## LM808 WiFi 802.11ac/b/g/n Adapter

Host Controller Interface (HCI) via USB Interface















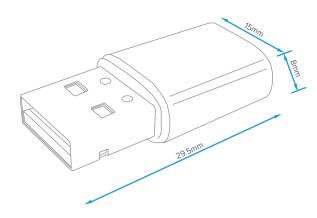


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#### **Features**

- Supports All IEEE Standards IEEE 802.11ac/a/b/g/n/d/e/h/i
- Backward compatible with 802.11a/b/g devices while operating over 802.11n
- Maximum Data Rates at
  - 72.2 Mbps Using 20MHz bandwidth
  - 150 Mbps Using 40MHz bandwidth
  - 433.3Mbps Using 80MHz bandwidth

- Operates over ISM bands (2.4GHz and 5GHz) 20MHz / 40MHz / 80MHz Bandwidth Transmission
- Modulation
  - OFDM with BPSK, QPSK, 16QAM, 64QAM and 256QAM
  - Convolutional Coding Rate: 1/2, 2/3, 3/4, and 5/6
- WiFi Direct and support for WiFi P2P PAN network
- See our website for this products certifications.
- RoHS, REACH and WEEE





The LM808 WiFi USB Adapter uses a USB 2.0 interface in order to communicate with the host. It uses a Realtek IC that fully supports all of the 808.11 Bands, IEEE 802.11 ac Draft 2.0 and 802.11 a/b/g/n specifications, plus is backward compatible while using 802.11n standard.

The LM808 Series Adapter is for users requiring a high-performance wireless client. Also supporting the WiFi Direct feature that can easily build a WiFi P2P PAN network.

The LM808 supports the Orthogonal Frequency Division Multiplexing (OFDM) with one transmit and one receive path (1T1R).

Features include support for both 20MHz, 40MHz and 80MHz channel bandwidth, and combined with BPSK, QPSK, 16QAM, 64QAM and 256QAM modulation of the individual subcarriers and offers a compatible coding rate of 1/2, 2/3, 3/4, and 5/6, and provides up to 433.3 Mbps over IEEE 802.11ac while using 80MHz bandwidth.

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Product

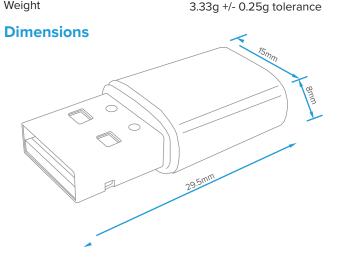
LM808

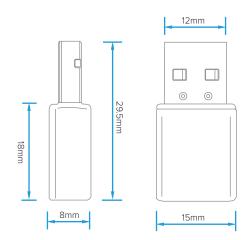
Part No

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### **General Specification**

Product Name	LM808
Chipset	Realtek
No. of Transmitters	1T 1R
Standard	IEEE 802.11ac/a/b/g/n/d/e/h/i
Data Transfer Rate	1, 2, 5.5, 11, 6, 9, 12, 18, 24, 36, 48, 54, 60, 90, 120, 150, 173.3, 180, 240, 270, 300, and maximum of
	433.3Mbps
Modulation Method	CCK, DQPSK, DBPSK, BPSK, QPSK,16QAM, 64QAM, 256QAM
Frequency Band	2.4 GHz and 5 GHz ISM Band
RF Output Power	17dBm – 802.11b @ 11Mbps
(tolerance ±2dBm)	15dBm – 802.11g @ 54Mbps
	13dBm – 802.11a @ 54Mbps
	13dBm - 802.11n @ MCS7_HT20
	13dBm - 802.11n @ MCS7_HT40
	11dBm - 802.11ac @ NSS1 MCS9_BW20, BW40, BW80
	-82dBm – 802.11b @ 11Mbps -71dBm – 802.11g@54MBps
Receiver Sesitivity	-67dBm – 802.11n @ MCS7_BW20
	-64dBm – 802.11n @ MCS7_BW40
	-57dBm - 802.11ac @ NSS1_MCS9_BW20
	-54dBm - 802.11ac @ NSS1_MCS9_BW40
	-51dBm – 802.11ac @ NSS1_MCS9_BW80
Operating Temperature	0° to +70° C ambient temperature 5 to 90 % (non-condensing)
Storage Temperature	-40° to +80°C ambient temperature 5 to 95 % (non-condensing)
Dimension	29.5mm x 15.0mm x 8.0 mm (L x W x H) USB Type A Connector + Housing
Weight	3.33g +/- 0.25g tolerance







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LM808 Product

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#### **Datasheet Version Notes**

v1.0 11 JAN 2018 Added version notes to datasheet.



### LM808 WiFi 802.11ac/b/g/n Adapter

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Product Part No LM808 See Below

### **LM808 Packaging Options**



808-0409 **Sample (2x20)** 

ADPT 802.11ac + USB 433Mbps 5v IC-ANT SAMPLE (2x20)



808-0402 AO - Adapter Only

ADPT 802.11ac + USB 433Mbps 5v IC-ANT AO



808-0403 RP - Retail Pack

808-0406

ADPT 802.11ac + USB 433Mbps 5v IC-ANT RP



AO - Adapter Only

ADPT 802.11ac + USB 433Mbps 5v IC-ANT ETCH AO

 $\bullet \ \ \text{See our website to download any applicable Product Software, Manuals and Notes} \ \ \text{-http://www.lm-technologies.com/downloads}$