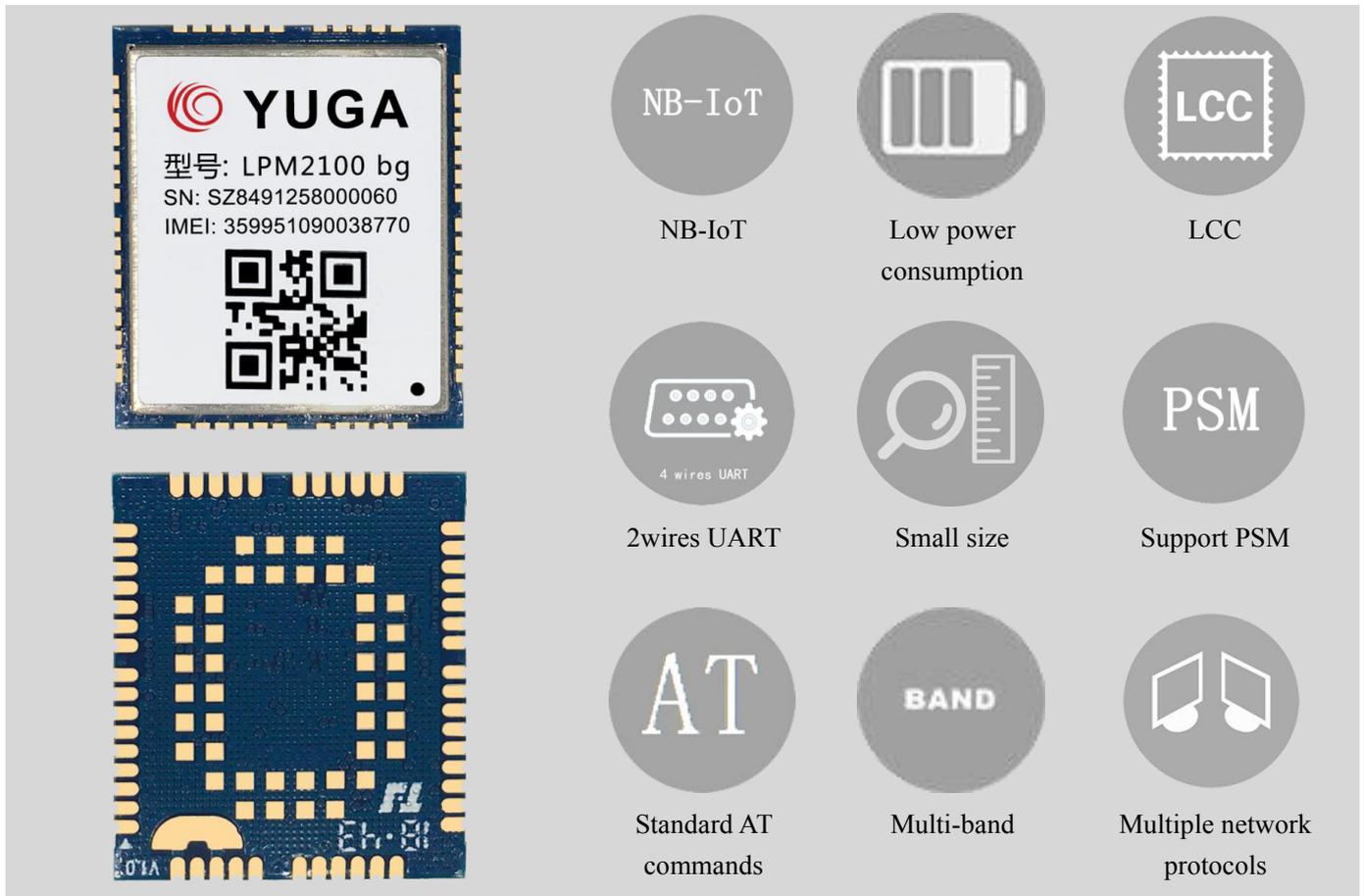


# LPM2100\_bg

## Multi-Band NB-IoT + GSM Module



The image displays the YUGA LPM2100\_bg module, a multi-band NB-IoT + GSM module. The top part shows the module's packaging with the YUGA logo, model number (LPM2100\_bg), SN (SZ8491258000060), and IMEI (359951090038770). Below the packaging is the bare module. To the right, a grid of icons highlights key features: NB-IoT, Low power consumption, LCC, 4 wires UART, 2wires UART, Small size, Support PSM, Standard AT commands, Multi-band, and Multiple network protocols.

 NB-IoT	 Low power consumption	 LCC
 4 wires UART	 Small size	 Support PSM
 2wires UART	 Multi-band	 Multiple network protocols

### Module introduction:

The LPM2100\_bg is a multi-band NB-IoT wireless communication module that supports ultra-low power consumption and supports multi-mode IoT. It supports bands B1, B3, B5, B8, B20, and B28. It can be divided into bc (B5/B8/B20/B28) Standard voltage module, bg (B1/B3/B5/B8/B20/B28) Standard voltage module and bg\_u (B1/B3/B5/B8/B20/B28) Low-voltage module according to user flexible configuration. Providing a wealth of external interfaces and protocol stacks, allowing customers to quickly and accurately design and upgrade products, providing great convenience for customers' applications. The LPM2100\_bg module is designed with energy-saving technology for ultra-low power consumption in sleep mode and less than 5uA in deep sleep.

### Application scenario:

- Car networking
- Smart home
- Smart city (smart parking, water/gas meter, street light, smoke alarm, trash can, etc.)
- Consumption and medical (wearing devices, VIP tracking, life support, remote clinical tracking, etc.)
- Industrial and agricultural intelligent monitoring (machine alarm, gas detection, irrigation, soil pH, etc.)
- Logistics support (industrial assets, container tracking, location and status updates, etc.)
- Other wireless terminals

# LPM2100\_bg

## Multi-Band NB-IoT + GSM Module

Main characteristics			Electrical characteristics	
Package: LCC			Sensitivity: -128dBm	
Band	LPM2100 bc	B5/B8/B20/B28	Maximum output power: 23dBm ± 2dB	
	LPM2100 bg	B1/B3B5/B8/B20/B28	Current consumption (numerical value)	≤ 1mA @Idle mode
	LPM2100 bg_u	B1/B3B5/B8/B20/B28		≤ 5uA @Power saving mode
Voltage	LPM2100 bc	3.1-4.2V typical 3.7V	LTE Cat NB1 Network connection status:	
	LPM2100 bg	3.1-4.2V typical 3.7V	232mA@RF emission status,23dBm	
	LPM2100 bg_u	2.45-4.2V typical 3.6V	83mA@RF emission status,12dBm	
Weight: about 2g			60mA@RF emission status,0dBm	
Size: 23.6×19.9×2.2 mm			<b>Interface</b>	
Low power consumption	Idle mode ≤ 1mA		98 LCC Package	
	PSM mode ≤ 5uA		SIM card interface (3V/1.8V supports hot swap) x1	
Range of working temperature: -40 ~ +85 °C			Reset interface x1	
<b>Software features</b>			PSM_EINT interface x1	
			Serial interface x3	
Non-IP			ADC interface x1	
Built-in TCP/UDP protocol			NB-IoT antenna interface x1	
FTP/HTTP/HTTPS			I2C interface x1	
CoAP			Network indicator interface x1	
LwM2M			Multiple GPIO interfaces (configurable)	
SSL			Support RTC and other control interfaces	
IPv4/IPV6			<b>Certification</b>	
			CCC SRRC	
<b>Data transfer rate</b>			<b>Compatibility</b>	
Single-tone: 25.5kbps(DL),16.7kbps(UP)			3GPP TS 27.007 V14.3.0 (2017-03)	
Multi-tone: 25.5kbps(DL),62.5kbps(UP)			3GPP Rel-13 and enhanced AT commands	