



# INNBOX E80

## Supreme ETTH Home Gateway

**ISKRATEL**  
S&T Group

**LINDSAY**  
BROADBAND



Full gigabit  
throughput



Top-of-the-line  
wireless performance



Broad management  
capabilities



By introducing the latest technology, Iskratel brings a carrier-class, high-end networking solution for advanced triple-play services, including multiple high-definition channels over the wireless network. Comprising of a powerful home-networking engine, the **Innbox E80** ETTH home gateway is designed for service providers meeting the demand for high-speed connections up to 1 Gbps in downstream and upstream.

The Innbox E80 ETTH home gateway offers a gigabit Ethernet WAN port for **ETTH deployments**, and supports up to full gigabit network connectivity in downstream and upstream.

The Innbox E80 supports the delivery of triple-play services: internet data, voice over IP, and IP video, including bandwidth-consuming HDTV.

A wireless **802.11ac/n** access point supports a **dual-band Wi-Fi** technology (with concurrent 2.4 GHz and 5 GHz), guaranteeing that the delivery of services to all wireless devices and supreme user experience are never compromised.

Adding to local connectivity, Innbox E80 offers two ports for telephony services, using an SIP-compatible VoIP technology.

With embedded NAT, firewall and IP sharing, Innbox E80 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.

### KEY FEATURES AND BENEFITS

- Gigabit Ethernet (RJ-45 10/100/1000Base-TX) uplink
- Powerful full-gigabit engine for enhanced services
- USB 2.0, Gigabit Ethernet, FXS for POTS, 3G/LTE
- 802.11n/ac concurrent, dual-band 2.4 GHz/5 GHz
- Triple-play home gateway for multiple HDTV IP streams
- Fully-featured router and firewall, with secure wireless transmission and authentication
- Line-rate routing performance
- K.21 overvoltage protection on all wired interfaces



## ETTH WAN

- 1 port 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

## 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 ports FXS (RJ-11) for POTS connection
- 1 port USB 2.0 with host connector

## Wireless

- 802.11b/g/n 2x2 MIMO and 802.11ac 2x2 MIMO
- Concurrent WLAN access point with internal antennas
- Wi-Fi protected setup (WPS)
- WEP with 64- or 128-bit key length
- 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, service-based tagging
- IGMP transparent snooping, IGMP forking (optional)
- Automatic MAC learning and aging

## 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

## 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

## USB 2.0 applications

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

## Configuration and network management

- UPnP/DLNA
- Simple port configuration
- DHCP server for IP management
- 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
- IPERF (optional)
- Buttons: WLAN, WPS, reset

## Voice support

- G.711 (64 kbps, A-law,  $\mu$ -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)

## Power

- External 115-230 VAC, 50-60 Hz, 12 VDC 2 A
- Power consumption less than 20W
- K.21 overvoltage protection on all wired interfaces

## Physical dimensions

- 190 mm x 143 mm x 27 mm
- 0.28 kg (without power adapter)

## Environment

- Operating: +5°C to +40°C, RH 5-85% non-condensing, compliant with ETSI 300 019-1-3, Class 3.1
- Storage: -25°C to +55°C; RH 10-95% non-condensing, compliant with ETSI 300 019-1-1, Class 1.2

## Certification

- CE, CB, RoHS compliant

Ordering code	Description
LBB-2941	Innbox E80 Ethernet Gateway with 1x GE WAN, 4x GE LAN, 1x FXS, 1x USB, 802.11ac 2x2 Wi-Fi

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Some features might not be included in dedicated software releases.  
Date of issue: 24. 5. 2018 / Version 2.0



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**ISKRATEL**  
S&T Group

Iskratel, d. o. o., Kranj  
Ljubljanska cesta 24a  
SI 4000 Kranj, Slovenia

P +386 4 207 20 00  
F +386 4 207 27 12

info@iskratel.si  
www.innbox.net  
www.iskratel.com

**LINDSAY**  
BROADBAND

2-2035 Fisher Dr, Peterborough, ON K9J 6X6 Canada  
+1.705.742.1350 • 1.800.465.7046  
info@lindsaybb.com • lindsaybb.com

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