



# Unlock the Potential of your Gigabit devices

The NETGEAR 8-port Gigabit Unmanaged Switches, GS108X and GS108MX, help businesses cost-effectively connect their network with powerful gigabit speeds. The GS108MX features one 10G/Multi-Gig Ethernet port for non-blocking uplink while the GS108X features a 10G SFP+ port for non-blocking uplink over longer distances. Both switches come with eight 1G Ethernet ports housed in a fanless metal case that can be placed on a desk or mounted on a wall. These switches are energy efficient, built to last, and rigorously tested to provide the reliability businesses need.

# Highlights

#### Plug-and-Play

• Simple set up with no software to install or configuration needed and zero maintenance

#### 10 Gigabit Uplink

- For the GS108X, the SFP+ fiber uplink offers an expanded, long-distance connection for more than 100m. Requires fiber transceiver.
- With the GS108MX the 10G/Multi-Gig uplink reduces network bottlenecks.

#### **Flexible Mounting**

• Wall-mount or desktop

#### **Small Form Factor**

• Compact design to fit in any small cabinet or wiring panel

#### High Quality and Reliable Performance

• Durable metal case and long product life (shown by MTBF numbers)

#### LED to indicate activity on each port

• Check port activity directly on the switch for network activity status.

#### **Silent Switches**

• Fanless quiet operation

#### **Industry Leading Warranty**

• Limited Lifetime\* Hardware Warranty



<sup>&</sup>lt;sup>1</sup>Cat6A or higher cables required for 10Gbps speed.



### Hardware at a Glance

Model Name	Form-Factor	10M/100M/1G Copper Ports	10 Gig SFP+ Ports	10G/Multi-Gig Ports	LED's	Case Material	Fans	Power Supply
GS108X	Desktop/wall-mount	8	1	0	Power, Port Link/Speed/Activity	Metal	Fanless	External
GS108MX	Desktop/wall-mount	8	0	1	Power, Port Link/Speed/Activity	Metal	Fanless	External



#### GS108X: front

- 8 x Gigabit Copper Ports
- 1 x 10 Gig SFP+ Port



#### GS108X: back

• External power adapter (varies by region)

#### GS108MX: front

- 8 x Gigabit Copper Ports
- 1 x 10G/Multi-Gig Port

#### 

#### GS108MX: back

• External power adapter (varies by region)

### Software at a Glance

Model Name	Management	VLANs	EEE (802.3az) Auto-EEE	Jumbo Frame Support
GS108X	Unmanaged	No	Yes	Yes
GS108MX	Unmanaged	No	Yes	Yes

### Performance at a Glance

Model Name	Fabric	Packet Buffer	Latency (Max Connection Speed)	MAC Address Table	Priority Queues	Packet Forwarding Rate (64 byte)	Jumbo Frames (bytes)
GS108X	36 Gbps line-rate	768KB	100Mbps: <5µs 1Gbps: <2µs 10Gbps : <1µs	16K Entries (dynamic)	8 (WRR)	41.664 Mfps	up to 9728 byte
GS108MX	36 Gbps line-rate	768KB	100Mbps: <5µs 1Gbps: <2µs 2.5Gbps: <4µs 5Gbps: <3µs 10Gbps : <2µs	16K Entries (dynamic)	8 (WRR)	41.664 Mfps	up to 9728 byte



### Features and Benefits

Hardware Features	Benefits
Compact form factor with fanless design	Ideal for nearly any configuration or environment (especially noise-sensitive ones such as a classroom, conference room, doctor's office, etc).
Flexible Mounting Options	Desktop or wall-mount to be used in any environment.
36 Gbps non-blocking switching architecture	Get all the connectivity you need to your devices without congestion.
Energy Efficient Ethernet (IEEE 802.3az)	For maximum power savings and reduced energy costs.

### Example Application



### Why the NETGEAR GS108X/GS108MX Switches are ideal for small businesses

1. Remove network bottlenecks with the 10 Gigabit uplinks

2. Limited Lifetime\* Warranty

3. Energy efficient switches that automatically adjust power consumption according to Energy-Efficient Ethernet standard



# 8-port Gigabit Switches with 10 Gigabit SFP+ Uplink

# **Technical Specifications**

Technical Specifications	GS108X	GS108MX
Gigabit ports	8	8
SFP+ ports	1	0
100M/1G/2.5G/5G/10G RJ-45 copper ports	0	1
Form Factor	Desktop/Wall-mount	Desktop/Wall-mount
Performance Specification		
Bandwidth	36 Gbps	36 Gbps
Priority queues	8	8
Priority queuing	Weighted Round Robin (WRR)	Weighted Round Robin (WRR)
MAC Address database size (48-bit MAC addresses)	16K	16K
Packet forwarding rate (64 byte packet size) (Mfps or Mpps)	41.664Mfps	41.664Mfps
Speed / Latency	100Mbps: <5µs 1Gbps: <2µs 10Gbps : <1µs	100Mbps: <5µs 1Gbps: <2µs 2.5Gbps: <4µs 5Gbps: <3µs 10Gbps: <2µs
Jumbo frame support	Up to 9728 bytes	Up to 9728 bytes
Acoustic noise level @ 25° C (dBA) (ANSI-S10.12)	0 dBA	0 dBA
Mean Time Between Failures (MTBF) @ 25° C	4,802,599 hrs (548 yrs)	3,514,690 hrs (401 yrs)
Power/Energy Efficiency		
Energy-Efficient Ethernet	Yes	Yes
Max power (worst case, all ports used, line-rate traffic) (Watts)	5.7W	5.8W
Quality of Service		
802.1p-based QoS/CoS Supported	Yes	Yes
IEEE 802.1p COS	Yes	Yes
IPv4 DSCP	Yes	Yes
Pre-Defined Rate Limiting Rates	N/A	N/A
Pre-Defined Port Priority Queues	8	8
Weighted Round Robin (WRR)	Yes	Yes
L2 Services - Availability		
IEEE 802.3x (full duplex and flow control)	Yes	Yes
LEDs		
Per port	Speed, Link, Activity	Speed, Link, Activity
Per device	Power	Power



# 8-port Gigabit Switches with 10 Gigabit SFP+ Uplink

# **Technical Specifications**

Physical Specifications	GS108X	GS108MX	
Dimensions (W x D x H)	235 x 100.8 x 27 mm (9.25 x 3.97 x 1.06 in)	235 x 100.8 x 27 mm (9.25 x 3.97 x 1.06 in)	
Weight	0.575 kg (1.267 lbs)	0.575 kg (1.267 lbs)	
Power Consumption			
Power Supply	External Power Adapter 12V 1.5A	External Power Adapter 12V 1.5A	
Max power (worst case, all ports used, line-rate traffic) (Watts)	5.7W	5.8W	
Min power (link-down standby) (Watts)	2.3W	2.4W	
Heat Dissipation (max and min) (BTU/hr)	Max: 19.33 BTU/hr Min:  7.86 BTU/hr	Max: 19.91 BTU/hr Min: 8.21 BTU/hr	
Fan(s)	Fanless	Fanless	
Environmental Specifications			
Operating temperature	0° to 40°C (32° to 104°F)		
Humidity (relative)	90% maximum relative hum	idity (RH), non-condensing	
Altitude	10,000 ft (3,000	0 m) maximum	
Electromagnetic Emissions and Immunity			
Certifications	RCM ICES-003 FCC Part 15 CE UKCA VCCI KC BSMI		
Electromagnetic Compliance (Class A or B)	Cla	ss B	
Safety Certifications			
Certifications	C	CM CE CA SMI	



# 8-port Gigabit Switches with 10 Gigabit SFP+ Uplink

# **Technical Specifications**

Warranty and Support	GS10	X8(	GS108MX			
		Limited Lifetime* Warranty				
	90-day 24x7 Online Technical Support					
		Limited Lifetim	Limited Lifetime Next Business Day Hardware Replacement (NBD)			
			Catego	-		
ProSUPPORT OnCall 24x7, Ser	rvice Packs**		PMB0S12-10000S (1 yr) PMB0S32-10000S (3 yrs) PMB0S52-10000S (5 yrs)			
Package Content						
		GS108X 8-Port Gig		GS108MX 8-Port Gigabit Ethernet		
		Unmanaged Switc		Unmanaged Switch with		
		1 dedicated 10G S	FP+ Port	1 dedicated 10G/Multi-Gig Port		
All models		Power adapter (var	ies by region)	Power adapter (varies by region)		
		Wall-mount kit		Wall-mount kit		
		Rubber feet		Rubber feet		
		Installation guide		Installation guide		
Optional Modules and Access	ories for GS108	BX				
1G Fiber SFP Transceiver	AGM731F	AGM731F	(multimode, 10	0BASE-SX SFP LC Transceiver 000m OM4, 550m OM3 50/125µm, M1 62.5/125µm)		
1G Fiber SFP Transceiver	AGM732F	AGM732F	NETGEAR 1000BASE-LX SFP LC Transceiver (single mode, 10km 9/125µm)			
1G Copper SFP Transceiver	AGM734	AGM734-10000S	NETGEAR 1000	0BASE-T SFP RJ45 Transceiver		
10G SFP+ DAC	AXC761	AXC761-10000S	NETGEAR 10G Meter Passive [	Direct Attach SFP+ to SFP+ 1 DAC Cable		
10G SFP+ DAC	AXC763	AXC763-10000S	NETGEAR 10G Meter Passive [	Direct Attach SFP+ to SFP+ 3 DAC Cable		
10G Fiber SFP+ Transceiver	AXM761	AXM761-10000S		BASE-SR SFP+ LC Transceiver 50m OM4, 300m OM3 50/125µm, 1 62.5/125µm)		
10G Fiber SFP+ Transceiver	AXM762	AXM762-10000S		BASE-LR SFP+ LC Transceiver 10km 9/125µm)		
10G Fiber SFP+ Transceiver	AXM764	AXM764-10000S		BASE-LR LITE SFP+ (single mode, 2km 9/125µm)		



### Ordering Information

GS108X	Country/Region
GS108X-100NAS	North America
GS108X-100EUS	Europe
GS108X-100AUS	Australia and New Zealand
GS108X-100JPS	Japan
GS108X-100KOS	Korea
GS108X-100PES	Other APAC
GS108X-100UKS	Hong Kong
GS108X-100INS	India
GS108X-100PRS	China
GS108X-100TWS	Taiwan
GS108MX	Country/Region
GS108MX-100NAS	North America
GS108MX-100EUS	Europe
GS108MX-100AUS	Australia and New Zealand
GS108MX-100JPS	Japan
GS108MX-100KOS	Korea
GS108MX-100PES	Other APAC
GS108MX-100UKS	Hong Kong
GS108MX-100INS	India
GS108MX-100PRS	China
GS108MX-100TWS	Taiwan

\* This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and covers unmodified hardware, fans and internal power supplies - not software or external power supplies, and requires product registration at https://www.netgear.com/business/registration within 90 days of purchase; see https://www.netgear.com/about/warranty for details. Intended for indoor use only.

\*\* The NETGEAR OnCall 24x7 contract provides unlimited phone and email technical support for your networking product. For products purchased prior to 06/2014, also includes next business-day hardware replacement.

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NETGEAR, Inc. 350 E. Plumeria Drive, San Jose, CA 95134-1911 USA, 1-888-NETGEAR (638-4327), E-mail: info@NETGEAR.com, www.NETGEAR.com