



INNBOX G31

GPON FTTH IAD ONT

By introducing latest fiber GPON access technology, Innbox brings carrier class high-end networking solution for advanced triple play services. Complying with the latest ITU-T G.984 GPON standard, the newly introduced Innbox GPON Home Gateway G31 is designed for service providers to meet the demand for desired high-speed connections. The ONT is designed for indoor applications, presenting lower cost alternative to outdoor solutions, significantly lowering CAPEX with advanced FTTH deployments.

The FTTH GPON Home Gateway Innbox G31 is designed to deliver full range of services: internet data, Voice over IP (VoIP) and IP video including bandwidth consuming HDTV. For packet based terminal devices the Innbox G31 GPON Home Gateway provides two Ethernet ports, one of which is Gigabit, removing bandwidth limitations for heavy and dense networking applications. Additionally one port for telephony services is provided using Voice over IP technology compatible with SIP environments. The G31 Home Gateway is ideal for FTTH deployments where high-speed data must be transported reliably. The ONT also operates well in conjunction with separate devices such as routers and WiFi access points to provide even more flexibility with deployment. The Innbox G31 ONT with its small and stylish form-factor is also manageable remotely and supports full range FCAPS functions including supervision, monitoring and maintenance as well boasting with embedded NAT, firewall and IP sharing technology delivering secure broadband Internet access to all connected clients.

Key Features and Benefits >

ITU G.984 GPON compliant

Powerful Home Gateway engine for offering 3Play services

Multiple interface options: Gigabit Ethernet, FXS for POTS

Real 3Play proven Home Gateway to provide multiple HDTV IP streams

Fully featured Router and Firewall, secure wireless transmitting and authentication

Small and stylish form-factor

Fiber Termination Unit as an add-on

TECHNICAL SPECIFICATIONS

Note: some features are hardware dependant;
some feature may not be included in dedicated software release.

WAN Specifications

- Full ITU-T G.984 compliance
- SC/APC connector
- Tx (1.25Gbps upstream data rate)
 - 1310nm (Launch Power: 0,5 to +5 dBm)
- Rx (2.5Gbps downstream data rate)
 - 1490nm (Input power overload: -8 dBm, Sensitivity: -28dBm)

GPON

- Fully ITU-T G.984 compliant framing
- Multiple T-CONTs per device
- Multiple GEM Ports per device
- Activation with automatic discovered SN and password in conformance with ITU-T
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction)
- 802.1p mapper service profile on U/S
- Support for Multicast GEM Port

Bandwidth/Distance

- Compliant with ITU-T G.984.5, Class B+
 - APD receiver and DFB transmitter
 - 0.5~+5dBm launch power, -28 dBm sensitivity and -8dBm overload

Local Interface

- 1x Gigabit Ethernet 10/100/1000Base-TX (RJ-45 jack) and 1x Ethernet 10/100Base-TX (RJ-45 jack)
 - Automatic MDI/MDIX crossover, Auto-negotiation and speed-auto-sensing, Half/Full duplex support
 - Meets IEEE 802.3 specifications
- 1x FXS (RJ-11) for POTS connection

Bridging

- Ethernet bridging/switching per IEEE 802.1D/802.1Q
- Traffic management (priority queuing and traffic shaping)
- QoS with support for IEEE 802.1p + DSCP
- Per port IEEE 802.1Q VLAN ID processing
- VLAN tagging/untagging
- IGMP v2/v3 Snooping
- Automatic MAC learning and aging
- Unlimited # of MAC addresses for OMCI-configured flows
- Support for up to 4096 MAC addresses for RG traffic flows
- Broadcast storm control

IP Routing

- IP routing: RIP1, RIP2, and static routing
- RFC2684 (RFC1483) Routed
- PPPoE client
- PPPoE pass-through
- DHCP client, server & relay (RFC2131)
- (D)DNS client & relay
- IP Multicast IGMP Proxy
- RTP Proxy PPPoE
- NAT/NAPT with port forwarding

Security & QoS

- NAT (RFC3022) basic Firewall support with extensive ALG support
- Firewall with well known applications setup
- URL filtering
- Time Scheduler (parental control)
- DMZ/IP pass-through
- VPN pass-through
- ToS/DSCP to CoS mapping
- Bandwidth reservation
- Voice traffic prioritization

Configuration & Network Management

- OMCI
- Simple port configuration
- DHCP server for IP management
- Telnet for local or remote management
- WEB for firmware upgrade and configuration
- WEB-based configuration and management (multi-level GUI)
- TR-069 data-frame model support, including TR-098, TR-104 and TR-106
- IxRave QoE monitoring client of Ixia® (optional)
- IPERF (optional)

Voice support

- Voice compressions G.711 (64kbps, A-law, u-law PCM), G.729ab (8kbps) - optional
- Line Echo Cancellation G.168 with configurable tail
- Voice Activity Detection (VAD), Comfort Noise Generation (CNG)
- Adaptive jitter buffer and Packet Loss Compensation (PLC)
- DTMF (tone) dialing, modem/fax tone detection and pass-through
- Supports SIPv2 (RFC 3261), RTP (RFC3550)
- Supports RTP Profile for Audio and Video Conferences with minimal control (RFC 3551)
- Supports RTP payload for DTMF events (RFC2833)
- Caller ID (Type-1 and 2)
- T.38 Fax

Power

- External 115-230 VAC, 50 - 60 Hz, 12VDC
- Power consumption, 5-7W

Physical dimensions

- 102mm x 47mm x 56mm, weight 0.25 kg (without AC Power supply)

Environment

- Operating Temperature: 5°C ~ 45°C, Humidity: 5% ~ 85% (non condensing), compliant with ETSI 300 019-1 -3, Class 3.1
- Storage Temperature: -25°C ~ +55°C, Humidity: 10% ~ 95% (non condensing), compliant with ETSI 300 019-1 -1, Class 1.2

Optional accessories

- Fiber Termination Unit (FTU)

Certification

- CE, CB, RoHS compliant

Ordering info

Model	Local Interfaces
Innbox G31	1xGE, 1xFE, 1xFXS

