Iskratel Innbox G92

High-end GPON FTTH Home Gateway and EasyMesh™ Wi-Fi Controller

Iskratel Innbox G92 home gateway delivers fibre connectivity over a GPON uplink, unlocking the true potential of gigabit connectivity by providing multi-gigabit wireless in even the biggest homes. This state-of-the-art home gateway guarantees uncompromised user experience with advanced services and multiple ultra-high-definition TV streams, delivered over wired or wireless home network.

Iskratel Innbox G92 supports a smooth delivery of services such as internet and video – including multiple ultra-high-definition TV streams – over four gigabit Ethernet ports or over dual-band Wi-Fi 6 access point that operates concurrently at 2.4 GHz and 5 GHz.

Furthermore, Iskratel Innbox G92 acts as an EasyMesh™-compliant controller for a gigabit mesh Wi-Fi network that ends the headaches caused by dead zones. Complemented with EasyMesh™ agent access points, the wireless mesh ensures seamless roaming and smooth handover without service interruptions, and never compromises supreme user experience.

Adding to connectivity, Iskratel Innbox G92 offers SIP-compatible VoIP services over FXS ports. One USB host port is available for additional features such as a printer server, a file server, or an LTE modem for backup uplink connectivity.

The devices' embedded firewall, NAT and IP sharing deliver secure internet access to all connected users.

KEY FEATURES AND BENEFITS

- Fully ITU G.984 compliant with extended functions
- Full-gigabit home-gateway with line-rate routing for advanced services and multiple UHD TV IP streams
- Multiple LAN interfaces: Gigabit Ethernet, Wi-Fi 6, Wi-Fi 5, concurrent 2.4 GHz/5 GHz, USB 2.0, FXS POTS
- EasyMesh™-compliant mesh Wi-Fi controller
- 1,800 Mbps cumulative Wi-Fi data rate
- Smooth multi-streaming and gaming with MU-MIMO
- Internal or external antennas
- Integrated fibre-termination unit

Full gigabit throughput

Top-of-the-line wireless performance

Unparalleled reach and coverage

WAN specifications

- Full compliance with ITU-T G.984.5 GPON, Class B+
  - SC/APC connector
  - DFB transmitter, 1310 nm, 1.25 Gbps upstream, launch power 0.5..5 dBm
  - APD receiver, 1490 nm, 2.5 Gbps downstream, input power overload –8 dBm; sensitivity –28 dBm
- Fully ITU-T G.984 compliant framing
- Multiple T-CONTs and GEM ports, multicast GEM port
- 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

LAN interfaces

- Four ports Gigabit Ethernet 10/100/1000Base-TX (RJ-45)
  - Automatic MDI/MDIX crossover, Auto-negotiation and speed auto-sensing, half/full duplex support
  - Compliance with IEEE 802.3
- Two ports FXS (RJ-11) for POTS connection
- One port USB 2.0 with host connector

Wireless LAN

- Wi-Fi 6 (802.11ax) 2×2 MU-MIMO at 2.4 GHz and 2×2 MU-MIMO at 5 GHz
- Simultaneous dual-band 2.4 GHz and 5 GHz
- 1,800 Mbps cumulative Wi-Fi data rate (AX1800)
- Coverage up to 230 sq. m
- Internal or external antennas
- Wi-Fi protected setup (WPS)
- WPA/WPA2/WPA3 in PSK mode or using EAP w/ RADIUS
- Access control list based on MAC address

Mesh Wi-Fi

- Compliance with EasyMesh™
- Embedded EasyMesh™ controller, operating with agent access points via wireless or wired backhaul
- Plug-and-play operation with EasyMesh™-compliant agent access points
- 802.11k/v/r compliant roaming and band steering

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 applications

- File server (using USB disk, flash or HDD), DLNA
- Printer server
- 3G/LTE modem (optional)

Innbox Premium Application Suite (optional)

- Mobile App: One-touch access to basic CPE configuration and most-used features
- Innbox VPN: Direct and secure private connection to home network from anywhere in the world
- Innbox Share: Private cloud storage for sharing photos, videos, documents, personal files
- MeetInn: Online conferencing, meetings, presentations
- Innbox Advanced Parental Control: Safe use of the internet for children
- IPTV over Wi-Fi: Quality video stream over Wi-Fi
- LXC containerisation: Development and deployment of independent applications without a SW upgrade
- Integrated Speedtest by Ookla™

Security and QoS

- NAT (RFC3022) basic firewall with extensive ALG support
- Firewall with well-known-app setup; URL filtering
- Time scheduler (basic parental control)
- DMZ/IP pass-through
- ToS/DSCP-to-CoS mapping
- Bandwidth reservation, voice traffic prioritisation

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
- TR-143 testing and troubleshooting tools
- 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 dialling, modem/fax tone detect and pass-trough
- 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 adapter 115-230 V AC, 50-60 Hz, 12 V DC, 2 A
- Power consumption (including adapter) 9.6 W in On-state, 6.5 W in Ready-state
- CoC compliant, Tier 2022, 70% consumption On-state (72% as per Tier-2024 levels)

Physical dimensions

- 226 mm × 140 mm × 48 mm

Environment

- Operating: temperature +0..+40 °C, RH 20..90% non-condensing, compliant with ETSI 300 019-1-3, Class 3.1
- Storage: temperature –25..+55 °C; RH 10..95% non-condensing, compliant with ETSI 300 019-1-1, Class 1.2

Certification

- CE, UKCA, CB, RoHS compliant

Some features are hardware-dependent.
Some features might not be included in dedicated software releases.

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ISO 9001 Q-009
ISO 14001 E-498
ISO/IEC 27001 I-046

SILVER 2022 ecovadis Sustainability Rating

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