

Genexis XG6846

XG-Series

Managed FTTH Switch



The XG6846 is a manageable Gigabit Ethernet layer 2 switch with four Gigabit Ethernet LAN ports. The XG6846 is equipped with both an electrical 10/100/1000 Base-T WAN/LAN Ethernet port as well as a 100/1000 Base-X SFP autosensing WAN port. The integrated Gigabit Ethernet switch provides

non-blocking throughput with VLAN support as well as advanced QoS mechanisms. XG6846 is optionally delivered with a fiber tray where a CATV module can be installed. By offering the flexibility and performance, this device brings maximum benefit to operators, service providers and network owners.

Key features

- All Ethernet interfaces support up to 1000 Mbps symmetric rates with automatic speedsensing and crossover correction. Port speed/ duplex configurable 10/100/1000 FD/HD
- Flexible choice of WAN port: either copper or fiber (SFP)
- Integrated four port Gigabit Ethernet switch
- Extra "hidden" ethernet port LAN or WAN
- Supports IGMP snooping
- 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)
- Features IP based automated provisioning, configuration and management as well as TR-069
- Software can be upgraded through TFTP, HTTP or TR-069 CLI
- Optional CATV module (remotely managed)



Product features and specifications

Genesis XG6846

Environment

Dimension (H x W x D):	28x110x140mm
Operating temperature	0 - 45 °C
Storage temperature	-20 - +85 °C
Operating humidity (non-condensing)	5% ~ 95%
Storage humidity (non-condensing)	5% ~ 95%

Power

Output	12 VDC, 1A
Input	100-240 VAC 50/60Hz
802.3az Energy Efficient Ethernet (EEE)	

WAN interface

10/100/1000 Base-T Ethernet port in RJ-45 connector, comply with IEEE 802.3u & 802.3x or SFP 100/1000 Base-X auto sensing

LAN interface

Four 10/100/1000 Base-T Ethernet ports each in RJ-45 connector, comply with IEEE 802.3u /802.3x and support automatic MDI/MDIX and speed sensing

EXT1 10/100/1000 Base-T port RJ-45 connector, comply 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 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
- 802.1w Rapid Spanning Tree
- Port states & BPDU handling for Spanning

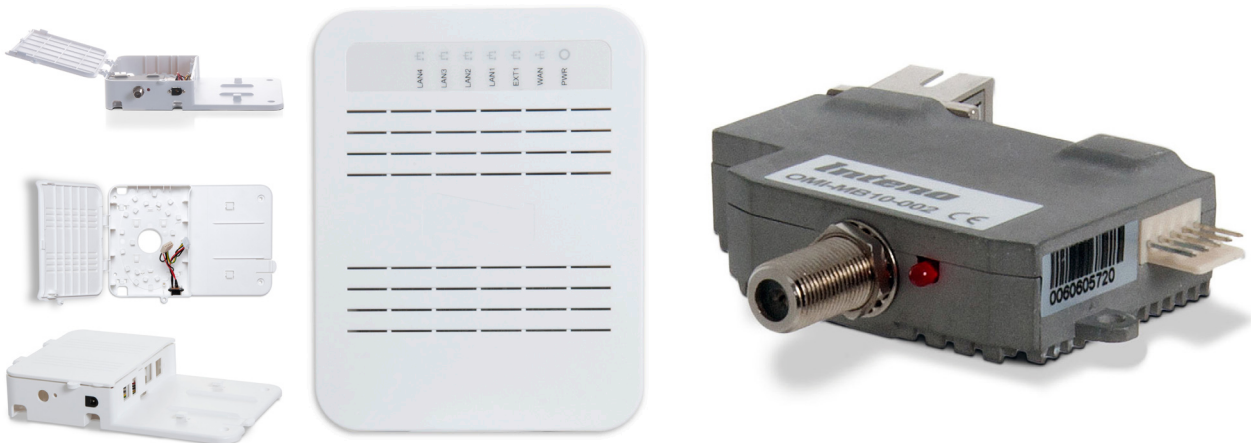
Tree
Enhanced 802.1s per VLAN Spanning Tree supporting up to 64 instances

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

Per port, programmable MAC address limiting MAC SA based 802.1X authentication RMON counters available per port (SNMP) Integrated Advanced Virtual Cable Tester® (VCT™) cable diagnostic feature
DHCP client with options for getting management IP Management and configuration via Web / HTTP
Software upgrade using HTTP, TFTP or TR-069
Supports TR-069 (with switch management supported by future software upgrade)
SNMP
CLI access via telnet/SSH
HTTP web server access



Genesis XG-Series product models

Model	LAN		CATV
	Ports	Speed (Mbps)	Option in the Fibertray
XG6846-W/O-USB	4x	1000/100/10	1550 nm
XG6846-FIBERTRAY	Fibertray and wall mount for XG6846 including cable kit		
XG6846-Tray-Extender	Fiber tray extender for XG6846		

Note: Not every listed feature may be included in the shipping product. We reserve the right to make changes of technical specifications, housing or design without prior notice.