



### Unlock the potential of your 10G/Multi-Gig devices

The XS505M and XS508M come with Copper Ethernet ports that provide either FastEthernet, 1-Gigabit, 2.5-Gigabit, 5-Gigabit or 10-Gigabit connectivity, as well as 1 SFP+ Fiber port with 1-Gigabit or 10-Gigabit connectivity.

Each port automatically detects which speed is needed by the connected device and provides the adequate speed. As opposed to regular 10-Gigabit switches that will only provide 1-Gigabit connectivity to any device that require less than 10-Gigabit, the XS505M gives

the exact speed required, no downgrade. Also, the new NETGEAR 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 hassle.

## Highlights

### Multi-Speed Technology

- Expand your network instantly, and give your devices either 100Mb, 1, 2.5, 5 or 10 Gigabit, automatically

### Plug and Play

- Simple set up with no software or configuration needed

### Flexible Mounting

- Rackmount or Desktop Switches

### SFP+ Port

- One SFP+ Fiber port with 1-Gigabit or 10-Gigabit connectivity - Ideal for high-speed uplink connectivity to your core network

### High Quality and Reliable Performance

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

### Whisper Quiet

- Whisper Quiet switch with an active fan

### Industry leading warranty

- Lifetime 24/7 Technical Support
- Limited Lifetime\* Hardware Warranty



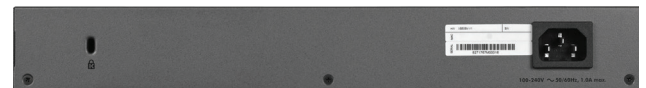
## Hardware at a Glance

Model Name	Form-Factor	10-Gig/Multi-Gig Copper Ports	Internal Power Supply	10G SFP+ Ports	LEDs	Case Material	Fans
XS505M	Rackmount/ Desktop	4	Yes	1	Power, Fan, Port Link/Speed/ Activity	Metal	Active Fan
XS508M	Rackmount/ Desktop	7 <sup>1</sup>	Yes	1 x 10G/1G SFP+ and Copper (combo)	Power, Fan, Port Link/Speed/ Activity	Metal	Active Fan



XS505M

- 4 x 10-Gig/Multi-Gig Copper Ports
- 1 x SFP+ Ports
- 19-inch Rackmountable



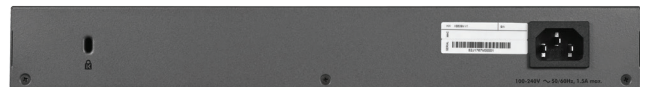
XS505M-Back

- Internal PSU



XS508M

- 7<sup>1</sup> x 10-Gig/Multi-Gig Copper Ports
- 1 x 10G/1G SFP+ and Copper (combo)
- 19-inch Rackmountable



XS508M-Back

- Internal PSU

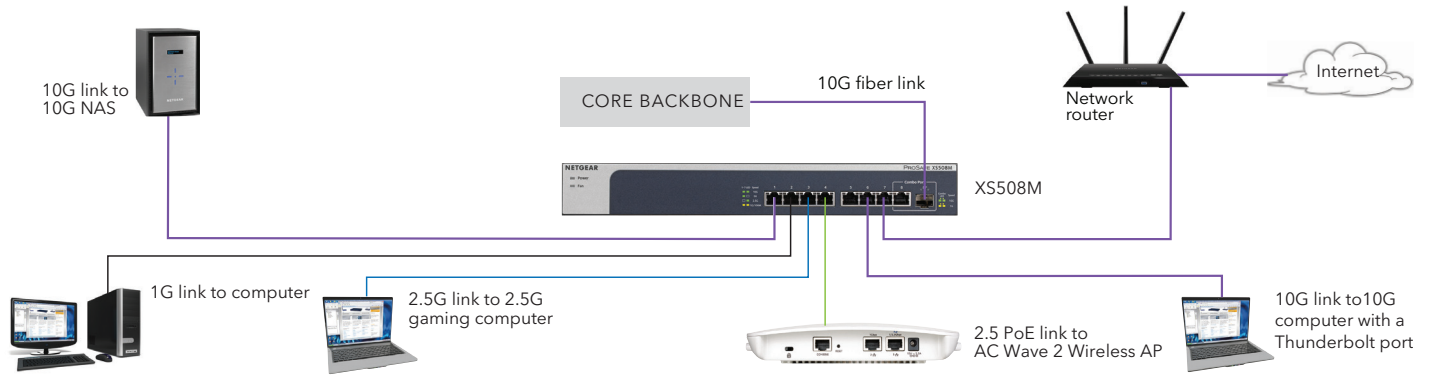
## Performance at a Glance

Model Name	Fabric	Packet buffer	Latency (Max Connection Speed)	VLANs	MAC Address Table	Priority Queues	Multicast IGMP Group	Packet Forwarding Rate (64 byte)	Jumbo Frames (bytes)
XS505M	100 Gbps line-rate	128KB	10Gbps: 4.845us 1000Mbps: <4us 100Mbps: <6us	N/A	2K Entries (dynamic)	8 (WRR)	N/A	10Gbps: 14,880,952fps 5Gbps: 7,440,476fps	up to 9K
XS508M	160 Gbps line-rate	128KB	10Gbps: 4.913us 1000Mbps: <4us 100Mbps: <6us	N/A	2K Entries (dynamic)	8 (WRR)	N/A	2500Mbps: 3,720,238fps 1000Mbps: 1,488,095fps 100Mbps: 148,810fps	up to 9K

<sup>1</sup> Port #8 is a combo Port

## Example Application

### XS505M/XS508M in a Business Environment



## Cables and Speed

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

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

Note: For speeds of 10 Gbps, if the cable length is shorter than 45 meters (148 feet), you can use a Cat 5e cable.

## Why the NETGEAR 10-Gig/Multi-Gig Switches are ideal for SMB

1. Plug-and-play, automatic connectivity to your router or modem of 4 additional wired connections. No need for an IT expert!
2. Expand your network instantly, and give your devices either 100Mb, 1, 2.5, 5 or 10-Gigabit, automatically.
3. Small and silent desktop or rackmount form factor for quiet operation - Adapts to your needs and configuration in any environment.
4. Limited 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 the link status and cable length.

## Technical Specifications

	XS505M	XS508M
100M/1G/2.5G/5G/10G RJ-45 copper ports	4	7
10G SFP+ ports	1	1 x 10G/1G SFP+ and Copper (combo)
Form Factor	Desktop/Rackmount	Desktop/Rackmount
<b>Performance Specification</b>		
Packet buffer memory (Dynamically shared across only used ports)	128KB	
Forwarding modes	Store-and-forward	
Bandwidth	100Gbps	160Gbps
MAC Address database size (48-bit MAC addresses)	2K	
Packet forwarding rate (64 byte packet size) (Mpps)	10Gbps: 14,880,952fps 5Gbps: 7,440,476fps 2500Mbps: 3,720,238fps 1000Mbps: 1,488,095fps 100Mbps: 148,810fps	
Jumbo frame support	Up to 9K packet size	
Acoustic noise level @ 25°C (dBA) (ANSI-S10.12)	22.5	
Mean Time Between Failures (MTBF) @ 25°C	1093237 hours	1145157 hours
<b>Power/Energy Efficiency</b>		
802.1p-based QoS/CoS Supported	Yes	
Auto Power Down	Yes	
Short Cable Detection/Power Saving	Yes	
<b>Quality of Service (QoS)</b>		
IEEE 802.3az (Energy Efficient Ethernet)	Yes	
Honors DSCP (DiffServ) Tags	Yes	
Weighted Round Robin (WRR)	Yes	
Priority Queues	8	
<b>IEEE Network Protocols</b>		
<ul style="list-style-type: none"> <li>• IEEE 802.3 Ethernet</li> <li>• IEEE 802.3u 100BASE-TX</li> <li>• IEEE 802.3ab 1000BASE-T</li> <li>• IEEE 802.3x Full-Duplex Flow Control</li> <li>• IEEE 802.1p Class of Service</li> <li>• IEEE 802.3az Energy Efficient Ethernet (EEE)</li> <li>• IEEE 802.3an 10GBASE-T</li> <li>• IEEE 802.3bz 5Gbps and 2.5Gbps Ethernet Over Copper Twisted Pair Cable</li> <li>• IEEE 802.3ae 10-Gigabit Ethernet Over Fiber</li> <li>• IEEE 802.3aq 10-Gigabit over Fiber (10GBASE-LRM)</li> <li>• IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX</li> </ul>		
<b>LEDs</b>		
Per port	Speed, Link, Activity	
Per device	Power and Fan	

# 10-Gigabit/Multi-Gigabit Ethernet Unmanaged Switches

Physical Specifications	XS505M	XS508M
Dimensions (W x D x H)	328 x 169 x 43.2 mm (12.91 x 6.65 x 1.7 in)	
Weight	1.38kg	1.49kg
Power Consumption		
Power Supply	Fixed internal PSU, 100-240VAC, 50-60Hz, 1A max Power cord localized to country of sale	Fixed internal PSU, 100-240VAC, 50-60Hz, 1.5A max Power cord localized to country of sale
Max power (worst case, all ports used, line-rate traffic) (Watts)	22.5W	39W
Min power (link-down standby) (Watts)	12.25	21.31
Heat Dissipation (max and min) (BTU/hr)	85.3/46.4	147.86/80.8
Fan(s)	x1	x1
Environmental Specifications		
Operating		
Operating Temperature	0° to 50°C (32° to 122°F)	
Humidity (relative)	95% 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 (RH), non-condensing	
Altitude	10,000 ft (3,000 m) maximum	
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+AC2013, Class B EN 55024:2010 EN 61000-3-2:2014, Class B EN 6100-3-3:2013 AS/NZS CISPR 32:2015, Class B VCCI V-3/2015.04, Class B V-4/2012.4 Korea KC mark CNS 13438	
Electromagnetic Compliance	USA / IC: FCC 15B (Class B) + ICES -003 CE/AUS/NZ: EN55032/24 + CISPR 32 Japan: VCCI AUS/NZ: BSMI (CNS 13438) Taiwan: sDoC Korea: KCC	

# 10-Gigabit/Multi-Gigabit Ethernet Unmanaged Switches

Safety Certifications	
Certifications	CE: CB 60950-1, LVD 60950-1 AUS/NZ: AS/NZS 60950-1 USA: UL 60950-1, SNE VA Taiwan: BSMI (CNS 14336-1)
Warranty and Support	
	Limited 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.)
Package Contents	
All models	XS505M or XS508M 10-Gigabit/Multi-Gigabit Ethernet Unmanaged Switch Power cord (localized to country of sale) Rackmount kit Installation guide
Easy-Mount additional options (GS418TPP)	Mount for attachment to a wall, or rectangular pole Rubber belts Velcro straps Power cord locker

## Ordering Information

Ordering Information	
XS505M-100NAS	North America and Latin America
XS505M-100EUS	Europe and United Kingdom
XS505M-100AJS	Asia Pacific and Australia
XS508M-100NAS	North America and Latin America
XS508M-100EUS	Europe and United Kingdom
XS508M-100AJS	Asia Pacific and Australia
Optional Modules and Accessories	
AFM735	SFP Transceiver 100BASE-FX (multimode)
AGM731	SFP Transceiver 1000BASE-SX (Short range, multimode)
AGM732F	SFP Transceiver 1000BASE-LX (Long range, single mode)
AGM734	SFP Transceiver 1000BASE-T Copper RJ45 GBIC
AXC761	10GSFP+ Cu (passive) SFP+ to SFP+ Direct Attach Cable 1m
AXC763	10GSFP+ Cu (passive) SFP+ to SFP+ Direct Attach Cable 3m
AXM761	10GBASE-SR SFP+ GBIC (OM3/OM4 Multimode)
AXM762	10GBASE-LR SFP+ GBIC (Single mode)
AXM763	10GBASE-LRM SFP+ GBIC (Long Reach Multimode for OM1/OM2, also compatible with OM3/OM4)
AXM764	10GBASE-LR LITE SFP+ GBIC (Single mode)

\* 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.

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

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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](mailto:info@NETGEAR.com), [www.NETGEAR.com](http://www.NETGEAR.com)

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