



# siotech

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## PRODUCT DATASHEET

Siotech UNIOR Si003

### BATTERY-POWERED universal sensor on SIGFOX NETWORK

Size: 50 x 120 x 30 mm

Weight: 85 g

SFM10R1 modul by WISOL

Atmega324PB mcu by microchip

Replaceable battery CR123A

Operating Temperature Range: -30°C to +60°C

Radio Configurations: Zone 1: Europe, Oman,  
South Africa

Atmega324PB mcu by Microchip

High-Performance, Low-Current MCU

Flash: 64 KB

RAM: 4 KB

EEPROM: 1kB

Clock: 1MHz (in sleep mode is disable)

External clock for timing period: 32,768kHz

### MODUL PARAMETERS

Basic parameters of the module:

Periphery available:

- I / O max. 18x
- ADC 10bit 7 channels, external reference option
- I2C bus 1x
- SPI bus 1x
- USART bus 1x

Built-in Button for sending extra messages or activating / deactivating the accelerometer or other peripherals 2 signaling LEDs Internal temperature Battery status, External antennae

### BOARD FEATURES

2V to 3.6V Power supply

2.4 µA Idle state consumption

48,9 x 39 mm size without antenna  
Green and Red LED indications

### KEY SIGFOX MODEM FEATURES

SIGFOX™ transceiver certified

145 dB maximum link budget

(G)FSK, 4(G)FSK, GMSK, OOK modulation

Receive sensitivity = -127 dBm

20µA RX (windowed mode)

50 mA TX @ radiated +12,5 dBm

Optional ultra-low power 3D Accelerometer

Up to ±16g full scale

### ENERGIZER 123 (EL123AP)

RECOMMENDED BATTERY - ENERGIZER CR123A  
SPECIFICATIONS

Classification: "Lithium"

Chemical System: Lithium / Manganese Dioxide  
(Li/MnO<sub>2</sub>)

Designation: ANSI-5018LC, IEC-CR17345

Nominal Voltage: 3.0 Volts

Storage Temp:

-40°C to 60°C (-40°F to 140°F)

Operating Temp: -40°C to 60°C (-40°F to 140°F)

Typical Capacity: 1500 mAh (to 2.0 volts)

(Rated at 100 ohms at 21°C)

Typical Weight: 16.5 grams (0.58 oz.)

Typical Volume: 7.0 cubic centimeters (0.4 cubic inch)

Max Discharge: 1500 mA continuous (3500 mA pulse)

Max Rev Current: 2 uA

Typical Li Content: 0.55 grams (0.019 oz.)