

## Wi-Fire

High-Gain Wireless USB 2.0 Adapter

## Data Sheet

P/N: HFWFG10

### *The Wi-Fire: How It Works*

The Wi-Fire is a range-extending USB device that enables you to access a wireless Internet connection from up to 1,000 feet away—three times the range of your internal wireless adapter.

The Wi-Fire uses a powerful directional antenna, highly sensitive receiver and proprietary software to find and enhance normal Wi-Fi signals. With it you can connect wirelessly to the Internet faster and with a stronger signal than an internal wireless card can ever achieve.

Annoyed by dropped signals and spotty connections? Even with weak Wi-Fi signals, the Wi-Fire allows you to surf the web, tap remote applications, download large files, stream audio and video—without squinting at a tiny screen and thumb typing on a credit card-sized keyboard. Just try performing essential online tasks on a painfully slow cell phone connection.

You could look around for the closest and strongest access point. You could suffer through a spotty, slow connection that drops at the most inopportune time. Or you could plug in your Wi-Fire, see multiple access points you never even knew existed, and get online—now!

The Wi-Fire draws very little power from your laptop battery. It comes complete with everything you need to connect wirelessly to the Internet. Just install the driver software, plug in the Wi-Fire to a USB port and you're ready to start. It can rest flat on any surface or will rest securely on a laptop display or flat screen monitor.

The Wi-Fire Connection Manager reveals all available networks in the area—more than you've ever seen without the Wi-Fire. Simply select the strongest publicly accessible network, or private network for which you have authorization, and rotate the Wi-Fire's 360-degree directional antenna to focus the signal and connect.

### *Three Things to Consider*

In addition to connecting to an access point, a Wi-Fi adapter must also maintain strong, fast, sustainable connections so that the user benefits from the high speed Wi-Fi internet access. Here are three important objective and subjective measures of the Wi-Fire's performance.

#### **Distance from Access Point**

Many things can lower the strength of a Wi-Fi signal, but the most common enemies are obstructions and distance to the Access Point. As a consumer using a standard Wi-Fi adapter increases the distance to the Access Point, the usable Wi-Fi signals drop considerably. The Wi-Fire also helps the user stay connected even at these distances by having one of the most powerful receive sensitivities in the industry (-98 dBm).

#### **Maximum Throughput**

Because the 802.11b/g protocols use Dynamic Rate Scaling, the Maximum Throughput levels are decreased as a signal gets weaker. Because of the powerful built in 10.4 dBi antenna within the Wi-Fire, as well as the receive sensitivity advantage, users can significantly increase overall connections speeds, remaining high, even when other adapters slow.

#### **Subjective Internet Use**

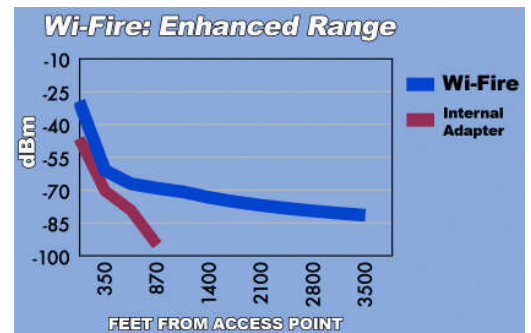
Objective metrics are important, but ultimately actual usability is what Wi-Fi users look for. In most tests, the Wi-Fire has provided a usable network connection where an internal adapter could not. Internal adapters may connect without the Wi-Fire, but the connection was often insufficient even for browsing, and high bandwidth activities was nearly impossible. In the same environment, the Wi-Fire allowed for fast browsing and was even strong enough for the online streaming of video and audio sources.



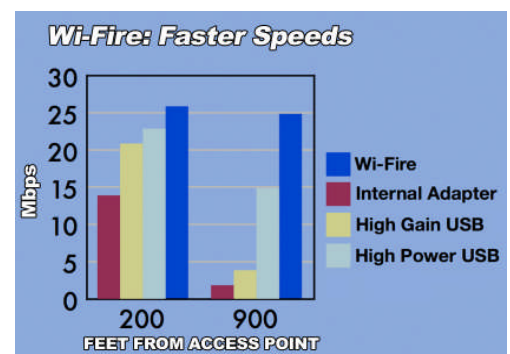
## The Wi-Fire: Product Specifications

The Wi-Fire is a range-extending USB device that enables you to access a wireless Internet connection from up to 1,000 feet away—three times the range of your internal wireless adapter. It uses a powerful directional antenna and proprietary software to find and enhance normal Wi-Fi signals. With it you can connect wirelessly to the Internet faster and with a stronger signal than your internal wireless adapter can achieve.

<b>Wireless</b>	<ul style="list-style-type: none"> <li>○ IEEE 802.11 b/g protocols</li> <li>○ Frequency Range: 2.421 Ghz – 2.4835 Ghz</li> <li>○ Channels: US – 11 channels</li> <li>○ Transmit Power: +16dBm</li> <li>○ Antenna Gain: +10.4 dBi</li> <li>○ Minimum Receive Power: -98 dBm</li> </ul>
<b>System Requirements</b>	<ul style="list-style-type: none"> <li>○ Windows XP</li> <li>○ Mac OS X 10.3 or 10.4</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>○ 64/128/256 bit WEP</li> <li>○ 128 bit WPA, WPA2 (AES-256 bit)</li> </ul>
<b>Physical Specification</b>	<ul style="list-style-type: none"> <li>○ 4 ounces</li> <li>○ 4 in(L), 0.375 in(W), 3.25 in(D)</li> <li>○ Host Interface:</li> <li>○ USB 2.0</li> </ul>
<b>Media Access Control</b>	<ul style="list-style-type: none"> <li>○ CSMA/CA with ACK</li> </ul>
<b>Data Rate</b>	<ul style="list-style-type: none"> <li>○ 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps</li> <li>○ 802.11b: 1, 2, 5.5, 11 Mbps</li> </ul>
<b>Power Requirements</b>	<ul style="list-style-type: none"> <li>○ 5V DC (from USB port)</li> </ul>
<b>Modulation</b>	<ul style="list-style-type: none"> <li>○ Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)</li> <li>○ OFDM</li> </ul>
<b>Certification</b>	<ul style="list-style-type: none"> <li>○ FCC Part 15</li> </ul>
<b>Package Contents</b>	<ul style="list-style-type: none"> <li>○ Wi-Fire Wireless Adapter</li> <li>○ Mount</li> <li>○ USB Cable</li> <li>○ Quick Start Guide</li> <li>○ Driver and Software Utility CD</li> </ul>



Wi-Fire allows you to connect from three times further away than with an internal adaptor. The Wi-Fire maintains connectivity better, faster and longer.



Wi-Fire's enhanced signal lets you maintain high bandwidth speeds where other adapters barely permit simple browsing. The graph represents actual throughput while downloading, as opposed to maximum connection speed.