LM005 WiFi 802.11 b/g/n Adapter 300Mbps

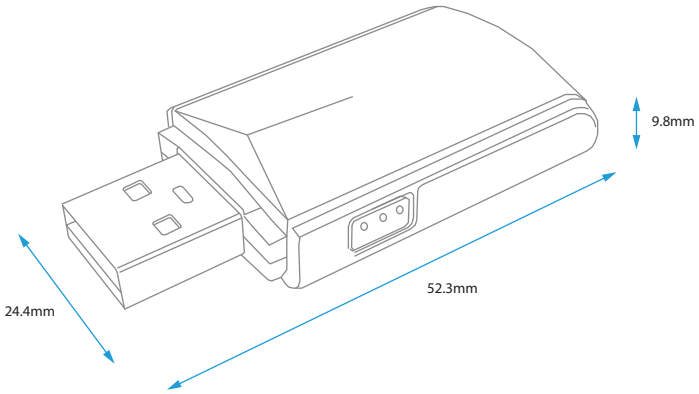
Host Controller Interface (HCI) via USB Interface

Product	LM005
Part No	See Last Page
Revised	11/JAN/2018
Datasheet Version	1.0

Linux OSX Win XP Win Vista Win 7 Win 8 Win 10

WIFI





Features

- WiFi 802.11 b/g/n
- Operates in 2.4 GHz Frequency bands
- Plug and Play (Linux, MAC OSX and Windows XP – 10 compatible)
- Up to 300Mbps Data Transfer Rate
- 2x2 MIMO technology improves data throughput and range over existing 802.11 b/g products
- WPS button (Wi-Fi Protected Setup) for easy and secure establishment in a wireless network.
- 802.11e-compatible bursting and I standards.
- Fully-featured software utility for easy configuration and management
- BPSK, QPSK, 16 QAM, 64 QAM, DBPSK, DQPSK, and CCK modulation schemes.
- WEP, TKIP, and AES, WPA, WPA2 hardware encryption schemes.
- Supports infrastructure networks through an access point and ad-hoc network via peer to peer connections
- Up to 180m range in open space
- See our website for this products certifications.
- RoHS, REACH and WEEE

Overview

The LM005 is a powerful 300Mbps adapter that also fully supports the functional compliance of IEEE 802.11 e and i standards and therefore can be used across IEEE 802.11 bands g n e and i.

In addition, the WiFi a, b, g, n USB Adapter also supports Linux and Mac OSX. It is compatible with Linux Kernel 2.6.18~2.6.38, 3.0.2 Android 1.6~2.3 & 4.0. and Mac OSX 10.5 - 10.11 (Tested with El Capitan)

The LM005 is available as an adapter only or as a retail pack.



The WiFi USB Adapter uses a Realtek IC alongside an LM qualified list of components. The WiFi adapter also works comfortably in temperatures ranging from 0°C to +50°C.

LM005 has a maximum communication range of 180m (in open space). In order to obtain 300Mbps bandwidth the adapter broadcasts on 2.4GHz. The dongle also incorporates 2x2 MIMO technology which improves the effectiveness of throughput and range over existing 802.11 g. It is designed to provide excellent performance with minimum power consumption.

This WiFi adapter has an excellent performance for better power management applications and is very cost effective.

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General Specification

Wireless

Wireless Standard	802.11 b/g/n
Module Type	Host Controller Interface (HCI)
OS Compatibility	Linux, MAC OSX and Windows XP – 10
Security	64 bit/ 128 bit WEP, TKIP, AES, WPA, WPA2
	WPS button for easy and secure establishment of a wireless network
Network Architecture	Ad hoc mode and Infrastructure mode

Hardware

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

RF Characteristics

Tx Output Power	(+/- 2dBm): 14dBm@11n, 17dBm@11b, 14dBm@11g
Rx Sensitivity	11Mbps -80dBm@8%,54Mbps -70dBm@10%,130Mbps -64dBm@10%
Range (in open space)	Up to 180m
Current Consumption	Transmit: average 305 mA
	Receive: average 190 mA
Data Transfer Rate	1,2,5.5,6,11,12,18,22,24,30,36,48,54,60,90,120,180,240,270 and maximum of 300 Mbps
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

LM005-1001 & 1007 Operating Temperature	0°C to +50°C ambient temperature	EOL SEP 2018
LM005-1002 & 1006 Operating Temperature	-20°C to +85°C ambient temperature	
LM005-1001 & 1007 Storage Temperature	0°C to +50°C ambient temperature	EOL SEP 2018
LM005-1002 & 1006 Storage Temperature	-40°C to +85°C ambient temperature	
Storage Temperature	5% to 90% maximum (non-condensing)	
Humidity	52.3mm x 24.4mm x 9.8mm	
Dimensions (L x W x H)	10.2g	
Weight	9.45g +/- 0.25g tolerance	

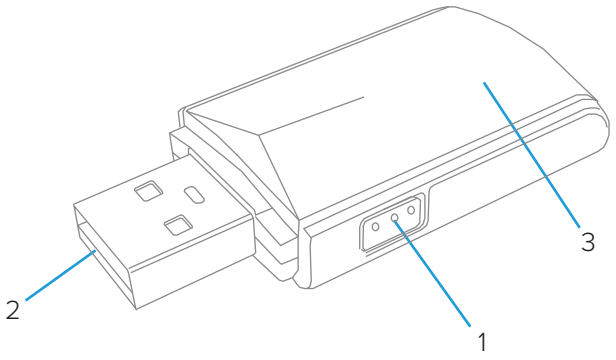
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Hardware Structure

1 Push Switch.
2 USB Connector.
3 Compact Casing.



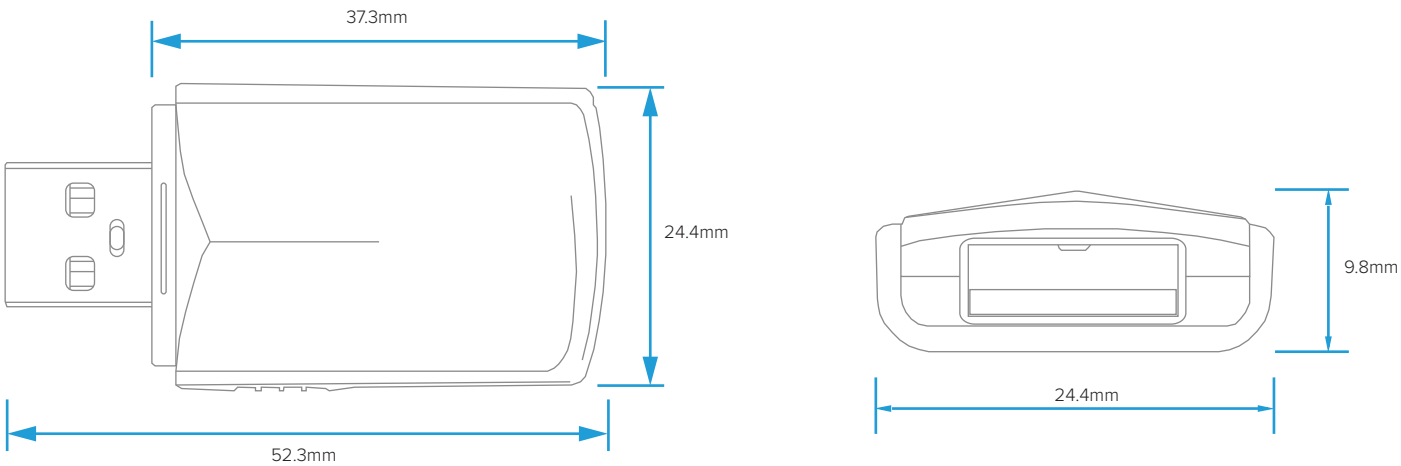
Switch Functions

Reset Button

By pressing the Reset Button you can:

Disconnect a wireless connection (after a short press).
Restore the factory settings (after over 3 seconds press).

Physical Dimensions



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Datasheet Version Notes

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

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LM005 Packaging Options



005-1005

Sample (2x20)
ADPT HCI 802.11b,g,n 300Mbps USB WPS IC-ANT SAMPLE (2x20)



005-1001

RP - Retail Pack
ADPT HCI 802.11b,g,n 300Mbps USB WPS IC-ANT RP



005-1007

AO - Adapter Only
ADPT HCI 802.11b,g,n 300Mbps USB WPS IC-ANT AO

- User Guides, Manuals and configuration Software for our products are available to download via our website - http://www.lm-technologies.com/downloads

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