

# ThunderAX – Premium-SE

## Fiber optic Multi-WAN Gateway

**ThunderAX - SE** Residential and Small Business Gateway ensures high-performance data routing and value-added services for home or office local networks.

Ultra-high-speed fiber interface and xDSL legacy support allow to use the same device for various access networks, employing the latest broadband technologies. In particular, support of copper and high-speed Fiber providing a significant increase in the bandwidth available to the end-user without big investments in different CPEs.



### High-speed wireless connections

**ThunderAX - SE** is a high-performance 11ax dual-band concurrent wireless access point that guarantees seamless, reliable and secure connectivity to all types of client devices, optimal utilization of the Wi-Fi spectrum on both 5 and 2.4 GHz bands, and the highest quality of video streaming over Wi-Fi.

**ThunderAX - SE** positioned as the central node of a Wi-Fi MESH system, guarantees the perfect coverage of the entire location, delivering fast, reliable and full-strength Wi-Fi signal everywhere on the premises.

### epiCentro® Stack rich in benefits

**ThunderAX - SE** is equipped with the **epiCentro®** software stack, a full-featured and scalable embedded middleware with state-of-the-art IPv4/IPv6 routing, QoS, high-security VoIP protocols and easy-to-use, extensive local and remote management capabilities.

Thanks to its open and modular architecture, the stack can be assembled in profiles tailored to the specific device and deployment requirements.

Regular updates and an efficient in-field upgrading scheme provide continuous improvements and feature extensions during the entire device lifecycle.

### ADB Broadband Gateways

**ThunderAX – SE** is a part of ADB's Residential and Small Business Gateway product range, which completely addresses market needs for broadband access, from entry level to future-proof high-end devices.

ADB gateways combine baseline and advanced functions of modems, routers, and wireless access points in a single box, providing user devices in home or small office networks with a seamless and secure broadband connection to the Internet, other office branches or the corporate network infrastructure. ADB's gateways are perfectly equipped to deliver latest generation of Internet connection and a diverse range of office networking applications.

# FEATURES AT A GLANCE

## Interfaces

SFP+ socket, supporting up to 10 Gbps symmetric connection on Fiber Optics (XGS-PON)

1x 2.5 Gigabit ETH LAN/WAN port

3x Gigabit Ethernet LAN ports

4x4 11ax (Wi-Fi 6) radio at 2.4 GHz

4x4 11ax (Wi-Fi 6) radio at 5 GHz

1x USB 3.0 + 1x USB 2.0 Host Type A ports, for mass storage and printer server, 3G/LTE dongles

2x FXS ports, for analog telephones, POS and Fax

## Interfaces Stuffing Options

- xDSL up to 35b profile
- Integrated ZigBee radio @ 2,4GHz for Smart-Home applications
- One of the below, mutually exclusive options:
  - SFP+ cage up to 10Gbps symmetric
  - GPON 2.5/1.25 Gbit, optical interface

## Functionality

Gigabit Ethernet router with NAT, DHCP, DNS, DynDNS, UPnP IGD, DLNA

xDSL and SFP cage for Fiber Optic WAN connections

300 Mbit VDSL with full vectoring (option)

Wi-Fi mesh

IPv4 / IPv6 dual stack

Stateful Packet Inspection Firewall with port forwarding

Extensive CLI

HW or SW-based packet flow acceleration

Orderable Models	Mounted Options
VM 5723	xDSL, GPON, 2.5GbE, ZigBee
VD 5722	xDSL, SFP+ cage, 2.5GbE
VG 5722	GPON, 2.5GbE



# ThunderAX - SE

## TECHNICAL SPECIFICATIONS:

### Interfaces / Ports

- SFP+ socket for P2P, GPON, or XGS-PON (10 Gbps) Fiber Optics connectivity
- GPON 2.5/1.25 Gbps Class B+, SC/APC, G.984.x OMCI compliant
- ADSL/ADSL2+ [ITU-T G.992.3 Annex A] + VDSL2 [ITU-T G.993.2 Annex Q] -RJ-11 (option)
- 3x Gigabit Ethernet [IEEE 802.3 10/100/1000 Base-T] – RJ-45
- 1x 2.5 Gbps Ethernet – RJ-45 (option)
- 1 x USB 3.0 + 1 x USB 2.0 - Type A (printer, storage, 3G/4G modem)
- 2 x FXS - RJ-11 (analog phones and fax)

### Wireless LAN

- Dual concurrent radio Access point (AP)
  - 4x4 802.11ax (5 GHz) – 2SS @160MHz
  - 4x4 802.11ax (2.4 GHz) – 40MHz
- WPA3 encryption, Wi-Fi Protected Setup (WPS)
- Best channel automatic selection

- Band steering, Airtime fairness
- Virtual AP for WLAN Guest Network access
- Wi-Fi Mesh Root Node
- Optional ZigBee radio

### Router Functions

- Multiple WAN access router with NAT, DHCP, DNS, DynDNS, UPnP, DLNA
- WAN – LAN interface full speed throughput (up to 8 Mbit/s ADSL, 24 Mbit/s ADSL2+, 300 Mbit/s VDSL2\_35b, 10 Gbit/s Fiber Optics)
- IPv4 / IPv6 dual-stack on both WAN and LAN sides
- Stateful Packet Inspection Firewall with port forwarding for secure surfing
- Flow classification and multi-layer scheduling policies for QoS
- IPsec VPN for secure remote access
- Web -based Graphic User Interface and Command Line Interface over telnet / ssh for local and remote management
- Broadband Forum TR-069 remote management

### Telephony Functions

- SIP-based Internet telephony (RFC 3261) with IMS extensions
- Multiple SIP server configurations (Call Manager, User Agent, Registrar, Proxy, Back to back User Agent)
- Full supplementary services set (call transfer, call blocking, call diversion, internal calls, three-party conferences, Do Not Disturb)

### Regulatory Compliance and Certifications

- CE mark
- Wi-Fi Alliance certification
- RoHS, REACH, WEEE, ErP

### Physical Specifications

- Device size and weight: 260 x 211 x 86[mm] – 617 g
- Box size and weight: 280 x 233 x 93 [mm] – 1200 g

### Standard Gift Box

- Power adapter
- Ethernet CAT5.e cable (yellow) - RJ-45 plug
- Voice Cable - RJ-11 plug (option)
- Safety leaflet