Allied Telesis

AT-iBG915FX
Fast Ethernet Fiber Uplink intelligent Business Gateway

AT-iBG915FX
1 x WAN, 100TX or 100BX or
100LX through SFP plug
5 x 10/100TX, 8 x FXS

Broadband Business Gateway for Small-medium Enterprise
The AT-iBG915FX expands Allied Telesis intelligent Business Gateway portfolio with the addition of a Fast Ethernet fiber-based WAN interface. Based on the successful Residential and intelligent Multiservice Gateways, the iBG900 series leverages powerful Layer 2 and Layer 3 functionality and proven VoIP support.

With the addition of the AT-iBG915FX, the gateway family now has a platform that is ideal for small/medium business applications where more than four FXS ports are required.

The AT-iBG915FX through the use of a SFP module can provide either dual fiber single-mode or single-strand single-mode fiber access. The AT-iBG915FX enables FTTH deployments to utilize existing fiber infrastructure between the CO or remote cabinet and new developments, reducing the costs of deploying high revenue generating FTTH equipment.

Voice-over-IP
The iBG900 leverages Voice-over-IP signaling protocols such as H.323, SIP and MGCP on FXS interfaces. VoIP interoperability has been established with major softswitch vendors. Furthermore, the iBG900 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 iBG900 also guarantees local switching of calls among FXS as well as VoIP phones connected to the LAN even when central VoIP service is not available.

Real Time Applications Optimization
The iBG900 family 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.

SOHO and SMB Applications
The AT-iBG915FX gateway is optimized for small and medium-sized business applications supporting up to 8 FXS or 4 FXS ports. The AT-iBG915FX comes in an ultra slim 1U rack-mountable form factor with all the connectors on the front panel for easy integration into any environment.

Data Delivery and Security
The extensive support for per port rate-limiting in the iBG900 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 iBG900 series is designed to be easy to deploy and manage. With the AlliedView™- NMS software platform, this family of products can be remotely provisioned and managed. AlliedView software solutions are interoperable, flexible and help manage all of the Allied Telesis products on your network. Easy to use, with a clear graphical interface, these network management tools provide the effective management and monitoring resources that are needed.

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

• Fiber WAN interface through use of SFP module (not included)

• Up to 100Mbps bandwidth delivery

• Eight FXS ports for small/medium business applications

• H.323, SIP and MGCP VoIP protocol support

• Major softswitch manufacturer compatibility

• Support for analog (FXS) and VoIP phones

• Triple Play ready

• Stateful Inspection Firewall / NAT

• DMZ support

• Intrusion Detection System: DoS, port scanning and Web spoofing protection

• Managed by the AlliedView NMS management system

• Service specific management and monitoring – ensures Quality of Service to customers

• RoHS compliant

2002/95/EC
RoHS COMPLIANT

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Specifications

WAN Port
100Mbps WAN interface
10/100TX (RJ-45) on copper OR
100BX through SFP module
100LX through SFP module

User ports
5 x 10/100TX (RJ-45)
8 x FXS (RJ-11)

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
4 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

Management
AlliedView-NMS
TR-069*
Telnet
SSH
Remote software upgrade
Web GUI
CLI
SNMP v1, v2 and v3

* The TR-069 will be available in the next software release.

Status LEDs
Power	
System	
WAN	Link/Activity
LAN	Link/Activity
VoIP	Use/Ready/Ringing

Memory
RAM:	32MB
Flash:	8MB

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

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

Physical Characteristics
Dimensions:	5cm x 20cm x 37cm
(H x D x W)	(2" x 8" x 14.8")

Approvals and Certifications
CE	
Safety	EN60950
CSA 950/US	
UL 1950	
Emission	FCC Part 15 Class B Part 68
	EN55022 Class B
Immunity	EN55024

Ordering Information

AT-iBG915FX-xx (990-002316-xx)
1 x Fast Ethernet, 5 x 10/100TX, 8 x FXS

AT-CONSOLECABLE (855-000144)
Console cable (Cisco pinout)

AT-SPFXBD-LC-13 (990-002083-00)
100Mbps BiDirectional SFP
TX = 1310nm
RX = 1550nm

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

Connecting The IP World

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