



## ***SIGFOX Certified Module***

### ***SN10-21/22/23 Module for your IoT applications***

#### ***Key Features***

- *SN10-2x series is a high performance low current SIGFOX ULTRA NARROW BAND MODEM modules with BLE, WiFi and GPS function. It combined a powerful radio transceiver to offers an outstanding RF sensitivity.*
- *Ideal technology for IoT applications requested both long and short range wireless connectivity in the same time.*



#### ***Target Applications***

- Tracking devices
- Sensor networking
- Metering
- ...etc



## Specifications

- **Powerful 48MHz ARM® Cortex M3 Microcontroller**
- **Memory**
  - 128kB In-System Programmable Flash
  - 20kB RAM
  - 8kB SRAM for Cache
- **Multiple Wireless Connectivity**
  - **SIGFOX**
    - Frequency Band:  
SN10-21: 868MHz (RCZ1)  
SN10-22: 902MHz & 920MHz (RCZ2 & RCZ4)  
SN10-23: 923MHz (RCZ3)
    - Excellent Receiving Sensitivity: -125dBm @600bps 2GFSK
    - Excellent Image Rejection: 60 dB
    - Excellent Blocking Performance: 58 dB
    - Output Power:  
SN10-21: 14dBm  
SN10-22: 22dBm  
SN10-23: 13dBm

### BLE

- 2.4 GHz Bluetooth low energy compliance
- RF frequency range 2360 – 2500MHz
- Programmable output power up to +5dBm
- Excellent receiver sensitivity (-97 dBm)

### WiFi

- IEEE 802.11 b/g/n compliance
- High receiver sensitivity (-96.2dBm @1Mbps CCK)

### GPS

- Support multi-GNSS include QZSS
- Support 22tracking / 66 acquisition-channels
- Support WAAS/EGNOS/MSAS/GAGAN
- Superior sensitivity  
Acquisition: -148dBm (cold) / -163 dBm (hot)  
Tracking: -165dBm
- NMEA 0183 V3.01 standard and backward compliance

### Interface

- I2C
- Digital I/O and Analog I/O (ADC)

### Sensors

- Accelerator

### Outline

- 27mm(L) x 27mm(W) x 2.8mm(H)
- Castellated SMT pads

### Power Supply

- 3.3 to 4.5 VDC

### Operating Temperature Range

- -40°C to +85°C

### Software

- SDK (Software Development Kit) with sample code

**●Evaluation Kit is also available!**

### Ordering information

Please email to [sigfox@innocomm.com](mailto:sigfox@innocomm.com) or call +886-3-5781868 for more information.

InnoComm is authorized partner of SIGFOX® to offer modules and devices who require to develop applications based on SIGFOX® network.



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