# XG6746-R1 Managed Ethernet Switch

# Gigabit Ethernet Triple Play Switch with Remote Management



The XG6746-R1 is a manageable Gigabit Ethernet layer 2 switch with four Gigabit Ethernet LAN ports. The XG6746-R1 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-R1 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.

### Features

- All Ethernet interfaces support up to 1000 Mbps symmetric rates with automatic speed-sensing 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
- 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, HTTP or TR-069
- CLI
- Optional CATV module (remote managed)





### **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
   Blinking Activity
- 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
- LED can be turned off in the configuration

### **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 12V DC 1A
- Power consumption: Less than 7 watt

## Physical Dimensions

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

### Certificates

CE

### Specifications, functions

### **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 lds
- 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**

 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

**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.





# Visual Overview



