



# AT-iBG915FX

# Fast Ethernet Fiber Uplink intelligent Business Gateway

#### AT-iBG915FX

I  $\times$  WAN, IOOTX or IOOBX or IOOLX through SFP plug  $5 \times$  IO/IOOTX,  $8 \times$  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. I p, 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 802.1 p, 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<sup>TM</sup>-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.

# **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



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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 RIPvI and v2 IGMPv2 IGMP snooping IGMP proxy

# **Security**

NAT

Stateful Inspection Firewall
Dynamic port opening
Intrusion detection and blocking system
Access Control List

# OoS

IPSec/VPN passthrough

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
Telnet
SSH
Remote software upgrade
Web GUI
CLI
SNMP v1, v2 and v3

# 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 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**

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) I 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

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