



802.11n Wireless USB 2.0 Adapter EMP-9701

The EMP-9701 feature-rich mini-PCI embodies 2 transmitter 3 receiver (2T3R) architecture to ensure reliable, cost-effective wireless connectivity at high throughput over an extended range. Optimized RF architecture and baseband algorithms provide superb performance with low-power consumption. Intelligent MAC design deploys a highly efficient DMA engine and hardware data processing accelerators without overloading the host processor. It supports standards-based security, quality of service and international regulatory, giving end users the greatest performance anytime, anywhere.

Specifications

Features:

- Up to 300Mbps wireless data transfer rate
- Up to 12X Faster & 4X Farther than 802.11g
- Supports 2T3R Radios
- Enable Superior Reception from Farther Distances
- Backward Compatible with 802.11g and 802.11b Networks

Network:

- **Data Rates:**
1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54, 72, 84, 150 and 300Mbps (with 2-stream on both ends)
- **Standards / Compliance:**
IEEE802.3, IEEE802.3u, IEEE802.11b, IEEE802.11g, 802.11n 2.0
- **Security**
WPA/WPA2 (AES, 64,128-WEP with shared-key authentication)
Cisco CCS V1.0, V2.0 and V3.0compliant
- **Regulation Certifications:**
FCC Part 15, ETSI 300/328/CE
- **Operating Voltage:**
3.3V \pm 0.15V
- **Drivers:**
Windows 2000/XP/Vista

Physical Specifications:

- **Form Factor:**
Mini-PCI type III A
- **Dimensions:**
59.60mm X 50.9mm
- **Operating Voltage:**
5 V \pm 0.25V
- **Current consumption**
Tx : 695mA @ 2T (max.)
Rx : 407mA @ MCS 15, 40MHz

Environmental:

- **Temperature Range:**
Operating: -20°C to 70°C
Storage: -30°C to 80°C
- **Humidity (non-condensing):**
5%~95% Typical

Radio:

- **Frequency Band:**
802.11b/g:
U.S., Europe and Japan product covering 2.4 to 2.484 GHz
- **Media Access Protocol:**
Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)
- **Modulation Technology:**
802.11g: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
802.11b: DSSS (DBPSK, DQPSK, CCK)
- **Operation Channels:**
11 for North America
- **Receive Sensitivity (Typical):**
2.412~2.472G (IEEE802.11b) (1Rx)
-93dBm @ 1Mbps
-91dBm @ 11Mbps
2.412~2.472G (IEEE802.11g) (2Rx)
-92dBm @ 6Mbps
-79dBm @ 54Mbps
2.412~2.472G (IEEE802.11N) (2Rx)
-90 dBm MCS 8
-70 dBm MCS 15
- **Available Transmit Power *subject to country regulations*:**
2.412~2.472G (IEEE802.11b)
19dBm @1~11Mbps
2.412~2.472G (IEEE802.11g)
19 dBm @6Mbps
16 dBm @54Mbps
2.412~2.472G (IEEE802.11N)
20 dBm MCS 8
16 dBm MCS 15
- **Antenna Configuration**
2 U.FL antenna connectors (IPEX)
- **Related Products**
EUB-9701EXT (802.11n USB 2T2R)
EUB-9702 (802.11n USB 1T2R)
ESR-9710 (802.11n Gigabit Router)