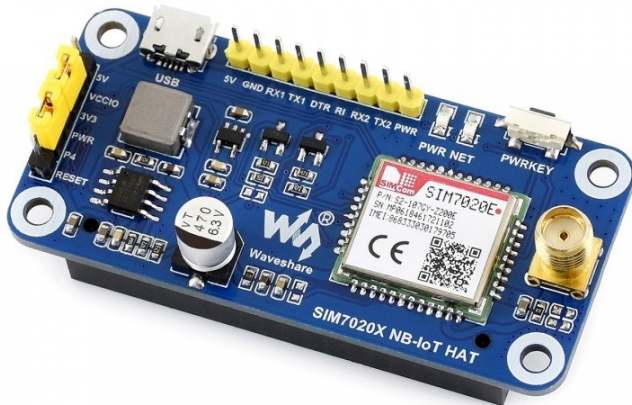




## NB-IoT HAT für Raspberry Pi, EU Version



Order number:	RPI-SIM7020E
Hersteller:	Waveshare
EAN:	614961953819
Herkunftsland:	China
Zolltarifnummer:	84733020
Gewicht:	0.08 kg

### Overview

This is an NB-IoT (NarrowBand-Internet of Things) HAT for Raspberry Pi, controlled via serial AT commands, supports communication protocols like LWM2M/COAP/MQTT, etc. Due to the advantages of low delay, low power, low cost, and wide coverage, it is the ideal choice for IoT applications such as intelligent instruments, asset tracking, remote monitoring, and so on.

### Features

- Raspberry Pi connectivity, compatible with any revision
- Supports communication protocols such as LWM2M/COAP/MQTT/TCP/UDP/HTTP/HTTPS, etc.
- Onboard USB interface, for power supply OR debugging
- Breakout UART control pins, to connect with host boards like Arduino/STM32
- Onboard voltage translator, 3.3V by default, allows to be switched to 5V via onboard jumper
- SIM card slot, supports NB-IoT specific card
- 2x LED indicators, easy to monitor the working status
- Baudrate: 300bps~921600bps (115200bps by default)
- Control via AT commands (V.25TER, 3GPP TS 27.007, and SIMCOM AT Commands)
- Comes with development resources and manual (examples for Raspberry Pi/Arduino/STM32/Python)

### Communications Specifications

- Band
  - FDD-LTE B1/B3/B5/B8/B20/B28
- Data rate
  - Uplink≤62.5Kbps
  - Downlink≤26.15Kbps
- SMS
  - Text mode and PDU mode (depends on the NB card)

### General Specifications



- Power supply: 5V
- Logic level: 5V/3.3V (3.3V by default)
- Overall current (idle mode): ~18mA
- Single module current (VBAT=3.3V):
- Idle mode: 5.6mA
- Sleep mode: 0.4mA
- PSM mode: 5uA
- eDRX mode: 70uA (eDRX=655.36s)
- Dimension: 30.5mm x 65.0mm

## Package Content

- SIM7020E NB-IoT HAT x1
- Antenna x1
- USB type A plug to micro plug cable x1
- RPi screws pack (2pcs) x1

## Development Resources

- [http://www.waveshare.com/wiki/SIM7020E\\_NB-IoT\\_HAT](http://www.waveshare.com/wiki/SIM7020E_NB-IoT_HAT)

## Weitere Bilder:

