

Intel PRO/WIRELESS 5000 LAN PRODUCT FAMILY SPECIFICATIONS

RANGE AND THROUGHPUT	Data Rates	• 54, 48, 36, 24, 18, 12, 9, 6 Mbps
	Typical Indoor Range	• 40 ft (12 m) @ 54 Mbps • 300 ft (91 m) @ 6 Mbps
	Typical Outdoor Range	• 100 ft (30 m) @ 54 Mbps • 1000 ft (305 m) @ 6 Mbps
FREQUENCY AND MODULATION	Frequency band	5.15 GHz to 5.35 GHz
	Modulation	BPSK, QPSK, 16 QAM, 64 QAM
	Wireless Medium	Orthogonal Frequency Division Multiplexing (OFDM) 5 GHz UNII
	Channels	8-non-overlapping; 4 non-overlapping (Japan)
COMPATIBILITY	OS	Windows® 98SE, Me, 2000, XP
	Web Browser	IE 5.50 or higher Netscape Version 4.78 or 5.x
	WECA	Pending ratification of inter operability test and logo program by WECA
	WHQL	Yes
SECURITY	Encryption	0-bit, 64-bit and 128-bit WEP
QOS	DCF	CSMA/CA
REGULATORY AND SAFETY	Safety	UL, C-UL, CE
	United States	FCC
	Canada	Industry Canada
	Japan	VCCI, JATE, Telec
WARRANTY AND SUPPORT	Warranty	Limited Lifetime
	Support	Web: www.intel.com Phone: (800) 538-3373

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CARDBUS ADAPTER	Form Factor	CardBus Adapter
	Dimensions	2.12 in x 4.4 in x .2 in-.3 in on extended portion (54mm x 114mm x 5mm-7.8mm on extended portion)
	Weight	1.5 oz (43 g)
	LEDs	Link, Activity
	Operating Temperature	0 to +55 Celsius
	Humidity	10 to 90% non-condensing
	Output Power	40 mW to 200 mW dependent on frequency channel
	Transmit	450-480 mA
	Receive	420-440 mA
	Idle	<420 mA
	Voltage	3.3 V
	WLAN Standard	IEEE 802.11a
	Architecture	Infrastructure, Ad-hoc (peer-to-peer)
	Roaming	802.11a compliant for seamless roaming between access points
	Wired-to-wireless switching	Via Intel PROSet software

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ACCESS POINT	Form Factor	Access Point
	Dimensions	5.6 in x 8.6 in x 3.3 in (142mm x 218mm x 84mm)
	Weight	27 oz (765 g)
	Wired Interface	RJ-45
	LEDs	Link, Activity
	Operating Temperature	0 to +45 Celsius
	Humidity	10 to 90% non-condensing
	Users Supported	64 Active Users
	AC Adapter	100-230V AC Adapter
	PoE (Power over Ethernet)	Supports IEEE Standard 802.3af PoE
	Wired Network Standard	10/100BTx
	WLAN Standard	IEEE 802.11a
	Optional WLAN Standard	802.11b via upgrade kit
	Form Factor	Access Point
	DUAL ACCESS POINT	Dimensions
Weight		28 oz (794 g)
Wired Interface		RJ-45
LEDs		Link, Activity
Operating Temperature		0 to +45 Celsius
Humidity		10 to 90% non-condensing
AC Adapter		100-230V AC
PoE (Power over Ethernet)		Supports IEEE Standard 802.3af PoE
Wired Network Standard		10/100BTx
WLAN Standard		IEEE 802.11a and 802.11b
Form Factor		PCI Adapter
Dimensions (board with Mini PCI)		6.6 in x 2.75 in (168mm x 70mm)
Dimensions (with bracket and antenna)		8.4 in x 5.1 in (213mm x 130mm)
Weight		3.2 oz (91 g)
Connector Interface		PCI
LEDs	Link, Activity	
Operating Temperature	0 to +65 Celsius	
Humidity	10 to 90% non-condensing	
Output Power	40mW to 200mW dependent on frequency channel	
Transmit	450-480mA	
Receive	420-440mA	
Idle	<420mA	
Standby	<30mA	
Voltage	3.3V	
WLAN Standard	IEEE 802.11a	
Architecture	Infrastructure, Ad-hoc (peer-to-peer)	
Roaming	802.11a compliant for seamless roaming between access points	
Wired-to-wireless switching	Via Intel PROSet software	
PCI ADAPTER	Form Factor	PCI Adapter
	Dimensions (board with Mini PCI)	6.6 in x 2.75 in (168mm x 70mm)
	Dimensions (with bracket and antenna)	8.4 in x 5.1 in (213mm x 130mm)
	Weight	3.2 oz (91 g)
	Connector Interface	PCI
	LEDs	Link, Activity
	Operating Temperature	0 to +65 Celsius
	Humidity	10 to 90% non-condensing
	Output Power	40mW to 200mW dependent on frequency channel
	Transmit	450-480mA
	Receive	420-440mA
	Idle	<420mA
	Standby	<30mA
	Voltage	3.3V
	WLAN Standard	IEEE 802.11a
Architecture	Infrastructure, Ad-hoc (peer-to-peer)	
Roaming	802.11a compliant for seamless roaming between access points	
Wired-to-wireless switching	Via Intel PROSet software	

FOR PRODUCT INFORMATION

World Wide Web:	www.intel.com/network/wireless
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Italy	+02-696-33276
Spain	+91-377-8166
Hong Kong, Taiwan, Korea, Singapore and ASEAN	+65-213-1000
Australia	+61-2-9937-5800

PRODUCTS AND MODEL NUMBERS

Intel® PRO/Wireless 5000 Access Point	WSAP5000
Intel® PRO/Wireless 5000 LAN Dual Access Point	WDAP5000
Intel® PRO/Wireless 5000 LAN Access Point Upgrade Kit 802.11b	W2UP5000
Intel® PRO/Wireless 5000 LAN Starter Kit*	WLSK5000
Intel® PRO/Wireless 5000 LAN CardBus Adapter	WCB5000
Intel® PRO/Wireless 5000 LAN PCI Adapter (Starter Kit includes one WSAP5000 Access Point and two WCB5000 CardBus Adapters)	WPC15000

For the latest product information, visit us on the World Wide Web at www.intel.com/network/wireless

The Intel® PRO/Wireless 5000 LAN Family of Products

The first wireless networking technology fast enough to take care of business

Intel® is leading the computing industry's transition to 802.11a Wireless LAN with a comprehensive line of Intel® PRO/Wireless 5000 LAN products.

Intel PRO/Wireless 5000 LAN products offer speeds up to 54 Mbps, network capacity for more users and the 5 GHz, clean spectrum for optimal wireless performance. Users get the highest throughput available in any wireless network technology—enough to handle data intensive applications, large files and true multimedia streaming video.



Features	Benefits
IEEE 802.11a compliant technology	<ul style="list-style-type: none"> Broad compatibility with other 802.11a products Ability to operate in both infrastructure and ad-hoc modes
Data rates up to 54 Mbps	<ul style="list-style-type: none"> Wireless access up to five times faster than 802.11b Operates on all defined data-rates in the 802.11a standard (54, 48, 36, 24, 18, 12, 9 and 6 Mbps)
128, 64, and 0-bit WEP (Wired Equivalent Privacy) encryption with VPN compatibility	<ul style="list-style-type: none"> Strong security protects data transmissions from unauthorized access VPN compatibility allows the highest level of security available
Full driver support for leading operating systems	<ul style="list-style-type: none"> Easy compatibility with widely used operating systems including Windows® 98SE, Me, 2000, and Windows® XP
Roaming	<ul style="list-style-type: none"> While moving through environments with multiple access points, the client stays connected
Software configurable antenna	<ul style="list-style-type: none"> Customized cell coverage Better control of access point ranges and transmissions
Access points with options for dual 802.11a and 802.11b capabilities	<ul style="list-style-type: none"> A single access point can support both 2.4 and 5 GHz users simultaneously Allows support of an existing 802.11b infrastructure while deploying an 802.11a network
Auto-sensing and switching	<ul style="list-style-type: none"> Wired-to-wireless switching lets users move directly from a wired to a wireless connection without rebooting computer or restarting applications
Eight non-overlapping channels for greater network capacity	<ul style="list-style-type: none"> Network capacity for more users, more data and high bandwidth applications Up to thirteen times the network capacity of 802.11b Wireless LAN technology

Intel PROSet

PROSet software is already used to manage millions of wired Ethernet connections, and now it lets you manage your wireless Ethernet connections. It lets you deliver driver consistency among desktops, notebooks and servers from leading system suppliers, as well as configuration and diagnostics for Intel-based NICs.

PROSet provides:

- Wired-to-wireless switching
- Improved network performance
- Easy, unlimited profile management
- Advanced power management features
- A full set of hardware diagnostics
- User configurable settings



PROSet eases setup, maintenance and wireless integration into existing infrastructures.



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Intel® Network Connections— The Intelligent Way to Connect

INTEL ADVANTAGES

- **Wired-to-wireless switching software**
- **Software configurable antenna**
- **Personalized wireless LAN places**

A complete family of 802.11a products

The advantages of an Intel® PRO/Wireless 5000 LAN are clear: by offering a family of high-performance, 5 GHz products including access points, CardBus adapters and PCI adapters, Intel simplifies wireless integration for businesses, making Intel PRO/Wireless 5000 LAN the choice for 802.11a solutions.

Easy installation

To help with installation, Intel provides Site Survey tools and an Installation Wizard that walks administrators through setup. Intel PRO/Wireless 5000 LAN Access Points can be placed on tables or mounted on walls or ceilings, and they feature software configurable antennas for customizing the cell coverage.

Greater network capacity for more users

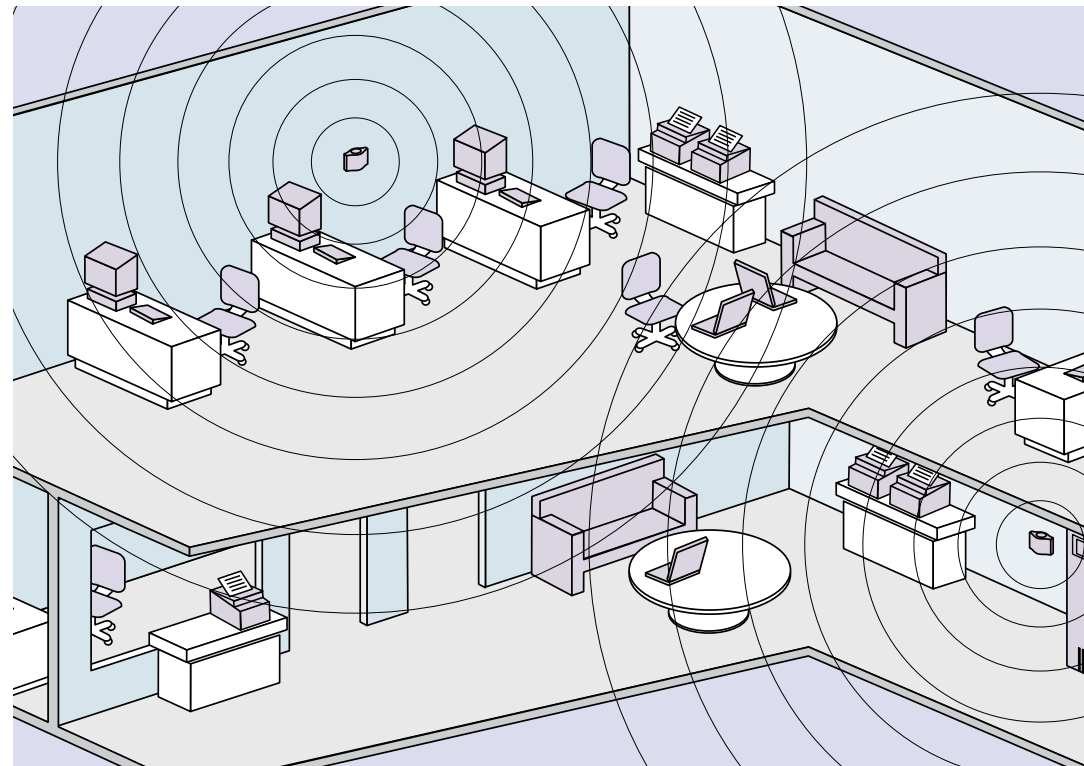
Access Points feature eight non-overlapping transmission channels, and provide access for up to 64 users per access point. This means an organization can provide greater bandwidth at a lower cost than the previous generation of Wireless LANs.

Multi-function, industry-standard technology

For even broader compatibility, access points can be dual-function, which means they are capable of working in both 802.11a and 802.11b modes. Dual compatibility lets access points support both 5 GHz and 2.4 GHz clients simultaneously. Access points support IEEE 802.3af Power over Ethernet (PoE) so the access point can draw power from a PoE-enabled hub through a powered RJ-45 cable to the access point—no need to supply additional power. NICs feature auto-sensing and switching, and Intel PRO/Wireless 5000 LAN products offer support for leading operating systems including Microsoft® Windows® XP, taking advantage of Windows XP's features for wireless computing.

High-performance security

To help keep transmissions safe, security features include 128-bit WEP encryption. Additional VPN compatibility allows network administrators to implement the highest level of security available.



Wireless LAN— How it works

In a Wireless Local Area Network (Wireless LAN), installed access points transmit data between the wired network and wireless users. Data travels via radio waves, not through wires.

In-office networks can transmit and receive signals up to 300 feet, and even through walls and ceilings. End users can move freely from one place to another and maintain a high-speed link to the Internet, e-mail and your network.

Access Points & Client Adapters

Intel® PRO/Wireless 5000 LAN Access Point

The 802.11a Intel PRO/Wireless 5000 LAN Access Point operates on the 5 GHz spectrum and features a software configurable antenna. It supports IEEE 802.3af PoE and a lock to secure the access point. It is designed for placement on a table, or it can be mounted on walls or on the ceiling. Each access point uses eight non-overlapping transmission channels that support up to 64 active users per access point. For broader compatibility, you can upgrade the Intel PRO/Wireless 5000 LAN Access Point using an optional hardware kit for simultaneous transmissions in both 802.11a and 802.11b modes.



Intel® PRO/Wireless 5000 LAN Dual Access Point

The Intel PRO/Wireless 5000 LAN Dual Access Point operates over both 5 GHz and 2.4 GHz frequencies, supporting both 802.11a and 802.11b clients simultaneously. It features a software configurable antenna and supports IEEE 802.3af PoE and a lock to secure the access point. It is designed for placement on a table, or it can be wall or ceiling-mounted.

Intel® PRO/Wireless 5000 LAN AP Upgrade Kit 802.11b

The Intel PRO/Wireless 5000 LAN AP Upgrade Kit 802.11b turns the Intel PRO/Wireless 5000 LAN Access Point into a dual-function access point with 802.11a and 802.11b capabilities to support both 5 GHz and 2.4 GHz users.

Intel® PRO/Wireless 5000 LAN Starter Kit

The Intel PRO/Wireless 5000 LAN Starter Kit includes one 802.11a Intel PRO/Wireless 5000 LAN Access Point and two Intel PRO/Wireless 5000 LAN CardBus Adapters—everything you need to create a high performance Wireless LAN.



Intel® Pro/Wireless 5000 LAN CardBus Adapter

The Intel PRO/Wireless 5000 LAN CardBus Adapter is a Type II, 32-bit adapter that works with a PCMCIA-equipped notebook computer and 802.11a access points. It features wired-to-wireless switching, as well as ad-hoc networking with other 802.11a clients.



Intel® PRO/Wireless 5000 LAN PCI Adapter

The Intel PRO/Wireless 5000 LAN PCI Adapter lets a desktop PC work with an 802.11a access point. It also supports ad-hoc networking with other 802.11a clients.

