

AirLAN2000 PC/104+ Wireless Ethernet Controller



General Description

The **AirLAN2000** provides a high speed WireLess Ethernet interface for PC/104+ systems. Utilizing the high performance 32-bit PCI interface the AirLAN2000 is available with Wireless Ethernet support at speeds of up to 54/108Mbits/sec.

The AirLAN2000 is available with options supporting a wide range of **IEEE802.11** Wireless standards including **802.11a, b, g and h** standards. The AirLAN2000 series is designed for demanding embedded applications and also features support for both the WPA (Wi-Fi Protected Access) and AES (Advanced Encryption Security). Support for **Diversity Antenna** configuration (option) can improve performance and range over tens of kilometers even at low Transmitter power.

Features

- Wireless Ethernet to IEEE802.11 Standards
- Option for IEEE802.11b/g 2.4GHz standard
- Option for IEEE802.11a 5GHz standard
- Up to 54MB/s and 108MB/s (Turbo) data rates
- 152-bit WEP data encryption for security
- Peer-to-peer and Infrastructure configurations
- Drivers for Windows and Linux
- Standard 32-bit PC/104+ bus interface
- Compact 3.6in x 3.8in PC/104+ form factor
- Single +5V power supply

Applications

- Rugged, reliable industrial Wireless Ethernet
- High bandwidth remote communications
- MPEG Video streaming
- Mobile environment
- Remote surveillance
- Protocol Conversion
- Wireless Extension to Ethernet infra-structure
- Wireless Cell Network

*Rev A.00 subject to change without notification

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PC104+ Bus Interface	Compliant with PCI Rev 2.1 132MBytes/sec bandwidth at 33.33 MHz bus speed
Network Standards	IEEE802.11, IEEE802.11a, IEEE802.11b IEEE802.11g (draft) draft IEEE802.11e, f, h, i (future options)
Data Rates	IEEE802.11a up to 54MBit/s normal, up to 108MBit/s (Turbo Mode) IEEE802.11g at 6, 9, 12, 18, 24, 36, 48, 54MBit/s IEEE802.11b at 1, 2, 5.5, 11MBit/s
Security	WPA Wi-Fi Protected Access with up to 152-WEP AES (Advanced Encryption Security) Support
Frequency Bands	IEEE802.11a - 5.15 - 5.25GHz, 5.25 - 5.35GHz, 5.725 - 5.825GHz IEEE802.11b/g - 2.412 - 2.462GHz (USA) 2.412 - 2.484GHz (Japan) 2.412 - 2.472GHz (Europe ETSI) 2.457 - 2.462GHz (Spain) 2.457 - 2.472GHz (France)
Transmit Power (typical)	IEEE802.11a - 15dBm +/-2 @ 54MBit/s 13dBm +/-2 @ 108MBit/s (Turbo Mode) IEEE802.11g - 15dBm +/-2 @ 54MBit/s IEEE802.11b - 20dBm +/-2 for all rates
Receive Sensitivity	IEEE802.11a - -68dBm @ 54MBit/s IEEE802.11b/g - -68dBm @ 54MBit/s
Antenna Connection	IEEE802.11a - dual SMA for Diversity Antenna IEEE802.11b/g - single SMA for Antenna
Miscellaneous	Single +5V at less than 750mA Operating Temp of 0 to 55degC Standard 3.6 x 3.8in PC/104+ form factor
Software	Comprehensive driver support for Windows98/ME/2000/XP, Linux Other Operating Systems such as QNX, VxWorks, etc can be supported (contact AMP Ltd).
Ordering Information	AirLAN2000-11a AirLAN2000 with 802.11a, double SMA Conn AirLAN2000-11bg Standard AirLAN2000 with 802.11b and g