Light (SGW8130A only)	0 – 4,096 Lux

Current Consumption

Typical Value	SGW8130A	SGW8130B	SGW8130C
Operating Mode	2.8mA	30uA	20uA
Sleep Mode	11.5uA	4.7uA	2.7uA

Product Code

SGW8130A : 3-in-1 BLE Sensor (Temperature, Humidity and Light Intensity) with LED Indicator
 SGW8130B : 2-in-1 BLE Sensor (Temperature and Humidity) with LED Indicator
 SGW8130C : Low-maintenance BLE Beacon Transmitter

About Us

SG Wireless is the full-stack IoT solutions provider launched by Hong Kong-based EMS Season Group. With extensive wireless experience and global manufacturing capabilities, SG Wireless covers every step of the IoT journey from design to production to turn IoT concepts into market-ready products.



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