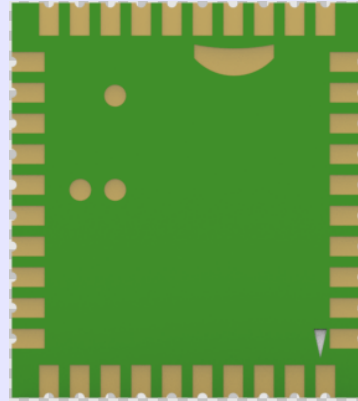


# Notion NB-IoT module OT01-3



OT01-3 is a high-performance NB-IoT module with extremely low power consumption. It supports a broad range of frequency bands used all over the world. The ultra-compact SMD package (16 × 18 × 2.1 mm) makes it easily embeddable into small-size applications. It also provides abundant external interfaces (UARTs, SPI, etc.) and protocol stacks (UDP/TCP, CoAP, LWM2M, etc.). The rich interfaces, small size, low power consumption and many RF bands allow it to be widely used for smart gas/water meters, information collection, security monitoring, smart city/home and other applications.

**RF bands** 1 / 3 / 5 / 8 / 20 / 2\* / 4\* / 12 / 13 / 17\* / 18\* / 19\* / 25\* / 26\* / 28 / 66\* (bands with a "\*" are not tested yet)

**power supply** 3.2–4.2 V (typical: 3.6 V)

**package** LCC, 58 pin

**dimensions** 16 × 18 × 2.1 mm

**operating temperature** –20–60 °C

**extreme working temperature** –40–85 °C

**humidity** 5–95 %

**software update** via USB, UART, FOTA

**RF output power** 23 ± 2 dB m

**RF sensitivity** –114 dB m

**single tone upload speed** 16.7 kbit/s

**single tone download speed** 25.5 kbit/s

**multi tone upload speed** 62.5 kbit/s

**multi tone download speed** 25.5 kbit/s

**power saving mode (PSM)** 5 μA@3.3 V

**DRX** (2.56 s) average 300 μA@3.3 V

**eDRX** (81.92 s) average 70 μA@3.3 V

## certifications

- CMCC
- CT
- Deutsche Telekom

## interfaces

- 1 × USB 1.1
- 2 × UART
- 1 × SPI
- 1 × PWM
- 1 × I2C
- 1 × ADC
- 1 × SIM (external)
- n × GPIO
- keys: power, reset
- PAD antenna

**protocols** UDP / TCP / CoAP / MQTT / LWM2M / PPP / SSL / TLS / DTLS / HTTP / HTTPS / FTP\*

**AT commands** 3GPP release 13/14

## applications

- water / gas meters
- smoke detectors
- smart home / city

