

LM007 WiFi 802.11 b/g/n Adapter

Host Controller Interface (HCI) via USB Interface

Product LM007
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 Revised 11/JAN/2018
 Datasheet Version 1.0



Features

- WiFi 802.11 b/g/n
- Operates in 2.4 GHz Frequency bands
- Plug and Play (Linux, macOS X, Windows XP – 10, Windows 10 IoT Core and Windows Compact Embedded 6/7 compatible))
- Up to 150Mbps Data Transfer Rate
- 1x1 SISO technology improves effective throughput and range over existing 802.11 b/g products
- 802.11e-compatible bursting and I standards
- BPSK, QPSK, 16 QAM and 64 QAM modulation schemes
- WEP, TKIP, and AES, WPA and WPA2 encryption schemes
- Fully-featured software utility for easy configuration and management
- Can be setup as an ad-hoc network for peer to peer communication
- Small convenient size
- RoHS, REACH and WEEE compliant
- See our website for this products certifications.

Overview

The LM007 USB adapter is a convenient plug & play solution that enables wireless communication in ad-hoc or infrastructure mode.

It is compatible with WiFi 802.11b, 802.11g or 802.11n compliant devices such as routers, access points or wireless adapters. Typically used to form a wireless LAN or for wireless access to the internet with a data transfer rates of up to 150 Mbps.

This cost effective adapter is designed for low power consumption, while maintaining excellent RF performance.

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General Specification

Wireless

Wireless Standard	802.11 b/g/n
Module Type	Host Controller Interface (HCI)
OS Compatibility	Linux, macOS X, Windows XP – 10, Windows 10 IoT Core and Windows Embedded Compact 6/7
Security	WEP, TKIP, AES, WPA and WPA2
Network Architecture	Ad hoc mode (Peer-to-Peer) and Infrastructure mode

Hardware

Chipset	Realtek
Antenna	Onboard Chip Antenna
Interfaces	USB 2.0 (Full Speed)

RF Characteristics

Tx Output Power	(+/- 2dBm): 13dBm@11n, 17dBm@11b, 15dBm@11g
Rx Sensitivity	11Mbps -80dBm@8%, 54Mbps -70dBm@10%, 130Mbps -64dBm@10%
Range (in open space)	Up to 180m
Current Consumption	Transmit: average 108 mA Receive: average 68 mA
Data Transfer Rate	1,2,5,5,6,11,12,18,22,24,30,36,48,54,60,90,120 Mbps to a maximum of 150Mbps
Frequency	2.4GHz ISM Band
Modulation Scheme	BPSK/ QPSK/ 16-QAM/ 64-QAM
Spread Spectrum	IEEE 802.11b: DSSS (Direct Sequence Spread Spectrum) IEEE 802.11g/n: OFDM (Orthogonal Frequency Division Multiplexing)

Physical Characteristics

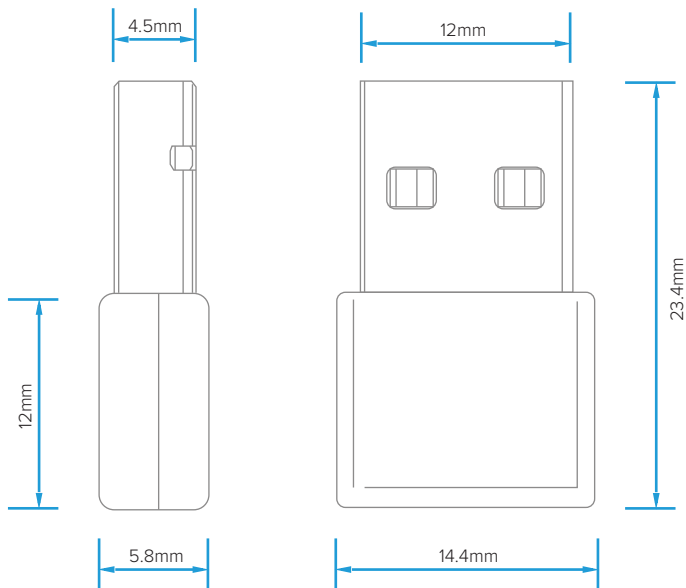
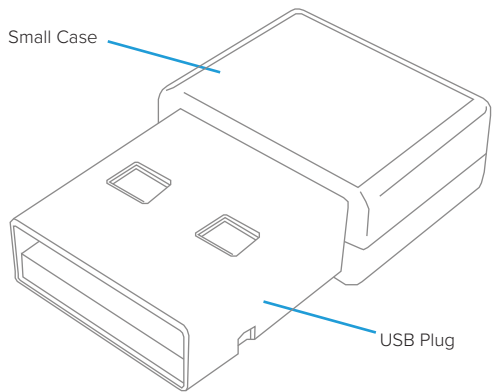
Operating Temperature	-20°C to +85°C ambient temperature
Humidity	5% to 90% maximum (non-condensing)
Dimensions (L x W x H)	23.44mm x 14.40mm x 5.80mm
Weight	2.21g +/- 0.25g tolerance (27.78g in retail pack)
Certifications	See our website for this products certifications.
Compliance	RoHS, REACH and WEEE

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Physical Dimensions





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Datasheet Version Notes

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



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Part No See Below

LM007 Packaging Options



007-1052

Sample (2x20)

ADPT HCI 802.11n USB 8188 EUS -40c IC-ANT SAMPLE (2x20)



007-1050

AO - Adapter Only

ADPT HCI 802.11n USB 8188 EUS -40c IC-ANT -AO



007-1051

RP - Retail Pack

ADPT HCI 802.11n USB 8188 EUS -40c IC-ANT -RP

- See our website to download any applicable Product Software, Manuals and Notes - <http://www.lm-technologies.com/downloads>