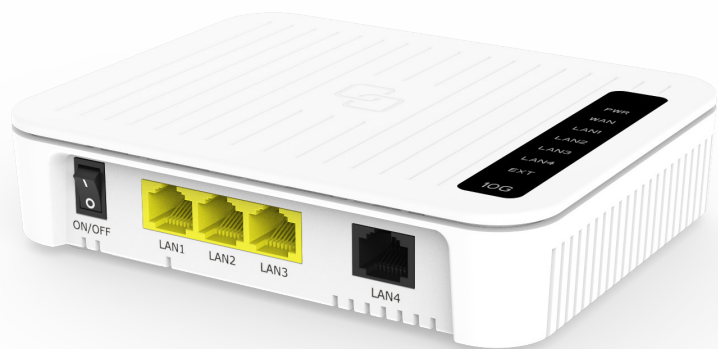# Genexis XGX-B

XGX-B Series

Managed 10G FTTH

The XGX-B is a high performance 10G capable Ethernet Layer 2/Layer3 device. The LAN side consists of one 10G Ethernet port and three 1G LAN ports. A 1G/10G SFP+ WAN is used for usage of Point-to-Point and XGS-PON (HGU) SFPs. In addition, the XGX-B also has a 2,5GE RJ-45 WAN port, which makes it very flexible in mixed copper and fiber networks.

The internal components are of the latest generation, supporting line rate performance up to layer4 thanks to advanced quad-core application processor and 10G network processor. Optional CATV module can be used and controlled via software.

Key features

· Three LAN interfaces support up to 1000 Mbps symmetric rates with automatic speed sensing and crossover correction.

· LAN4 Ethernet interface support 10G Mbps symmetric rates with automatic speed sensing and crossover correction. Port speed configurable 100/1000/2500/5000/10G

· Support IGMP snooping

· Compatible with existing XG Fiber Trays

· 1x SFP+ WAN port

· 1 x 2,5GE RJ-45 WAN (If no SFP is used)

· 1x 10GE LAN port

· 3x 1GE LAN ports

· Supports port-based or IEEE 802.1Q tagged VLAN to provide virtual channels to separate various types of service

· VLAN classification and retagging (VLAN mapping)

· Sophisticated packet classifying and priority queuing mechanisms ensure Quality of Service (QoS)

· CloudSight management and provisioning

· Software can be upgraded remotely

· Optional CATV module (remotely managed)

· Powered by IOWRT OS

· Line rate L2 for all packet-sizes packets

· Line rate performance in Layer 3 /Router mode for all packets sizes

· Dying gasp

· Optical Blackout (for OTDR tests)

Product features and specifications

Genexis XGX-B Series

Environment

Dimension (H x W x D): 28x110x140mm

Weight	300 g
Operating temperature	0 - 40 °C
Storage temperature	-20 - +85 °C
Operating humidity	5% ~ 95%

(non-condensing)

Storage humidity	5% ~ 95%

(non-condensing)

Power

Input	12 VDC

Power consumption (EU-CoC-BBE)

XGX-B	5.61 W Idle mode
	6.40 W On mode

WAN interface

1x1GE/2.5GE/10GE SFP+ (no coding)

1000base-X/2500base-X/10000base-R auto-sensing

For Point-to-Point and XGS-PON (HGU)

1 x 2,5GE RJ-45 WAN (If no SFP is used) compliant with IEEE 802.3u & 802.3x

LAN interface

1x100M/1GE/2.5GE/5GE/10GE and 3x 10/100/1000 Base-T Ethernet ports each in RJ-45 connector, compliant with IEEE 802.3u/802.3x and support automatic MDI/MDIX and speed sensing

CATV option (in the Fibertray)

Wavelength	1550 nm

CATV-102

Frequency range	47MHz~870MHz

F-female connector for CATV RF output

AGC (automatic gain control)

Simplex SC / APC Connector

Video RF signal output with 75 Ohm impedance

Power ON / OFF control for GPIO.

Weak signal alarm function

LED indicators

Power (PWR) indicator

On (green) – Power is on

On (red) – Startup failure

Off – Power is off

Packet switching

Supports up to 9K bytes Jumbo frames

Non-blocking switching performance with up to 8K MAC address automatic learning and aging 802.1Q VLAN support for 4096 VLAN Ids VLAN classification and retagging (VLAN mapping)

Port based VLANs are supported

Egress tagging / untagging selectable per port or by 802.1Q VLAN ID

Port Trunking and Monitoring / Mirroring

Quality of Service (QoS)

Four traffic classes to support QoS determined by port, 802.1p tagged frames, IPv4's Type of Service (ToS) & Differentiated Services (DS), IPv6's

Traffic Class, 802.1Q VID, Destination MAC Address or Source MAC Address

Strict, Weighted, or mixed mode QoS selectable per port

Configuration and network management

DHCP client with options for getting management IP Management and configuration via Web / HTTP

Software upgrade using HTTP, TR069, TR181

IUP (Inteno Universal Provisioning)

Note: more features are avaialble and not listed in this document.

*note: Copper SFP+ not supported

Genexis XGX-B Series product models

Model	LAN		CATV
	Ports	Speed (Mbps)	Option in the FiberTray
XGX-B	1x	100M/1GE/2.5GE/5GE/10GE	1550 nm
	3x	10M/100M/1GE	
XG6846 FiberTray-V4	FiberTray and wall mount for XGX including cable kit		