

**Series** 

Ver. 1.0

# Tiny BLE to WIFI & Ethernet interfaces Gateway

# **Product Description**

GW06-04 designed with the industry's first single PCBA for Gateway solution creates for the Internet of Things (IoT). GW06-04 Integrated with boasting a 64-bit quad core processor running at 1.4GHz, dual-band 2.4GHz and 5GHz wireless LAN, Bluetooth BLE 4.2 and faster Ethernet interfaces to BLE4.1 networks . The dual-band wireless LAN comes with modular compliance certification that provides reliable wireless data communication with 3egreen smart meters to install simply power system Easily .



GW06-04

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#### Feature:

- One Micro USB 5V/2.5A Power input
- Broadcom BCM2837B0, Cortex-A53 64-bit SoC @ 1.4GHz
- 1GB LPDDR2 SDRAM
- 2.4GHz and 5GHz IEEE 802.11.b/g/n/ac wireless LAN
- Bluetooth 4.2, BLE
- 32GB Micro SD format for loading operating system and data storage
- Supports Station, Access Point, and Wi-Fi Direct modes.
- Modbus protocol supported
- Operating temperature, -10–60°C
- Storage temperature -10 70 °C
- Fast Scan BLE devices up to over 50 devices in short time
- Dimension: 90mm x 55mm x 35mm (L x W x H)
- Bluetooth RF Performance:
- TX Power Up to <u>+5dBm@9.1mA</u>
- RX Sensitivity –97 dBm
- WIFI RF Performance :
- TX Power:17.0 dBm @1 DSSS
- 17.2 dBm @11 CCK
- 13.5 dBm @ 54 OFDM
- RX Sensitivity: –94.7 dBm @ 1 DSS
- 87 dBm @11 CCK
- −73 dBm @ 54 OFDM





#### **Applications**

#### For Internet-of-Things applications

- Cloud Connectivity Internet BLE to WIFI/Ethernet/RS485 Gateway
- Home Automation Industrial Control
- Home Appliances Smart Plug and Metering
- Security Systems IP Network Sensor Nodes
- Smart Energy

V.1.0.E



### **Electrical Characteristics**

## **Absolute Maximum Ratings**

Parameters	Min	Max	Unit
Storage temperature	-40	+120	°C
Supply voltage VDD input to the ground	4V	5.5	V

## **BLE RF Characteristics**

Conditions: TA = 25°C

Parameters	Condition	Min	Тур	Max	Unit
RF frequency	BLE 2.4G	2045	2400	2480	Mhz
RF frequency spacing	At antenna input, 250 Kbps		2		Mhz
RF sensitivity (high gain)	At antenna input, 250 Kbps		-93		dBm
Maximum RF input		-10			dBm
Adjacent channel rejection	@+/-1 MHz, 250 Kbps		-5		dBm
Alternate channel rejection	@+/-2 MHz, 250 Kbps		50		dBm
RSSI range	High gain mode, 250 Kbps Standard mode	-90 -87		-45 -35	dB
Maximum RF output power	At 5 dBm output power setting		5		dBm
RF output power control range		-23		5	dBm
TX gain control resolution		1			dB
TX EVM			15		%

# **Recommended Operating Conditions**

Test conditions: Power = 5V

Parameters	Min	Тур	Max	Unit
Ambient Operating Temperature	-20	+40	+70	°C
Supply Voltage for Power Input	3.3	5	5.5	V



# **Safety instructions**

- This product should only be connected to an external power supply rated at 5V/2.5 A DC. Any external power supply used with it shall comply with relevant regulations and standards applicable in the country of intended use.
- This product should be operated in a well-ventilated environment and Whilst in use, this product should be placed on a stable, flat, non-conductive surface and should not be contacted by conductive items.
- The cables and connectors of all peripherals used with this product must have adequate insulation so that relevant safety requirements are met.
- To avoid malfunction of or damage to this product, please observe the following: Do not expose to water or moisture, or place on a conductive surface whilst in operation.
- Do not expose to heat from any source; GW06-04 is designed for reliable operation at normal ambient temperatures.



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