



Description

Make your Internet of Things device cable-free by adding WiFi. Take advantage of the Raspberry Pi and Beagle Bone's USB port to add a low cost, but high-reliability wireless link. We tried half a dozen modules to find one that works well with the Pi and Bone without the need of recompiling any kernels: its supported by the Bone's Angstrom installation that comes with each Bone as well as the [Adafruit Occidentalis distribution](#). You'll have wireless Internet in 10 minutes! Works great with 802.11b/g/n networks.

If using with a Beagle Bone: Because of the high power required by WiFi, a [5V 2A power adapter is required](#) to power both the Bone and WiFi. Flaky behavior and crashes may result if this is not followed! We have a [tutorial for using this module with the Beagle Bone!](#)

If using with a Raspberry Pi: The latest Wheezy distributions support this module out-of-the-box. Also, the [Adafruit Occidentalis distribution](#) has support built in. [Check out our detailed tutorial for how to set up WiFi networking on the Pi](#) You may find that you need to have a powered hub to use this adapter, so if you're having power flakiness with your Pi, try a hub!

Please note: The WiFi module may look slightly different than above, but all modules shipped are Pi-tested and contain the same chipset and have equivalent performance, the only difference is the plastic shell.

Technical Details



- RT18192cu Chipset
- Sticks out 8mm (0.3") beyond USB port
- Weight: 2.17g
- Wireless Standards: IEEE 802.11n (draft), IEEE 802.11g, IEEE 802.11b
- Host Interface: High speed USB2.0/1.1 interface
- Data Rate: 802.11n: up to 150Mbps (downlink) and up to 150Mbps (uplink) , 802.11g: 54 / 48 / 36 / 24 / 18/ 12 / 9 / 6 Mbps auto fallback, 802.11b: 11 / 5.5 / 2 / 1 Mbps auto fallback
- Frequency Band: 2.4GHz ISM (Industrial Scientific Medical) Band/II>
- Chipset: Realtek
- RF Frequency: 2412 ~ 2462 MHz (North America), 2412 ~ 2472 MHz (Europe), 2412 ~ 2484 MHz (Japan)
- Radio Channel: 1 ~ 14 channels (Universal Domain Selection)
- Range Coverage: Up to 3 times farther range than 802.11g
- Antenna Type: Integrated Antenna
- Roaming: Full mobility and seamless roaming from cell to cell
- RF Output Power: 13 ~17 dBm (Typical)
- Modulation: 11n: BPSK, QPSK, 16QAM, 64QAM with OFDM, 11g: BPSK, QPSK, 16QAM, 64QAM, OFDM, 11b: DQPSK, DBPSK, DSSS, CCK
- Data Security: 64/128-bit WEP Encryption
WPA, WPA-PSK, WPA2, WPA2-PSK. TKIP/AES
- Network: Auto-switch to use 802.11n or 802.11g or 802.11b mode
- Supports Ad-Hoc, Infrastructure WLAN network, Wireless roaming, Data rate auto fall-back under noisy environment or longer range distance, Site Survey with Profile function
- Configuration & Management: Plug-and-Play setup and installation, Management Utility supports 2000 / XP/ Vista
- Media Access Control CSMA/CA with ACK
- LED Indicator Link/Active (Green)
- Operating Temperature 0°C to 40°C
- Storage Temperature -20°C to 75°C
- Operating Humidity 10% ~ 90% (Non Condensing)
- Storage Humidity 5% ~ 95% (Non Condensing)
- Requirements Available USB 2.0 port