

# AirLAN2000

PC/104+ Wireless LAN controller



**Advanced Micro  
Peripherals**

THE EMBEDDED VIDEO EXPERTS

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) standards for securing wireless networks.

IEEE802.11 a/b/g

Wireless

Ethernet

Controller

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The AirLAN2000 is available with drivers for Windows98/ME/2000/XP and Linux. Other drivers may be available on request.



Ideal for  
Remote  
Communication with  
Outstation.

## 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

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## 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

WPA - 64,128,152-WEP with TKIP for security

AES (Advanced Encryption Security) support

Peer-to-peer and Infrastructure configurations

Standard 32-bit PC/104+ bus interface

Compact 3.6in x 3.8in PC/104+ form factor

Single +5V power supply

Options for various

Standards

Including

IEEE802.11a 5GHz

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**PC/104-Plus Bus**

Compliant with PCI Rev 2.1  
132MBytes/sec bandwidth at 33.33MHz bus speed  
PCI Bus Master/Slave

**Host System Requirement**

PC/104plus bus with one spare REQ/GNT  
+5V or +3.3V signalling

**Network Standards**

IEEE802.11, IEEE802.11a, IEEE802.11b  
IEEE802.11g  
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**

Antenna Connection IEEE802.11a - dual  
IEEE802.11b/g - single SMA for Antenna

**Miscellaneous**

Single +5V power at less than 750mA  
Operating Temp 0°C to 55°C

**Software**

Driver support for Windows98/ME/2000/XP and Linux  
Driver support for QNX and VxWorks (optional)

**Ordering Information**

AirLAN2000-11a AirLAN2000 with 802.11a with  
double SMA connectors  
AirLAN2000-11bg Standard AirLAN2000 with  
802.11b and g

**AirLAN2000**