



# INNBOX X22

## XGS-PON FTTH Home Gateway

**ISKRATEL**  
S&T Group

**LINDSAY**  
BROADBAND



Multi-gigabit  
throughput



Line-rate forwarding  
performance



Robustness  
and efficiency

Complying with the latest ITU-T G.9807 XGS-PON fiber-access standard, **Innobox X22** XGS-PON home gateway delivers a high-end networking solution for advanced triple-play services, and an unparalleled user experience. Its XGS-PON network interface supports symmetrical data rates of **10 Gbps in downstream and upstream**, while its **multi-gigabit LAN interfaces** provide full flexibility with support for 10 Gbps, 5 Gbps, and 2.5 Gbps.

The **Innobox X22** is an ideal choice for two-box FTTH deployments, in either single- or multi-operator setups.

**Innobox X22 XGS-PON home gateway** supports the delivery of all triple-play services: internet data, voice over IP, and streaming IP video, including bandwidth-consuming ultra-high-definition (UHD) TV.

In addition to one gigabit Ethernet port, Innobox X22 provides one ten-gigabit port which supports **multi-gigabit speeds (10/5/2.5 Gbps)** over twisted pair.

### KEY FEATURES AND BENEFITS

- ITU G.9807 XGS-PON compliant
- Powerful multi-gigabit home-gateway engine
- Multi-gigabit (10/5/2.5 Gbps) Ethernet LAN interface
- Triple-play home gateway for multiple HDTV IP streams
- Line-rate forwarding performance
- K.21 overvoltage protection on all wired interfaces



#### WAN specifications

- XGS-PON
- SC/APC connector
- SFF optical transceiver module
  - Tx (10 Gbps upstream data rate)
  - Rx (10 Gbps downstream data rate)
- Compliant with ITU-T G.9807, Class N1/N2/E1
  - APD receiver and DFB transmitter
  - +4 to +9 dBm launch power
  - -28 dBm sensitivity with -9 dBm overload

#### xPON

- Fully ITU-T G.9807 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 upstream
- Support for multicast GEM port

#### Local interfaces

- 1 port multi-gigabit Ethernet (RJ-45), supporting 10GBase T (10 Gbps), 5GBase T (5 Gbps), and 2.5GBase T (2.5 Gbps)
- 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

#### Bridging

- Ethernet bridging/switching per IEEE 802.1D/802.1Q
- Traffic management (priority queuing, traffic shaping)
- QoS with support for IEEE 802.1p
- Per-port IEEE 802.1Q VLAN ID processing
- VLAN tagging/untagging
- IGMP v2/v3 snooping
- Automatic MAC learning and aging

#### IPTV

- IGMP multicast
- IGMP snooping

#### Configuration and network management

- OMCI
- Web for firmware upgrade

#### Power

- External 115-230 VAC, 50-60 Hz, 12 VDC
- Power consumption 3-5W

#### Physical dimensions

- 146 mm x 114 mm x 27 mm
- 0.25 kg (without power adapter)

#### Environment

- Operating: +5°C to +45°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
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LBB-3003	Innbox X22 XGS-PON ONU with 1x 10GE and 1x GE
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Some features are hardware-dependent.

Some features might not be included in dedicated software releases.

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