



Unlock the Potential of your 10G/Multi-Gig devices

The GS110EMX and GS110MX come with 8 Gigabit Ethernet ports and 2 uplink 10-Gigabit/Multi-Gigabit (5-speed) ports that provide either 100 Megabit, 1-Gigabit, 2.5-Gigabit, 5-Gigabit or 10-Gigabit connectivity.

The two uplink ports automatically detects which speed is needed by the connected device and provides the adequate speed. Moreover these two Multi-speed switch ports can be connected with regular Cat5E Ethernet cables, without the need to upgrade to Cat6 wiring, therefore reducing wiring costs and hassle¹.

The GS110MX and GS110EMX offer flexible mounting options - they can be mounted in a rack, on a wall or can be used as a desktop switch. Moreover the compact and fanless design make the GS110MX and GS110EMX ideal for any home or business environment.

Highlights

Multi-Speed Technology Support

Expand your network instantly, and give your devices either 100M, 1G, 2.5G, 5G or 10G automatically

10 Gigabit Uplinks

No Network Bottlenecks thanks to the 2 10-Gigabit/Multi-Gigabit Uplinks

Flexible Mounting

Rackmount², 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)

Silent Switches

Fanless Quiet Operation

Industry leading warranty

- LIFETIME 24/7 Technical Support
- LIFETIME Hardware Warranty*



¹ Cat6A or higher cables required for 10Gbps speed.

² Accessories included for a 19-inch rack.

Hardware at a Glance

| Model Name | Form-Factor | 10M/100M/1G Copper Ports | 10-Gig/Multi-Gig Copper Ports | LED's | Case Material | Fans | Power Supply |
|------------|----------------------------------|--------------------------|-------------------------------|------------------------------------|---------------|---------|--------------|
| GS110MX | Rackmount/Desktop/ Wall-Mount | 8 | 2 | Power, Port Link/Speed/Activity | Metal | Fanless | External |
| GS110EMX | Rackmount/Desktop/ Wall-Mount | 8 | 2 | Power, Port Link/Speed/Activity | Metal | Fanless | External |



GS110MX: front

- 8 x Gigabit Copper Ports
- 2 x 10-Gig/Multi-Gig Copper Ports
- 19-inch Rackmountable



GS110MX back

- External PSU



GS110EMX: front

- 8 x Gigabit Copper Ports
- 2 x 10-Gig/Multi-Gig Copper Ports
- 19-inch Rackmountable



GS110EMX back

- External PSU

Software at a Glance

| Model Name | Management | VLANs | IGMP | EEE (802.3az) Auto-EEE | QoS | Port Trunking | Jumbo Frame Support |
|------------|-------------|-----------------------|---------------|---------------------------|---------------------------------|------------------------|---------------------|
| GS110MX | Unmanaged | No | N/A | Yes | N/A | No | Yes |
| GS110EMX | Web Managed | Port-Based/ 802.1Q | IGMP Snooping | Yes | Port-Based IEEE 802.1p Based | Static LAG and LACP | Yes |

Performance at a Glance

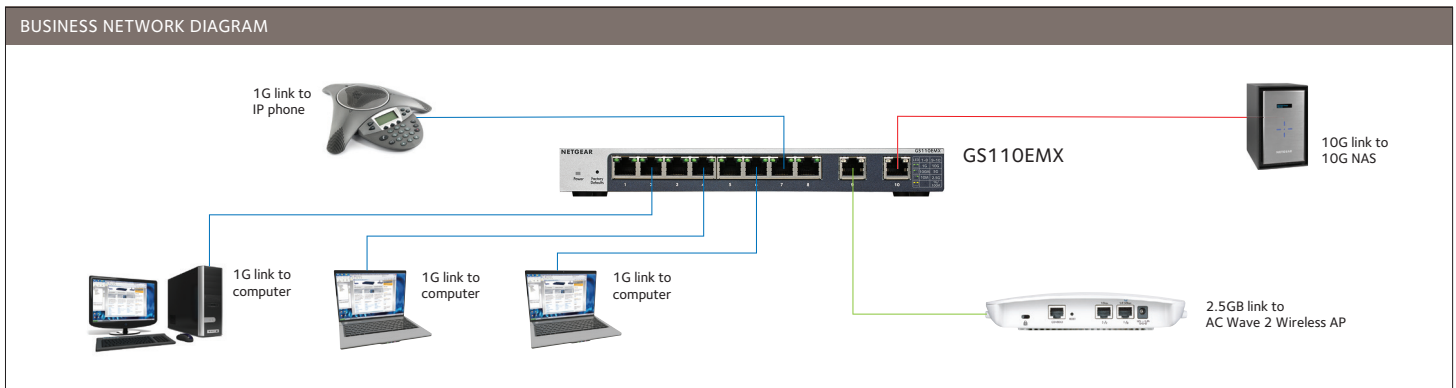
| Model Name | Fabric | Packet Buffer | Latency (Max Connection Speed) | MAC Address Table | Priority Queues | Multicast IGMP Group | Packet Forwarding Rate (64 byte) | Jumbo Frames (bytes) |
|------------|-------------------|---------------|-------------------------------------------------|-----------------------|-----------------|----------------------|----------------------------------|----------------------|
| GS110MX | 56 Gbps line-rate | 128KB | 10Gbps: <3μs 1000Mbps: <4μs 100Mbps: <7μs | 16K Entries (dynamic) | 8 (WRR) | N/A | 41.664Mfps | up to 10240 |
| GS110EMX | 56 Gbps line-rate | 128KB | 10Gbps: <3μs 1000Mbps: <4μs 100Mbps: <7μs | 16K Entries (dynamic) | 8 (WRR) | 128 | 41.664Mfps | up to 10240 |

Features at a glance

| HARDWARE FEATURES | BENEFITS |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compact form factor with fanless design | Adapts to your needs and configuration in any environment, even noise-sensitive (in a classroom, in a conference room, in a doctor's office...) |
| Flexible Mounting Options | Rack, Desktop or Wall-Mount to be used in any environment. |
| 56 Gbps non-blocking switching architecture | Get all the connectivity you need to your devices without congestion. |
| 5-Speed Networking | Automatically detects which speed is needed by the connected device and provides the adequate speed (100M/1G/2.5G/5G/10G) to connect all your devices with one switch. |
| SOFTWARE FEATURES (GS110EMX ONLY) | BENEFITS |
| Port-based and 802.1Q-based VLANs | Segment network into smaller groups for more secure and efficient use of network resources. |
| Comprehensive QoS features: <ul style="list-style-type: none"> • Port-based or 802.1p-based prioritization • Layer 3-based (DSCP) prioritization • Port-based ingress and egress rate limiting | Advanced controls for optimized network performance and better delivery of mission-critical traffic such as voice and video. Ingress and egress rate limiting allows for bandwidth shaping for mitigating network resources constraints or for optimizing guest access bandwidth on the network. |
| IGMP Snooping | For improved network efficiency on delivering multicast traffic. Save cost and improve network efficiency by ensuring multicast traffic only reaches designated receivers without the need of an extra multicast router. |
| Port trunking / Link Aggregation | Build up bigger bandwidth to support aggregated uplink/downlink traffic or to provide redundant link(s) using Static Manual LAGs or LACP. |
| Voice VLAN | The feature enables auto assignment of voice traffic (based on OUI) to a special VLAN (AKA Voice VLAN); allowing the assignment of special QoS parameters to that traffic, giving it high priority services. Port has to be MANUALLY assigned to be a member of the Voice VLAN. |
| Loop detection and auto DoS prevention | Detect accidental network loops and protect against DoS attacks. |
| Port Mirroring | For better and quicker network diagnostics and troubleshooting. |
| Energy Efficient Ethernet (IEEE 802.3az) | For maximum power savings and reduced energy costs. |
| Cable Test | Easily identify bad Ethernet cables. |

Example Application

GS110MX/GS110EMX in a Business Environment



Cables and Speeds

The following table describes the network cables that you can use for the switch connections and the speeds that the cables can support, up to 100 meters (328 feet).



| SPEED | CABLE TYPE |
|-----------------------------|--------------------------------------|
| 100 Mbps | Category 5 (Cat 5) or higher rated |
| 1 Gbps, 2.5 Gbps, or 5 Gbps | Category 5e (Cat 5e) or higher rated |
| 10 Gbps | Category 6A (Cat 6A) or higher rated |

Note: For speeds of 10 Gbps, if the cable length is shorter than 55 meters (180 feet), you can use a Category 6 (Cat 6) cable.

Why the NETGEAR GS110MX/GS110EMX Switches are ideal for SMB

1. Remove any Network Bottleneck with the 10-Gigabit/Multi-Gigabit Uplinks
2. 5-Speed auto-adapt intelligent Networking (100M,1G,2.5G,5G,10G)
3. Small and silent compact form factor for quiet operation – Adapts to your needs and configuration in any environment
4. ProSAFE LIFETIME Warranty, Next Business Day replacement and 24/7 chat with a NETGEAR expert
5. Energy efficient switches that automatically adjust power consumption according to Energy-Efficient Ethernet standard

Technical Specifications

| PRODUCT | GS110MX | GS110EMX |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |
| Gigabit ports | 8 | 8 |
| 100M/1G/2.5G/5G/10G RJ-45 copper ports | 2 | 2 |
| Form Factor | Desktop/Rackmount/Wallmount | Desktop/Rackmount/Wallmount |
| PERFORMANCE SPECIFICATION | | |
| Bandwidth | 56 Gbps | |
| Priority queues | 8 | |
| Priority queuing | Weighted Round Robin (WRR) | |
| MAC Address database size (48-bit MAC addresses) | 16K | |
| Multicast groups | N/A | 128 |
| Packet forwarding rate (64 byte packet size) (Mfps or Mpps) | 41.664Mfps | |
| Speed / Latency | 10Gbps: < 3µs 100Mbps: <7µs 1000Mbps: <4µs | |
| Jumbo frame support | Up to 10240 bytes | |
| Acoustic noise level @ 25° C (dBA) (ANSI-S10.12) | 0 dBA | |
| POWER/ENERGY EFFICIENCY | | |
| Energy-Efficient Ethernet | Yes | |
| Max power (worst case, all ports used, line-rate traffic) (Watts) | 13.2 | 15.6 |
| QUALITY OF SERVICE (QOS) | | |
| 802.1p-based QoS/CoS Supported | Yes | |
| Port-based rate limiting | N/A | Ingress and egress |
| Port-based QoS | N/A | Yes |
| IEEE 802.1p COS | Yes | Yes |
| IPv4 DSCP | Yes | Yes |
| Pre-Defined Rate Limiting Rates | N/A | 1/5/10/50/100/500 Mbit/s |
| Pre-Defined Port Priority Queues | 8 | 8 |
| Weighted Round Robin (WRR) | Yes | Yes |
| Strict priority queue technology | N/A | No |
| Voice VLAN | N/A | Yes |
| L2 SERVICES - VLANs | | |
| VLAN (# Supported) | N/A | 64 |
| IEEE 802.1Q VLAN Tagging | N/A | Yes |
| Port-based VLAN | N/A | Yes |

| PRODUCT | GS110MX | GS110EMX |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------|
| L2 SERVICES - AVAILABILITY | | |
| Broadcast, multicast, unknown unicast storm control | N/A | Yes |
| Static Manual LAGs (Port Trunking) | N/A | Yes |
| LACP | N/A | Yes |
| IEEE 802.3x (full duplex and flow control) | Yes | Yes |
| L2 SERVICES - MULTICAST FILTERING | | |
| IGMP snooping (v1, v2, and v3) | N/A | Yes |
| IGMP snooping querier | N/A | No |
| Block unknown multicast | N/A | Yes |
| Static multicast router port | N/A | Yes |
| L3 SERVICES - DHCP | | |
| DHCP client | N/A | Yes |
| LINK AGGREGATION | | |
| Static Manual LAGs (Port Trunking) | N/A | Yes |
| # of Static LAGs / # of members in each LAG | N/A | 5 LAGs with max 9 members in each LAG |
| LEDS | | |
| Per port | Speed, Link, Activity | |
| Per device | Power | |
| PHYSICAL SPECIFICATIONS | | |
| Dimensions (W x D x H) | 236 x 102 x 27 mm (9.29 x 4.02 x 1.06 in) | |
| Weight | 0.74 kg (1.63 lbs) | 0.75 kg (1.65 lbs) |
| POWER CONSUMPTION | | |
| Power Supply | MX: External Power Adapter 12V 1.5A EMX: External Power Adapter 12V 2.5A | |
| Max power (worst case, all ports used, line-rate traffic) (Watts) | 13.2v | 15.6 |
| Min power (link-down standby) (Watts) | MX: 4.8 EMX: 6.6 | |
| Heat Dissipation (max and min) (BTU/hr) | Max: 45.14 BTU/hr Min: 16.42 BTU/hr | Max: 53.35 BTU/hr Min: 22.57 BTU/hr |
| Fan(s) | Fanless | |
| ENVIRONMENTAL SPECIFICATIONS | | |
| Operating | | |
| Operating temperature | 0° to 40°C (32° to 104°F) | |
| Humidity (relative) | 90% maximum relative humidity (RH), non-condensing | |
| Altitude | 10,000 ft (3,000 m) maximum | |
| Storage | | |
| Storage temperature | -20° to 70°C (-4° to 158°F) | |
| Humidity (relative) | 95% maximum relative humidity, non-condensing | |
| Altitude | 10,000 ft (3,000 m) maximum | |

| PRODUCT | GS110MX | GS110EMX |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| ELECTROMAGNETIC EMISSIONS AND IMMUNITY | | |
| Certifications | 47 CFR FCC Part 15, SubpartB, Class B ICES-003:2016 Issue 6, Class B ANSI C63.4:2014 | |
| | EN 55032:2012 +AC:2013 / CISPR 32:2012 / AS/NZS CISPR 32:2013, Class B EN 55032:2015 +AC:2016 / CISPR 32:2015 +COR1:2016 / AS/NZS CISPR 32:2015, Class B EN 61000-3-2:2014 EN 61000-3-3:2013 EN 55024:2010 +A1:2015 | |
| | AS/NZS CISPR 32:2015, Class B | |
| | VCCI-CISPR 32:2016, Class B | |
| | Russia EAC mark (GS110MX only) | |
| | Korea KC mark | |
| | CNS 13438 | |
| | Class B | |
| SAFETY | | |
| Certifications | IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013 | |
| | EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 | |
| | AS/NZS 60950.1:2015 | |
| | Russia EAC mark (GS110MX only) | |
| WARRANTY AND SUPPORT | | |
| ProSAFE Lifetime Warranty | | |
| Lifetime 24x7 Online Technical Support* | | |
| Lifetime Next-Business-Day (NBD) Replacement | | |
| ProSUPPORT OnCall 24x7, Service Packs** | Category 1: PMB0311 (1 yr.) PMB0331 (3 yrs.) PMB0351 (5 yrs.) | |

Ordering Information

| PACKAGE CONTENT | |
|----------------------|----------------------------------------------------------------------------------------|
| All Models | GS110MX or GS110EMX 8-port Gigabit Switch with 2-port 10-Gigabit/Multi-Gigabit Uplinks |
| | AC power adapter (localized to country of sale) |
| | Rack-mounting kit |
| | Wall-mounting kit |
| | Rubber foot |
| | Quick install guide |
| ORDERING INFORMATION | |
| GS110MX-100NAS | North America and Latin America |
| GS110MX-100PES | Europe |
| GS110MX-100UKS | United Kingdom |
| GS110MX-100JPS | Japan |
| GS110MX-100PRS | China |
| GS110EMX-100NAS | North America and Latin America |
| GS110EMX-100PES | Europe |
| GS110EMX-100UKS | United Kingdom |
| GS110EMX-100JPS | Japan |
| GS110EMX-100PRS | China |

* This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and modifications to product may void the warranty; covers hardware, fans, and internal power supplies - not software or external power supplies; see <http://www.netgear.com/about/warranty/> for details. Lifetime technical support includes basic phone support for 90 days from purchase date and lifetime online chat support when purchased from a NETGEAR authorized reseller.

** 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.

† NETGEAR #1 in Fixed Web(Smart)-Managed Worldwide Market Share according to IHS Infonetics Ethernet Switches Market Share and Forecast, 1Q17 Edition, Dec 2016.

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