

By introducing the latest fiber GPON fiber-access technology, Innbox brings a carrier-class, high-end networking solution for advanced triple-play services. Complying with the latest ITU-T G.984 GPON standard, the Innbox G74 GPON home gateway is designed for service providers meeting the demand for high-speed connections, and offers data rates up to 2.5 Gbps in downstream and up to 1.25 Gbps in upstream.

The Innbox G74 is designed for indoor applications, as a cost-optimal alternative to outdoor solutions, and significantly lowers the CAPEX of advanced FTTH deployments.

Innbox G74 GPON home gateway supports the delivery of all triple-play services: internet data, voice over IP, and IP video, including bandwidth-consuming HDTV. It provides four full-gigabit Ethernet ports, as well as wireless access point of the latest 802.11n standard that relieves the users of those troublesome wirings.

A Wi-Fi access point (802.11b/g/n at 2.4 GHz) with internal 2x2 antennas facilitates the

delivery of services to all wireless devices with uncompromised user experience.

Adding to local connectivity, Innbox G74 offers two ports for telephony services, using a SIP-compatible VoIP technology.

With embedded NAT, firewall and IP sharing, Innbox G74 delivers a secure internet access that can be shared by all connected clients. A USB 2.0 host port is available to enable value-added features, such as a file server, an FTP server, a printer server, a hub or an external 3G/LTE modem. In addition, the Innbox G74 embeds a Quality of Experience (QoE) monitoring client which enables online evaluation of the data path all the way to the gateway, reflecting in a significantly lower operator OPEX.

KEY FEATURES AND BENEFITS

- ITU G.984 GPON compliant
- · Powerful full-gigabit engine for enhanced services
- USB 2.0, Gigabit Ethernet, FXS for POTS, 3G/LTE
- 802.11n Wi-Fi access point
- · Triple-play home gateway for multiple HDTV IP streams
- Fully-featured router and firewall, with secure wireless transmission and authentication
- Integrated fiber-termination unit (FTU)
- · Line-rate routing performance
- · Embedded QoE-monitoring solution
- K.21 overvoltage protection on all wired interfaces



WAN specifications

- · Full ITU-T G.984 compliance
- SC/APC connector
- Tx (1.25 Gbps upstream data rate)
 - 1310 nm; launch power from 0.5 dBm to +5 dBm
- Rx (2.5 Gbps downstream data rate)
 - 1490 nm; input power overload -8 dBm

GPON

- · Fully ITU-T G.984 compliant framing
- Multiple T-CONTs per device
- Multiple GEM ports per device
- Activation with auto-discovery of SN and password in conformance with ITU-T
- AES-128 decryption with key generation and switching
- 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
 - From 0.5 dBm to +5 dBm launch power
 - · -27 dBm sensitivity; -8 dBm overload

Local interfaces

- 4 ports Gigabit Ethernet 10/100/1000Base-TX (RJ-45)
 - Automatic MDI/MDIX crossover, Auto-negotiation and speed auto-sensing, half/full duplex support
 - Meets IEEE 802.3 specifications
 - · Support for 802.1Q and 802.1p VLAN
- 2 port FXS (RJ-11) for POTS connection
- 1 port USB 2.0 with host connector

Wireless

- 802.11b/g/n 2×2
- WLAN access point with internal antennas
- · Wi-Fi protected setup (WPS)
- · WEP with 64- or 128-bit key lengths
- WPA/WPA2 in PSK mode or using EAP with RADIUS
- Access control list based on MAC address

Bridging

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

IP routing

- IP routing: RIP1, RIP2, static routing
- RFC2684 (RFC1483) routed
- PPPoE client, PPPoE pass-through
- DHCP client, server and relay (RFC2131)
- (D)DNS client and relay
- IP multicast IGMP proxy
- RTP proxy PPPoE
- · NAT/NAPT with port forwarding

USB 2.0 applications

- · File server (using USB 2.0 disk, flash or HDD), DLNA
- · Printer server
- Hub connectivity
- 3G or LTE modem (optional)

Security and QoS

- NAT (RFC3022) basic firewall 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 and network management

- OMCI
- UPnP/DLNA
- · Simple port configuration
- Telnet for local or remote management
- Web for firmware upgrade and configuration
- · Web-based management (multi-level GUI)
- TR-069 data-frame model, TR-098, TR-104, TR-106
- IxRave QoE monitoring client of Ixia® (optional), TR-143
- IPERF and TCP dump (optional)
- · Buttons: WLAN, WPS, reset

Voice support

- G.711 (64 kbps, A-law, μ-law), G.729ab (8 kbps) (optional)
- · Line echo cancellation G.168 with configurable tail
- · Voice-activity detection, Comfort noise generation
- Adaptive jitter buffer and packet-loss compensation
- DTMF dialing, modem/fax tone detection, pass-through
- SIPv2 (RFC 3261), RTP (RFC3550)
- RTP profile for audio and video conferences (RFC 3551)
- RTP payload for DTMF events (RFC2833)
- Caller ID (Type-1 and 2)
- T.38 Fax

Power

- External 115-230 VAC, 50-60 Hz, 12 VDC 1.5 A
- Power consumption less than 15W

Physical dimensions

- 141 mm \times 243 mm \times 25 mm
- 0.45 kg (without power adapter)

Environment

- Operating: 0°C to +48°C, RH 5-90% non-condensing, compliant with ETSI 300 019-1-3, Class 3.1
- Storage: -20°C to +70°C; RH 10-95% non-condensing, compliant with ETSI 300 019-1-1, Class 1.2

Certification

• CE, CB, RoHS compliant

Ordering code Descrip
LBB-2848 Home G

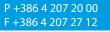
Home Gateway Innbox G74, 4x GE, 2x FXS, 2x USB, UPS, WiFi 802.11N 2x2 w/ CUL power adapter

Some features are hardware-dependent.

Some features might not be included in dedicated software releases. Date of issue: 25. 8. 2020 / Version 3.2







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