

USB WiFi (802.11b/g/n) Module with Antenna for Raspberry Pi

PRODUCT ID: 1030



DESCRIPTION

Make your Internet of Things device cable-free by adding super 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 ones that work 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.

When you don't need the small size of our Miniature or Stick-size WiFi adapter, this guy has a massive antenna for greater range! Please note we have changed to an adapter that does not have a removable antenna

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!

Technical Details



RTL8192cu Chipset

Antenna Length: 150mm / 5.9"

Sticks out 48mm (1.9") beyond USB port

Weight: 6g

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/li>

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)

Regulatory Compliance RoHS Compliant, Wi-Fi Compliant

Requirements Available USB 2.0 port