Allied Telesis™

AT-WA1104G
SOHO Wireless Router

AT-WA1104G
IEEE802.11g Wireless LAN router with 4 10/100TX switch ports

Share Internet Access With and Without Wires
With Allied Telesis' AT-WA1104G, you can connect to xDSL, cable modem, fix IP and etc, get your Internet access instantly and share the connection among multiple PCs either wired or wirelessly. It's ideal for home networking and small offices. With the AT-WA1104G, you not only can share your Internet connections, but also your printer and files among the networked PCs.

Secure and Interoperable
With the AT-WA1104G your network is protected by 128-bit, 'shared key' WEP encryption and WPA. The AT-WA1104G helps keep intruders out of your networked computers. The roadmap for future IEEE 802.11i support through future firmware upgrades provides additional comfort of mind that your network will remain highly secured in the future. The AT-WA1104G is also Wi-Fi certified, which means you can use it with any wireless client devices from other Wi-Fi vendors.

WDS-Based Wireless Bridging and Repeating Support
With the WDS (Wireless Distribution system) support in the AT-WA1104G, you can cover network dead spots by adding the products in that area to gain signal strength. Also, WDS allows the AT-WA1104G to wirelessly communicate with each other or other WDS-based wireless routers in order to extend the range of a wireless network.

Easy-to-use Configuration Software
Allied Telesis' user friendly configuration wizard takes you through configuring your network, step by step. With the AT-WA1104G at the center of your network, you don't have to be an IT professional to set up your own network place with shared printers, files, and Internet connections.

Key Features

- IEEE 802.11b/g compliant

- Wi-Fi certificated

- Three operation modes: gateway, bridge and wireless ISP

- WEP, WPA encryption - 64bit/128bit (WEP), WPA TKIP

- WPA2 support

- Wireless auto-channel selection

- Wireless users access control

- Support TCP/UDP/ICMP/ARP protocol stack

- Wireless Distribution System (WDS)

- NAT/NAPT. VPN pass-through with multiple sessions (IPSEC,L2TP, PPTP)

- Firewall, DoS,IP/Port/MAC filtering

- WAN access mode

- PPPoE PPTP/L2TP support

- Fixed IP address support

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Product Specifications

Internet Access

Shared Internet Access
All users on the LAN or WLAN can access the Internet through the AT-WA1104G, using only a single external IP Address. The local (invalid) IP addresses are hidden from external sources. This process is called NAT (Network Address Translation).

DSL and Cable Modem Support
The AT-WA1104G has a 10/100TX Ethernet port for connecting a DSL or cable modem. All popular DSL and cable modems are supported. SingTel RAS and Big Pond (Australia) login support is also included.

PPPoE, and PPTP
The Internet (WAN port) connection supports PPPoE (PPP over Ethernet), PPTP (Peer-to-Peer Tunneling Protocol), as well as 'direct connection' type services. Unnumbered IP with PPPoE is also supported.

Fixed or Dynamic IP Address
On the Internet (WAN port) connection, the AT-WA1104G supports both dynamic IP address (IP address is allocated on connection) and fixed IP address.

Advanced Internet Functions

Communication Applications
Support for Internet communication applications, such as interactive games, telephony, and conferencing applications, which are often difficult to use when behind a firewall, is included.

Special Internet Applications
Applications which use non-standard connections or port numbers are normally blocked by the Firewall. The ability to define and allow such applications is provided, to enable such applications to be used normally.

Virtual Servers
This feature allows Internet users to access Internet servers on your LAN. The required setup is quick and easy.

DDNS Support
DDNS (Dynamic DNS) allows Internet users to connect to virtual servers on your LAN using a domain name, even if your IP address is not fixed.

DMZ
For each WAN (Internet) IP address allocated to you, only one (1) PC on your local LAN can be configured to allow unrestricted two-way communication with servers or individual users on the Internet. This provides the ability to run programs which are incompatible with firewalls.

URL Filter
Use the URL filter to block access to undesirable Web sites by LAN users.

Internet Access Log
See which Internet connections have been made.

Access Control
Using the access control feature, you can assign LAN users to different groups, and determine which Internet services are available to each group.

VPN Pass through Support
PCs with VPN (Virtual Private Networking) software using PPTP, L2TP and IPSec are transparently supported - no configuration is required.

Wireless Access

Standards Compliant
The AT-WA1104G complies with the IEEE802.11g (DSSS) specifications for Wireless LANs.

Supports both IEEE 802.11b and IEEE 802.11g Wireless Stations
The IEEE 802.11g standard provides for backward compatibility with the IEEE 802.11b standard, so both IEEE 802.11b and IEEE 802.11g wireless stations can be used simultaneously.

Speeds to 54Mbps
All speeds up to the IEEE 802.11g maximum of 54Mbps are supported.

WEP support
Support for WEP (Wired Equivalent Privacy) is included. Key sizes of 64-bit and 128-bit are supported.

Support Wireless Distribution System (WDS)
Ability to use the AP as a bridge and/or a repeater in order to extend the coverage of your network.

Wireless MAC Access Control
The Wireless Access Control feature can check the MAC address (hardware address) of wireless stations to ensure that only trusted wireless stations can access your LAN.

LAN Access

4 Port Switching Hub
The AT-WA1104G incorporates a four port 10/100TX switching hub, making it easy to create or extend your LAN.

DHCP Server Support
Dynamic Host Configuration Protocol provides a dynamic IP address to PCs and other devices upon request. The AT-WA1104G can act as a DHCP server for devices on your local LAN and WLAN.

Configuration and Management

Easy Setup
Use your Web browser from anywhere on the LAN or WLAN for configuration.

Configuration File Upload/Download
Save (download) the configuration data from the AT-WA1104G to your PC, and restore (upload) a previously-saved configuration file to the AT-WA1104G.

Remote Management
The AT-WA1104G can be managed from any PC on your LAN. If the Internet connection exists, it can also be configured via the Internet.

Network Diagnostics
You can use the AT-WA1104G to perform a ping or DNS lookup.

UPnP Support
UPnP (Universal Plug and Play) allows automatic discovery and configuration of the AT-WA1104G. UPnP is supported by Windows ME, XP, or later.

Security

Password - Protected Configuration
Optional password protection is provided to prevent unauthorized users from modifying the configuration data and settings.

Wireless LAN Security
WEP (Wired Equivalent Privacy) is supported, as well as Wireless access control to prevent unknown wireless stations from accessing your LAN.

NAT Protection
An intrinsic side effect of NAT (Network Address Translation) technology is that by allowing all LAN users to share a single IP address, the location and even the existence of each PC is hidden. From the external viewpoint, there is no network, only a single device - the AT-WA1104G.

Protection against DoS attacks
DoS (Denial of Service) attacks can flood your Internet connection with invalid packets and connection requests, using so much bandwidth and so many resources that Internet access becomes unavailable. The AT-WA1104G incorporates protection against DoS attacks.

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Radio Characteristics
Data Rate with Automatic Fallback
1 6, 9, 12, 24, 36, 48, 54Mbps for IEEE 802.11g
1, 2, 5.5, and 11Mbps for IEEE 802.11b

Modulation Schemes
IEEE 802.11b	CCK (11Mbps)
	DQPSK (2Mbps)
	DBPSK (1Mbps)
	DSSS
IEEE 802.11g	OFDM

Transmit Power
Minimum 15dBm typically @ IEEE 802.11b
Minimum 12dBm typically @ IEEE 802.11g

Range Coverage
Indoors	15m @ 54Mbps
	120m @ 6Mbps or lower
Outdoors	40m @ 54Mbps
	300m @ 6Mbps or lower

Standards Capability
IEEE 802.11b
IEEE 802.11g

Media Access Protocol
CSMA/CA with ACK

Antenna
Detached

Network Management
Web-Based Interface
Managed via HTTP protocol, be able to displaying the configuration and status of the system.

Configure Wizard
Built-in wizard utility in the browser-based management interface for users to identify and input information to connect to Internet by xDSL, cable modem, fix IP, DHCP client, J-COM type service, PPPoE or PPTP login procedure.

Remote Management
Use any browser-based applications to login to the router and manage it remotely.

Firmware Upgrade
New firmware binary file can be downloaded into router through HTTP or through TFTP upload. Special window-based utility preferred.

LED Status Indicators
Power	ON	
	OFF	
Internet	ON	Link on
	OFF	Link off
	Flashing	Activities
WAN	ON	WAN connection established
	OFF	No WAN connection
100M	ON	LAN speed of 100Mbps
	OFF	LAN speed of 10Mbps
WLAN	ON	Wireless connection on
	OFF	No wireless connection
	Flashing	Activities

Interface
Wireless Interface
IEEE 802.11g WLAN, JEIDA 4.2, roaming support
Frequency: 2.4 to 2.4835 GHz

Network Interface
Four 10/100TX (RJ-45) LAN connection
One 10/100TX (RJ-45) for WAN

Driver Support
Windows 2000
Windows ME
Windows XP
Linux

Technical Specifications
Power Characteristics
Input	12vDC External
Output	13 dBm (typical)

Environmental Specifications
Operating temperature	0°C to 40°C
Storage temperature	-10°C to 70°C
Operating humidity	10% to 95% non-condensing

Physical Characteristics
Dimensions	15.55cm x 10.55cm x 2.6cm
(W x D x H)	(6.12' x 4.15' x 1.02')
Weight	0.74 lb

Electrical/Mechanical Approvals
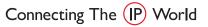FCC/EN55022 Class B
VCCI
CE
Wi-Fi

Ordering Information

AT-WA1104G-xx
IEEE 802.11g Wireless Access Point with 4 10/100TX switch ports

Where xx =	
	10 for US
	30 for UK
	40 for Australian
	50 for European

Connecting The (IP) World

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