

ISKRATEL

A brand of Kontron



Iskratel Innbox V91

VDSL2/ADSL2+/ETTH Home Gateway
and Mesh Wi-Fi Manager

Key features

VDSL2/ADSL2+ WAN and Gigabit Ethernet WAN

1,800 Mbps cumulative Wi-Fi data rate

Four GE LAN, one USB, two FXS POTS

Dual-band Wi-Fi 6

Mesh Wi-Fi management



Iskratel Innbox family of CPE is a product pillar of Iskratel, a specialised telco brand of Kontron. Iskratel unites eight decades of expertise with Kontron's reach and strength.

Iskratel Innbox V91 is a **VDSL2 and Ethernet home gateway** that unites VDSL2/ADSL2+, copper Ethernet and mobile connectivity in one device. With the box, service providers can meet the demand for high-data-rate connectivity of up to **300 Mbps with DSL** or up to **1 Gbps with ETTH or dual-box FTTH**. The device easily delivers advanced services and multiple **ultra-high-definition TV** streams over a wired or **mesh Wi-Fi** home network in even the biggest homes.

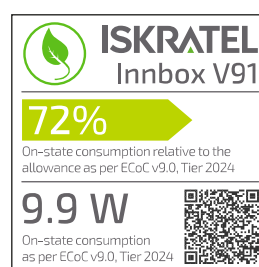
Innbox V91 arms operators with a box that can be used in **VDSL2/ADSL2+** or **FE/GE ETTH** network-access setups.

Innbox V91 supports a smooth delivery of services such as internet and UHD video over **four Gigabit Ethernet ports**, or over a **Wi-Fi 6** access point that operates at **2.4 GHz and 5 GHz** concurrently.

It embeds a **mesh Wi-Fi controller** for a gigabit mesh Wi-Fi network that brings

a whole-home wireless coverage with **seamless roaming and handover** with no service interruptions, never compromising supreme user experience.

Innbox V91 also offers SIP-compatible VoIP services over two FXS ports. A USB port is available for backup connectivity via an **LTE modem**, or for **additional features** such as file, VPN or printer server.



Full gigabit
throughput



Top-of-the-line
wireless performance



Unparalleled reach
and coverage

kontron

WAN specifications

- One DSL port (RJ-11)
 - VDSL2/ADSL2+, full compliance with ITU G.993.2
 - Profiles 8a, 8b, 12a, 12b, 17a, 30a, 35b
 - VDSL2 Annex Q VPlus/35b, G.vector, ATM, PTM, G.INP
- One Gigabit Ethernet 10/100/1000Base-TX (RJ-45)
- 3G/LTE modem via USB port (optional)

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 3.0 with host connector

Wireless LAN

- Wi-Fi 6 (802.11ax) 2x2 MU-MIMO at 2.4 GHz and 2x2 MU-MIMO at 5 GHz
- Simultaneous dual-band 2.4 GHz and 5 GHz
- 1,800 Mbps cumulative Wi-Fi data rate (AX1800)
- External antennas
- Wi-Fi protected setup (WPS)
- WPA/WPA2/WPA3 in PSK mode or EAP with RADIUS
- Access control list based on MAC address

Mesh Wi-Fi

- Embedded mesh Wi-Fi controller
- Management of mesh Wi-Fi agent access points
- 802.11k/v 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 802.1Q/p 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
- 4096 MAC addresses for RG traffic flows
- Broadcast storm control

IP routing

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

USB applications

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

Innbox Premium Application Suite (optional)

- Innbox Mobile App: One-touch access to basic CPE config
- Innbox VPN: Direct and secure private connection to home network from anywhere in the world
- Innbox Share: Private cloud storage and sharing
- Innbox MeetInn: Online conferencing and presentations
- Innbox Advanced Parental Control: Safe use of the internet for children
- IPTV over Wi-Fi: Quality video stream over Wi-Fi
- LXC containerisation: App deployment without SW upgrade
- Integrated speed test

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; VPN pass-through
- ToS/DSCP-to-CoS mapping
- Bandwidth reservation, voice traffic prioritisation

Configuration and network management

- 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)

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 detection and pass-through
- SIPv2, RTP, RTP profile for conferences, RTP DTMF payload
- Caller ID (Type-1 and 2), T.38 Fax

Environment

- Operating: +0..+40 °C, RH 5..95% non-condensing, compliant with ETSI 300 019-1-3, Class 3.1
- Storage: -25..+55 °C; RH 10..95% non-condensing, compliant with ETSI 300 019-1-1, Class 1.2

Physical dimensions

- 227 mm x 143 mm x 52 mm

Power

- External adapter 115-230 V AC, 50-60 Hz, 12 V DC, 2 A
- Power consumption (including adapter) 9.9 W in On-state, 8.7 W in Ready-state
- CoC compliant, Tier 2024, 72% consumption On-state
- EcoDesign compliant, HiNA equipment, Off mode <0.2 W

Certification

- CE, UKCA, CB, RoHS compliant



Some features may be hardware-dependent or might not be included in all software releases. The operation may depend on network setup and/or service model. No rights can be derived from this datasheet.