### 8-port and 16-port Gigabit Ethernet Unmanaged PoE/PoE+ Switches

Data Sheet

GS108LP/GS108PP/GS116LP/GS116PP



GS108LP, GS108PP, GS116LP, GS116PP

#### **Outstanding Power with Flexible Placement**

The NETGEAR® Gigabit Unmanaged Switch series helps businesses costeffectively increase power budget to expand their network.

Powered by the industry's first flexible PoE+ integrated technology, you can increase or decrease the PoE budget by simply buying a new power supply, effectively futureproofing small business networks and budgets.

All ports support PoE/PoE+ that makes them the perfect switches for deploying Wireless APs, Pan/Tilt/Zoom and fixed IP Cameras, VoIP Phones, access-limited security door locks or any other IoT PoE-powered devices.

The GS108LP, GS108PP, GS116LP and GS116PP Gigabit Ethernet switches come with 8 and 16 Gigabit copper ports in a desktop metal case.

The small form factor combined with the rack-mount and wall-mount accessories give you the flexibility to place these switches in small cabinets, in a 19" rack, on a wall or on your desk.

## **Key Highlights**



#### All ports Support PoE+

All ports supports PoE+ and PoE being able to provide up to 30W per port to any power-hungry device (PTZ Cameras, POE Lights, PD Switches, Access Points).



#### Flexible PoE Budget

Interchangeable External Power Supply. Increase or decrease your PoE Budget as needed.

GS108LP/GS108PP: 67.5W, 90W, 130W GS116LP/GS116PP: 90W, 130W, 200W



#### Flexible mounting options

Adapts to your needs and configuration and configuration in any environment. Rackmount, wall or desktop mounting options.



#### Silent Design

Small form factor and silent for quiet operation makes it the ideal switch for noise-sensitive environments.

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#### Hardware at a Glance

Model Name	Form-Factor	10/100/1000 Base-T RJ45 ports	PoE/PoE+ 802.3af/ 802.3at Ports	PoE Budget/PSU	LED's	PSU Supported	Fans
GS108LP	Desktop, wall & rack mount	8	8	PoE Budget: 60.5W PSU: 67.5W	Power, Port Link/Speed/Activity	67.5W/90W/130W	Fanless
GS108PP	Desktop, wall & rack mount	8	8	PoE Budget: 120W PSU: 130W	Power, Port Link/Speed/Activity	67.5W/90W/130W	Fanless
GS116LP	Desktop, wall & rack mount	16	16	PoE Budget: 76W PSU: 90W	Power, Port Link/Speed/Activity	90W/130W/200W	Fanless
GS116PP	Desktop, wall & rack mount	16	16	PoE Budget: 183W PSU: 200W	Power, Port Link/Speed/Activity	90W/130W/200W	Fanless



#### GS108LP/GS108PP

- · 8 x Gig Copper Ports
- 8 x 802.3af/802.3at Ports
- Desktop, Wall-mount and 19-inch Rackmountable
- Small Form Factor



#### GS108LP/GS108PP rear

• Interchangeable External Power Supply



#### GS116LP/GS116PP

- 16 x Gig Copper Ports
- 16 x 802.3af/802.3at Ports
- · Desktop, Wall-mount and 19-inch Rackmountable
- Small Form Factor



#### GS116LP/GS116PP rear

• Interchangeable External Power Supply

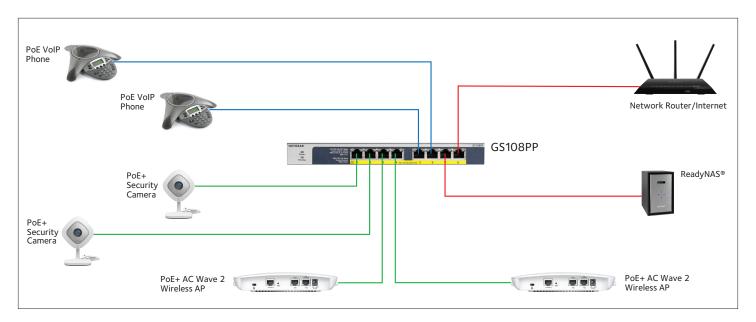
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#### **Example Application**

#### GS108LP/GS108PP in a Business Environment



#### GS108LP/GS108PP in a Business Environment

The following table describes the PoE classes and switch allocations.

Device Class	Standard	Class Description	Minimum Power Allocated to the Powered Device	Range of Power Delivered to the Powered Device
0	PoE and PoE+	Default Power (full)	0.44W	.044W - 12.95W
1	PoE and PoE+	Very Low Power	4.0W	0.44W - 3.84W
2	PoE and PoE+	Low Power	7.0W	3.84W - 6.49W
3	PoE and PoE+	Mid Power	15.4W	6.49W - 12.95W
4	PoE only	High Power	30.0W	12.95W - 25.5W

#### Why the NETGEAR PoE/PoE+ Switches are ideal for SMB

- Upgradable PoE Budget with interchangeable Power Supplies
- Small form factor and silent for quiet operation
- Plug-and-play, automatic connectivity to your router or modem
- Prioritize voice and video traffic
- · Lifetime Warranty\* plus lifetime online support and lifetime Next Business Day (NBD) replacement

## 8-port and 16-port Gigabit Ethernet Unmanaged PoE/PoE+ Switches

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## **Technical Specifications**

PRODUCT	GS108LP	GS108PP	GS116LP	GS116PP
Gigabit Ethernet RJ-45 Copper ports (10M/100M/1G) - 1000BASE-T	8		16	
PoE/PoE+ Ports	8 PoE+ ( 60.5W PoE budget)	8 PoE+ (120W PoE budget)	16 PoE+ (76W PoE budget)	16 PoE+ (183W PoE budget)
Power Supply	External Input 54V 1.25A (67.5W)	External Input 54V 2.4A (130W)	External Input 54V 1.66A (90W)	External Input 54V 3.7A (200W)
Power Supply Supported	External Input 54V 2.4A (130W) Input 54V 1.66A(90W) Input 54V 1.25A(67.5W)	External Input 54V 2.4A (130W) Input 54V 1.66A(90W) Input 54V 1.25A(67.5W)	External Input 54V 3.7A(200W) Input 54V 2.4A(130W) Input 54V 1.66A(90W)	External Input 54V 3.7A(200W) Input 54V 2.4A(130W) Input 54V 1.66A(90W)
Form Factor		Desktop/Rackmo	ount/Wall-Mount	
PRODUCT SPECIFICATIONS				
Gigabit Ports	1	8	1	6
Max MAC entries	4K			
Buffer Size	192	2KB	1MB	
Energy Efficient Enthernet (IEEE 802.3az complaint)	Yes			
POE SUPPORT				
802.3af	Port	s 1-8	Ports 1-16	
802.3at	Ports 1-8		Ports 1-16	
PoE Max Power Per Port		Up to 15.4w for 802.3a	af and 30W for 802.3at	
Total PoE Power Budget	60.5W	120W	76W	183W
PERFORMANCE SPECIFICATION				
Forwarding modes		Store-and	d-forward	
Bandwidth	160	Bbps	32Gbps	
Jumbo frame support	Yes			
Acoustic noise (ANSI-S10.12)	0 (fanless)			
Mean Time Between Failures (MTBF)	2,752,476 hours		2,088,514 hours	
QUALITY OF SERVICE (QOS)				
DSCP	Yes			
IEEE 802.1p COS	Yes			
Queue WRR Ratio	1:3:5:7:8:10:12:15 Weighted Fair Queue (WFQ)			
LEDS				
Per port	Speed, Link, Activity, PoE			
Per device Power Status, PoE Max			us, PoE Max	

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## **Technical Specifications**

PRODUCT	GS108LP	GS108PP	GS116LP	GS116PP		
IEEE STANDARDS SUPPORTED						
	• IEEE 802.3 Ethernet					
	• IEEE 802.3u 100BASE-TX					
	• IEEE 802.3ab 1000BASE-T					
	• IEEE 802.1p Class of Service					
	IEEE 802.3az Energy Efficient Ethernet (EEE)					
	• IEEE 802.3i 10BASE-T Ethernet					
	• IEEE 802.3x Flow Control					
PHYSICAL SPECIFICATIONS						
Dimensions (W x D x H)	236 x 102 x 27 mm 9.29 x 4.02 x 1.06 in		286 x 102 x 27 mm 11.26 x 4.02 x 1.06 in			
Weight	0.6 kg (1.32 lb)		0.88 kg (1.94 lb)			
POWER CONSUMPTION						
Power Supply	External Input 54V 1.25A (67.5W)	External Input 54V 2.4A (130W)	External Input 54V 1.66A (90W)	External Input 54V 3.7A (200W)		
Power Supply Supported	External Input 54V 2.4A (130W) Input 54V 1.66A(90W) Input 54V 1.25A(67.5W)	External Input 54V 2.4A (130W) Input 54V 1.66A(90W) Input 54V 1.25A(67.5W)	External Input 54V 3.7A(200W) Input 54V 2.4A(130W) Input 54V 1.66A(90W)	External Input 54V 3.7A(200W) Input 54V 2.4A(130W) Input 54V 1.66A(90W)		
Max power (worst case, all ports used, line- rate traffic) (Watts)	67.5W	130W	90W	200W		
Min power (link-down standby) (Watts)	1.0	8W	2.68W			
Heat Dissipation (max and min) (BTU/hr)	230.85 BTU/ 3.69BTU	444.6 BTU/ 3.69BTU	270.18 BTU/ 9.18BTU	680.58 BTU/ 9.14BTU		
Energy Efficient Ethernet (EEE) IEEE 802.3az	Yes					
Short cable power reduction			es			
Auto power-down	ito power-down Yes					
Fan(s)	on(s) 0 (fanless)					
ENVIRONMENTAL SPECIFICATIONS						
Operating						
Operating temperature	0° to 40°C (32° to 104°F)					
Humidity	90% maximum relative humidity (RH), non-condensing					
Altitude	10,000 ft (3,000 m) maximum					
Storage						
Storage temperature	rage temperature —20° to 70°C (– 4° to 158°F)					
Humidity 95% maximum relative humidity (RH), non-condensing						
Altitude	10,000 ft (3,000 m) maximum					

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## **Technical Specifications**

PRODUCT	GS108LP	GS108PP	GS116LP	GS116PP	
ELECTROMAGNETIC EMISSIONS AND IMMUNITY					
Certifications	47 CFR FCC Part 15, SubpartB, Class A ICES-003:2016 Issue 6, Class A ANSI C63.4:2014				
	55032:2012+AC:2013, Class A EN 55024:2010 EN 61000-3-2:2014, Class A EN 61000-3-3:2013				
	AS/NZS CISPR 32:2015, Class A				
		VCCI-CISPR 32	2:2016, Class A		
	KN 35				
CNS 13438			3438		
Electromagnetic Compliance (Class A or B)	Electromagnetic Compliance (Class A or B)  Class A				
SAFETY					
Certifications	CB. IEC 60950-1:2005(ed.2) + A1:2009 + A2:2013				
	UL/cUL Listed; UL60950-1, 2nd Ed. 2014; CAN/CSA C22.2 No. 60950-1-07, 2nd Ed. 2014				
	EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013				
	AS/NZS 60950.1:2015				
	KN 32				
	CNS 14336-1				
WARRANTY AND SUPPORT					
	ProSAFE Lifetime Warranty				
	Lifetime 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.)				

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### **Ordering Information**

PACKAGE CONTENT			
All Models	NETGEAR Gigabit Ethernet PoE+ Unmanaged Switch		
	Power adapter (localized to the country of sale)		
	Wall installation kit & Rack-mount kit		
	Quick install guide		
ORDERING INFORMATION			
GS108LP-100NAS	North America and Latin America		
GS108LP-100EUS	Europe and United Kingdom		
GS108LP-100AJS	Asia Pacific and Australia		
GS108PP-100NAS	North America and Latin America		
GS108PP-100EUS	Europe and United Kingdom		
GS108PP-100AJS	Asia Pacific and Australia		
GS116LP-100NAS	North America and Latin America		
GS116LP-100EUS	Europe and United Kingdom		
GS116LP-100AJS	Asia Pacific and Australia		
GS116PP-100NAS	North America and Latin America		
GS116PP-100EUS	Europe and United Kingdom		
GS116PP-100AJS	Asia Pacific and Australia		
OPTIONAL MODULES AND ACCESSORIES			
EPS90W	90W External Power Adapter		
EPS130W	130W External Power Adapter		
EPS200W	200W External Power Adapter		

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<sup>\*</sup> 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.

<sup>\*\*</sup> 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.