XG6746 Managed Ethernet Switch

Gigabit Ethernet Triple Play Switch with Remote Management



The XG6746 is a manageable Gigabit Ethernet layer 2 switch with four Gigabit Ethernet LAN ports. The XG6746 is equipped with both an electrical 10/100/1000 Base-T Ethernet port as well as a 100/1000 Base-X SFP autosensing port.

The integrated Gigabit Ethernet switch provides non-blocking throughput with VLAN support as well as advanced QoS mechanisms. XG6746 is otionally 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.

Features

- All Ethernet interfaces support up to 1000 Mbps symmetric rates with automatic speed-sensing and crossover correction.
- Flexible choice of WAN port: either copper or fiber (SFP)
- Integrated four port Gigabit Ethernet switch
- Supports IGMP snooping
- Supports port-based or IEEE 802.1Q tagged VLAN to provide virtual channels to separate various types of service.

- Sophisticated packet classifying and priority queuing mechanisms ensure quality of service.
- Features IP based automated provisioning, configuration and management as well as TR-069 per Broadband forum.
- Software can be upgraded through TFTP or HTTP.





Specifications, hardware

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

LED Indicators

 WAN indicator
 On (yellow) – Connected to a 100Mbps network
 On (green) – Connected to a 1000Mbps network

Off – Not connected to the network Blinking - Activity

- LAN 1-4 indicators
 On (yellow) Connected to the
 100Mbps network

 On (green) Connected to the
 1000Mbps network

 Off LAN not connected
- MANAGEMENT (MGM) indicator
 On (green) Connection to
 management server is ok
 Off No connection to management
 server
 Blinking Activity, update in process
- Power (PWR) indicator
 On (green) Power is on
 On (red) Startup failure (please contact your operator)
 Off Power is off

Environment

- Operation Temperature: 0°C ~ +45°C
- Operation Humidity: 5% ~ 95% (non-condensing)
- Storage Temperature: -20 ~ +85°C
- Storage Humidity: 5% ~ 95% (non-condensing)

Power

- AC to DC adapter: input 100~240 VAC 50/60 Hz; output 12 VDC 1.5 Amp (TBD)
- Power consumption: Less than 18 watts (TBD)

Physical Dimensions

 $(200 \times 140 \times 25)$ Main Body

Certificates

• CE

Functionality

Packet Switching

- Supports up to 10K bytes Jumbo frames
- Non-blocking switching performance with up to 1K MAC address automatic learning and aging
- 802.1Q VLAN support for 64 VLAN Ids
- Port based VLANs are supported
- Egress tagging / untagging selectable per port or by 802.1Q VLAN ID
- Port Trunking and Monitoring / Mirroring
- Port states & BPDU handling for Spanning Tree
- Enhanced 802.1s per VLAN Spanning Tree supporting up to 64 instances

Quality of Service

- 2 Ingress Rate Limiting buckets per port
- Non-rate Limited frames based on SA or DA

- 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
- Frame priority overrides based on SA, DA or VID
- Queue priority overrides based on SA, DA, VID, ARP or snoop
- 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
- 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 or TFTP
- Support TR-069 (with switch management supported by future software upgrade)

Note: Not every listed feature will be included in the shipping product.

We reserve the right to make changes of technical specifications, housing or design without prior notice.









