AT-iMG616W

FTTH Multiservice Gateway with Analog VoIP Ports and IEEE 802.11bg Wireless Interface

AT-iMG616W
1 x 100BX, 6 x 10/100TX, 2 x FXS, IEEE 802.11bg, , 1 x console port

A More Powerful FTTH Gateway

The AT-iMG616W gateways, new member of the AT-iMG616 family provides enhanced performances for routing and NAT traffic management as well as a wireless IEEE 802.11bg interface.

The Multiservice Gateway

The AT-iMG616 intelligent Multiservice Gateway is the ideal FTTH customer premise equipment for the delivery of communications and entertainment services, including carrier-class telephony, high-speed Internet access, IP television, and interactive, two-way video-based services. All of these services are provided over a passive optical distribution network via a single optical fiber to the home. The combined delivery of IP Triple Play services - voice, video and data - benefits both service providers and their customers. Service providers can quickly deliver advanced services such as fast Internet, VoIP, IPTV and Video on Demand in a scalable way with complete remote management. End users benefit by having a unique device interconnecting all peripherals, computers, wireless devices, analog and VoIP telephones to a single broadband uplink.

Voice over IP

The iMG616 series offers 2 FXS ports, leveraging SIP and MGCP Voice over IP (VoIP) protocols, with interoperability established with major softswitch vendors. The iMG600 family supports the connection of modems and faxes to voice interfaces for business applications in SoHo environments. VoIP QoS is assured through Type of Service bits (ToS), and IEEE 802.1p priority tagging. The addition of silence suppression and local generation of comfort noise results in excellent voice quality.

IP Television

The iMG600 family is optimized for IP video streaming. The iMG '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 iMG600 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. The extensive support for per port rate-limiting in the iMG600 series 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 iMG600 series is designed to be easy to deploy and manage. With the Allied*View*™-NMS software platform, the iMG600 series can be remotely provisioned and managed.

Optical WAN Interfaces

The AT-iMG616W offers single-strand (bi-directional) optical fiber links for FTTH application. The independent passive unit (AT-iMG001), where the optical cable is terminated, allows easy installation, maintenance and replacement thanks to a plug-and-play optical connection. It also provides a locking mechanism to secure the active unit.

Key Features

- Bi-directional fiber WAN interface
- Plug-and-play fiber outlet
- SIP and MGCP VoIP protocol support
- Major softswitch manufacturer compatibility
- Class 5 services
- Support for analog and VoIP phones
- Triple Play ready
- Stateful Inspection Firewall / NAT
- DMZ support
- Access Control List
- Intrusion Detection System: DoS, port scanning and Web spoofing protection
- Allied*View*-NMS support
- RoHS compliant

2002/95/EC ROHS COMPLIANT

AT-iMG616W | FTTH Multiservice Gateway

Specifications

Hardware
6 x 10/100TX (RJ45)
2 x VoIP FXS ports (RJ-11)
1 x console port
1 x IEEE 802.11bg
1 x 100BX single-strand S.M. (simplex-SC)

Optical Interfaces
IEEE 802.3ah 100BX-U single-strand single-mode (simplex SC): TX 1310 nm ; RX 1550 nm

Max sensitivity	-32 dBm
Max input power	-3 dBm
Max output power	-5 dBm

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
4K MAC address FDB

WAN Protocols
PPPoE
Global IP address pool
DNS proxy
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
PAP/CHAP authentication

QoS
IEEE 802.1p prioritization
Programmable ingress/egress rate limiting
4 QoS queues per port
DSCP/ToS

VoIP Protocols
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 forwarding (unconditional, on busy, on no answer)
Call waiting
Call hold
Message waiting
3-way call (local RTP MUX)
DTMF relay
RFC 2833

Management
AlliedView NMS
Telnet
Remote software upgrade
Web GUI
CLI
SNMPv1, v2 and v3

Status LEDs

Power	
WLAN	Link/Activity
WAN	Link/Activity
VoIP	Use/Activity
LAN	Link/Activity
Memory	
RAM:	32 MB
Flash:	8 MB

Power Characteristics

External power supply	
Input:	100-240V AC, 50-60 Hz
Output:	12vDC, 1.5A
Typ. power consumption:	13W

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 (H x D x W)	4.5cm x 15cm x 24cm
Weight	400 gr

Approvals and Certifications
CE and UL marking

Safety	IEC/EN60950-1 UL 60950-1 EN60825-1 CAN/CSA-C22.2 No 60950-1-03
Emission	FCC Part 15 Class B EMC Directive 2004/108/EC EN 55022 Class B EN 300 386
Immunity	EN 55024
Wireless compliance	EN 300 128 V1.7.1 EN 50371 EN 301 489-01/-17 FCC Part 15 Subpart C

Ordering Information

AT-iMG616W-xx (990-002555-xx)
1 x 100BX, 6 x 10/100TX, 2 x FXS,
1 x console port
(includes AT-iMG001 fiber outlet with locking mechanism)

Where xx =
10 for U.S. power supply
30 for U.K. power supply
40 for Australian power supply
50 for European power supply

Options
AT-iMG001 (990-001044-00)
Fiber outlet with locking mechanism (10 pieces)

AT-iMG008G-xx (990-002030-xx)
Battery backup

AT-RG009 (990-00530-00)
Battery backup cable

AT-RGCONSOLECABLE (990-011748-00)
Console cable

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