

Genexis XGX

XGX Series Managed 10G FTTH



The XGX is a high performance 10G capable Ethernet Layer 2/Layer3 device. Consists of one 10G Ethernet HSI port and three 1G LAN ports. A 1G/2.5G/10G SFP+ WAN is used for usage of Point-to-Point and XGS-PON SFPs. 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/duplex configurable 100/1000/2500/10G FD/HD
- Support IGMP snooping
- $\cdot\,$ Compatible with existing XG Fiber Trays
- \cdot 1x SFP+ WAN port
- \cdot 1x 10GE LAN port
- $\cdot\,$ 3x 1GE LAN ports

- $\cdot\,$ 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
- $\cdot\,$ Software can be upgraded remotely
- · Optional CATV module (remotely managed)
- $\cdot\,$ Using GenXOS modular software to enable for 3rd party development.
- $\cdot\,$ Line rate L2 for all packet-sizes packets
- Line rate performance in Layer 3 /Router mode for all packets sizes

Product features and specifications Genexis XGX Series



Environment

Dimension (H x W x D): $28x110x140$ mm		
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
802.3az Energy	Efficient Ethernet (EEE)

WAN interface (SFP only)

1x1GE/2.5GE/10GE SFP+ Ethernet WAN, compliant with IEEE 802.3u & 802.3x or SFP 100/1000 Base-X auto sensing*

For Point-to-Point and XGS-PON

LAN interface

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

CATV option (in the Fibertray)

Wavelength1550 nmCATV-10247MHz~870MHzFrequency range47MHz~870MHzF-female connectorCATV RF outputAGC (automatic gain control)Simplex SC / APC ConnectorSimplex SC / APC ConnectorVideo RF signal output with 75 Ohm
impedancePower 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 10K 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 avaiable and not listed in this document.

*note: Copper SFP+ not supported

Genexis XGX Series product models

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