



AT-iBG910

ADSL Business Gateway with Analog and Digital VoIP Ports

AT-iBG910A/B

1 x annex A/B ADSL2+, 8 x 10/100TX,
4 x FXS, 2 x ISDN BRI

Broadband Business Gateway for Small-Medium Enterprise

The AT-iBG910 is the family of Business Gateways for small-medium enterprise applications. The AT-iBG910 combines a broadband ADSL2/2+ connection to the WAN with Layer 3 capabilities and enhanced VoIP features set for both analog and digital terminal connections.

Voice over IP

The AT-iBG910 leverages Voice over IP signaling protocols such as H.323, SIP and MGCP on both FXS and ISDN BRI interfaces. VoIP interoperability has been established with major softswitch vendors. Furthermore, the AT-iBG910 allows the connection of modems and faxes to its voice ports. Quality of Service is provided through mechanisms such as the Type of Service (ToS), priority tagging of voice traffic using IEEE 802.1p, as well as silence suppression and local generation of comfort noise; the result is an excellent voice quality.

Within a SIP environment, the AT-iBG910 also supports IP PBX functionality that guarantees local switching of calls among FXS and ISDN BRI interfaces as well as VoIP phones connected to the LAN even when central VoIP service is not available.

Real Time Applications Optimization

The AT-iBG910 supports industry leading Quality of Service (QoS) through ISO Layer 2 and 3 prioritization techniques including priority tagging with IEEE 802.1p, Type of Service and DSCP fields.

The AT-iBG910 is optimized for IP video streaming. The iBG 'snoops' IGMP packets in-transit allowing simultaneous delivery of different multicast transmissions such as different movies or TV channels. This enables multiple high-quality, high bit-rate video streams without impacting data traffic or IP telephony while delivering the fast channel change that users expect from video services.

MPEG video service management and diagnosis is possible through dedicated commands and video quality can be monitored using Allied Telesis' unique MPEG stream monitoring tool.

Data Delivery and Security

The extensive support for per port rate-limiting in the AT-iBG910 enables service providers to deliver tiered data services for the wide spectrum of end-customer profiles, providing maximum flexibility in service differentiation.

Security is assured by an integral Stateful Inspection Firewall with NAT and an Intrusion Detection System (IDS) to protect end-users' networks from Denial of Service (DoS), port scanning and Web spoofing.

Management and Deployment

The AT-iBG910 is designed to be easy to deploy and manage. With the Zero Touch Configurator (ZTC) software platform, this family of products can be remotely provisioned and managed. ZTC is a distributed configuration system providing secure authentication and registration plus intelligent, automatic configuration of remote iBG units. Its XML-based structure enables seamless integration with service providers' existing OSS platforms.

In addition, the industry standard TR-069 is fully integrated and provides efficient, scalable and secure provisioning and support for a wide variety of Triple Play services.

Key Features

- ADSL2+ or WAN interface
- H.323, SIP and MGCP VoIP protocol support
- Integrated SIP proxy server
- Major softswitch manufacturer compatibility
- Support for analog (FXS), digital (ISDN BRI) terminal connection and VoIP phones
- Triple Play ready
- Stateful Inspection Firewall / NAT
- DMZ support
- Intrusion Detection System: DoS, port scanning and Web spoofing protection
- Zero Touch Configurator and TR-069 support
- Service specific management and monitoring – ensures Quality of Service to customers
- RoHS compliant



AT-iBG910 | ADSL Business Gateway with Analog and Digital VoIP Ports

Specifications

Hardware

8 x 10/100TX (RJ-45)
4 x FXS (RJ-11)
2 x ISDN BRI (RJ45)
1 x annex A ADSL2/2+ (RJ-11) (AT-iBG910A)
1 x annex B ADSL2/2+ (RJ-45) (AT-iBG910B)

Ethernet

Layer 2 wirespeed packet switching
Tag-based IEEE 802.1Q VLANs (max 16)
IEEE 802.1Q tag insertion and stripping
Port mirroring of ingress/egress traffic
DHCP client, server and relay
2K MAC address FDB

WAN Protocols

PPPoE, PPPoA, IPoA (PAP/CHAP authentication)
RFC 1483 routed and bridged
Global IP address pool
DNS client, relay
Static and dynamic IP address assignment

Routing and Multicast

PPP and IP routing
RIPv1 and v2
IGMPv2
IGMP snooping
IGMP proxy

Security

NAT
Stateful Inspection Firewall
Dynamic port opening
Intrusion detection and blocking system
Access Control List
IPSec/VPN passthrough

QoS

IEEE 802.1p prioritization
Programmable ingress/egress rate limiting
Four QoS queues per port
DSCP/ToS
Strict priority/WF2Q+ scheduling
Stream priority/limiting classification

VoIP Protocols

H.323 3.0
SIP 2.0
MGCP/NCS 1.0

VoIP Features

G.711 a-law and μ -law 64kbps
G.729 8kbps
G.726 16/24/32/40kbps
G.168 LEC 8-32 msec
T.38 fax relay
RTP voice packet encapsulation
Automatic fax/modem detection
Voice Activity Detection (VAD)
Comfort Noise Generation (CNG)
Error mitigation/bad frame interpolation
Adaptive jitter buffer
5 REN
Caller ID
Call transfer
Call waiting
Call hold
Message waiting
DTMF Relay

IP PBX

SIP proxy registrar
SIP proxy locator

Management

AlliedView NMS
Zero Touch Configurator
TR-069
Telnet
SSH
Remote software upgrade
Web GUI
CLI
SNMP v1, v2 and v3

Status LEDs

Power	
System	
xDSL	Training/Link
LAN	Link/Activity
VoIP	Use/Ready/Ringing

Memory

RAM	32MB
Flash	8MB

Power Characteristics

Internal power supply	
Input	100-240V AC, 50-60Hz
Max power consumption	25W

Environmental Specifications

Operating temperature	0°C to 40°C
Max operating humidity	80% RH (non-condensing)
Storage temperature	-20°C to 70°C
Max storage humidity	95% RH (non-condensing)

Physical Characteristics

Dimension (H x D x W)	5cm x 20cm x 37cm (2" x 7.87" x 14.5")
-----------------------	---

Approvals and Certifications

CE	
Safety	EN 60950
CSA 950/US	
UL 1950	
Emission	FCC Part 15 Class B Part 68 EN55022 Class B
Immunity	EN55024

Ordering Information

AT-iBG910A-xx (990-001919-xx)

1 x annex A ADSL2+, 8 x 10/100TX, 4 x FXS,
2 x ISDN BRI

AT-iBG910B-xx (990-001920-xx)

1 x annex B ADSL2+, 8 x 10/100TX, 4 x FXS,
2 x ISDN BRI

AT-CONSOLECABLE (855-000144)

Console cable (Cisco pinout)

Where xx =	00 for no power cord
	10 for U.S. power cord
	30 for U.K. power cord
	40 for Australian power cord
	50 for European power cord

USA Headquarters | 19800 North Creek Parkway | Suite 100 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895

European Headquarters | Via Motta 24 | 6830 Chiasso | Switzerland | T: +41 91 69769.00 | F: +41 91 69769.11

Asia-Pacific Headquarters | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830

www.alliedtelesis.com

© 2008 AlliedTelesis Inc. All rights reserved. Information in this document is subject to change without notice. All company names, logos, and product designs that are trademarks or registered trademarks are the property of their respective owners. 617-000202 Rev. D