**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 excellent performance for better power management applications and is very cost effective.
## 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
- **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
- **LM005-1002 & 1006 Operating Temperature**: -20°C to +85°C ambient temperature
- **LM005-1001 & 1007 Storage Temperature**: 0°C to +50°C ambient temperature
- **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
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
Datasheet Version Notes

v1.0  11 JAN 2018  Added version notes to datasheet.
LM005 WiFi 802.11 b/g/n Adapter 300Mbps
Host Controller Interface (HCI) via USB Interface

LM005 Packaging Options

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>005-1005</td>
<td>Sample (2x20)</td>
<td>ADPT HCI 802.11b,g,n 300Mbps USB WPS IC-ANT SAMPLE (2x20)</td>
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<tr>
<td>005-1001</td>
<td>RP - Retail Pack</td>
<td>ADPT HCI 802.11b,g,n 300Mbps USB WPS IC-ANT RP</td>
</tr>
<tr>
<td>005-1007</td>
<td>AO - Adapter Only</td>
<td>ADPT HCI 802.11b,g,n 300Mbps USB WPS IC-ANT AO</td>
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User Guides, Manuals and configuration Software for our products are available to download via our website - http://www.lm-technologies.com/downloads