USB WiFi (802.11b/g/n) Module: For Raspberry Pi and more

Part Number: 1012

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.

When you don't need the small size of our Miniature WiFi adapter, this guy has a bigger antenna for greater range!

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.

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.

TECHNICAL DETAILS

- RTl8192cu Chipset
- Dimensions: 59mm x 18mm x 8mm
- 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 FCC (USA), CE Mark (Europe), RoHS Compliant, Wi-Fi Compliant
- Requirements Available USB 2.0 port