

# Power-over-Ethernet with NETGEAR®

From wireless access points to network switches, NETGEAR provides a reliable, affordable, simple PoE solution for your business.

Power-over-Ethernet (PoE) is a revolutionary technology that is quickly being adopted by devices such as VoIP phones, IP video surveillance, and wireless access points. PoE supplies not only data but also power through that same Ethernet cable, allowing for easier deployment of devices and greatly reducing electrical wiring requirements.

**\*\*NETGEAR’s exclusive FlexPoE allows you to increase the PoE budget of the switch simply by purchasing a larger Power Supply.**

PoE CLASS CHART				
PoE Class Chart	Min. power levels the PSE needs to provide	Min/Max power available to the PD <sup>2</sup>	Class Description	Powered Devices (PD)
0 <sup>1</sup>	0.44W	0.44W-12.95W	Default power (15.4W)	Any that don't specify their class
1	4.0W	0.44W-3.84W	Very low power	IP Phone
2	7.0W	3.84W-6.49W	Low power	IP Camera
3	15.4W	6.49W-12.95W	Mid power	Wireless Access Point, video phone
4 (PoE+)	30.0W	12.95W-25.50W	High power	PTZ IP camera, dual-band 11AC or 11AX Wireless AP
5/6 (PoE++)	60.0W	25.5W-51W <sup>3</sup>	Ultra high power	LED lighting, Audio Speakers, AV encoders, PTZ cameras, Wi-Fi 6 (11AX) high-end Access Points
7/8 (PoE++)	90.0W	25.5W-71W <sup>3</sup>		

PD CHART		
PD Product	Product Description	Power Consumption
GS105PE* (PD-Powered Device ONLY)	Gigabit Smart Managed Plus Switch	2W min, 6.5W max
GS108Tv2	Gigabit Smart Managed Pro Switch	8.3W
GS108Tv3	Gigabit Smart Managed Pro Switch	5.5W
GS516TP	Gigabit Smart Managed Pro Switch	10W min, 16.1W max
M4100-D12G (GSM5212)	12 x GbE + 4 Combo SFP Managed Switch	25W
WND930	Outdoor Dual-Band Wireless 11N Access Point	15.2W min, 43.8W max
WAC505	Insight Managed Smart Cloud Wireless Access Point	8.9W
WAC510	Insight Managed AC WiFi Access Point	9.3W
WAC540	Insight Managed Smart Cloud Tri-Band 4x4 Wireless Access Point	25.5W
WAC720	2 x 2 11AC Access Point	11.0W
WAC730	3 x 3 11AC Access Point	12.9W
WAC740	4 x 4 Wave 2 11AC Access Point	17.9W

www.netgear.com/poe

<sup>1</sup> Default if not specified by device

<sup>2</sup> The maximum power delivered to the device is affected by the length of the Ethernet cable between the switch and the device, which creates losses, hence the difference between the maximum power allocated for the device, and the maximum power delivered to the device.

<sup>3</sup> Extended power capability allows PD input power to reach up to 60W for Type 3 and up to 90W for Type 4 if channel length is known.

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## NETGEAR Switches with PoE/PoE+/UPoE/Ultra PoE++

Model	Ports	PoE Ports & Type	PoE Budget	PoE Auto-Balance	NETGEAR FlexPoE**
UNMANAGED SWITCHES					
FS108P	8 x FE	4	53W		
FS116P	16 x FE	8	70W		
GS305P	5 x GbE	4	55W	Yes	
GS305PP	5 x GbE	4 PoE+	83W	Yes	
GS108LP	8 x GbE	8 (PoE+)	60W** (up to 123W with EPS130W)	Yes	Yes
GS108PP	8 x GbE	8 PoE+	123W**	Yes	Yes
GS308P	8 x GbE	4	53W		
GS308PP	8 x GbE	8 (PoE+)	83W** (up to 123W with EPS130W)	Yes	Yes
GS116LP	16 x GbE	16 PoE+	76W** (up to 183W with EPS200W)	Yes	Yes
GS116PP	16 x GbE	16 PoE+	183W	Yes	Yes
GS316P	16 x GbE	16 (PoE+)	115W** (up to 183W with EPS200W)	Yes	Yes
GS316PP	16 x GbE	16 (PoE+)	183W**	Yes	Yes
GS324P	24 x GbE	16 PoE+	190W	Yes	
GS324PP	24 x GbE	24 PoE+	380W	Yes	
GS348PP	48 x GbE	24 (PoE+)	380W	Yes	
GS516PP	16 x GE	16 PoE+	260W	Yes	
GS516UP	16 x GE	16 PoE+, 8 Ultra60 PoE++	380W	Yes	
GS524PP	24 x GE	24 PoE+	300W	Yes	
GS524UP	24 x GE	24 PoE+, 16 Ultra60 PoE++	480W	Yes	
SMART MANAGED PLUS SWITCHES					
GS105PE* (PD-Powered Device ONLY - NO AC POWER)	5 x GbE	2 x PoE, 1 x PD	up to 19W with 802.3at power in, up to 7.9W with 802.3af power in	Yes	
GS108PE	8 x GbE	4	53W		
JGS516PE	16 x GbE	8	85W		
JGS524PE	24 x GbE	12	100W		
SMART MANAGED PRO / SMART CLOUD SWITCHES					
FS728TP	24 x FE + 2 x GbE + 2 x 1G combo SFP	24	192W		
GC108P	8 x GbE	8 PoE+	64W** (up to 126W with EPS130W)		Yes
GC108PP	8 x GbE	8 PoE+	126W**		Yes
GC110P	8 x GbE + 2 x 1G Dedicated SFP	8	62W		
GS110TPv3	8 x GbE + 2 x 1G Dedicated SFP	8 PoE+	55W		
GS110TPP	8 x GbE + 2 x GbE	8 PoE+	120W** (up to 190W with EPS200W)		Yes
GS110TUP	8 x GbE + 1 x GbE + 1 x 1G Dedicated SFP	4 Ultra60 PoE++, 4 PoE+	240W		
GS310TP	8 x GbE + 2 x 1G Dedicated SFP	8 PoE+	55W		
GS510TLP	8 x GbE + 2 x 1G Dedicated SFP	8 PoE+	75W		
GC510P	8 x GbE + 2 x 1G Dedicated SFP	8 PoE+	134W		
GC510PP	8 x GbE + 2 x 1G Dedicated SFP	8 PoE+	195W		
GS510TPP	8 x GbE + 2 x 1G Dedicated SFP	8 PoE+	190W		
MS510TXPP	4 x GbE + 2 x 2.5GbE + 2 x 5GbE + 1 x 10GbE + 1 x 10G Dedicated SFP+	8 PoE+	180W		
GS710TUP	8 x GbE + 1 x GbE + 1 x 1G Dedicated SFP	8 Ultra60 PoE++	480W		
GS418TPP	16 x GbE + 2 x 1G Dedicated SFP	8 PoE+	240W		
GS716TP	16 x GbE + 2 x 1G Dedicated SFP	16 PoE+	180W		
GS716TPP	16 x GbE + 2 x 1G Dedicated SFP	16 PoE+	300W		
GS324TP	24 x GbE + 2 x 1G Dedicated SFP	24 PoE+	190W		
GS724TPv2	24 x GbE + 2 x 1G Dedicated SFP	24 PoE+	190W		
GS724TPP	24 x GbE + 2 x 1G Dedicated SFP	24 PoE+	380W		
GS728TPv2	24 x GbE + 4 x 1G Dedicated SFP	24 PoE+	190W		
GS728TPPv2	24 x GbE + 4 x 1G Dedicated SFP	24 PoE+	380W		
GC728XP	24 x GbE + 2 x 1G Dedicated SFP + 2 x 10G Dedicated SFP+	24 PoE+	390W		
GS752TPv2	48 x GbE + 4 x 1G Dedicated SFP	48 PoE+	380W		
GS752TPP	48 x GbE + 4 x 1G Dedicated SFP	48 PoE+	760W		
GC752XP	48 x GbE + 2 x 1G Dedicated SFP + 2 x 10G Dedicated SFP+	48 PoE+	505W		
STACKABLE SMART MANAGED PRO SWITCHES					
S3300-28X-POE+ (GS728TXP)	24 x GbE + 2 x 10GbE + 2 x 10G Dedicated SFP+	24 PoE+	195W and up to 720W with RPS		
S3300-52X-POE+ (GS752TXP)	48 x GbE + 2 x 10GbE + 2 x 10G Dedicated SFP+	48 PoE+	390W and up to 1400W with RPS		
GS752TPSB (incl. AGC761 stacking cable)	48 x GbE + 2 x 1G combo SFP + 4 x 1G/2.5G Dedicated SFP	48 (8 PoE+)	384W		
M4200 SERIES INTELLIGENT EDGE MANAGED SWITCHES (L2+ L3 MULTI-GIGABIT)					
M4200-10MG-POE+ (GSM4210P)	8 x 2.5G + 2 x 10GBASE-T	8 (PoE+)	240W		
M4250 AV LINE MANAGED SWITCHES (L2+ L3 REVERSIBLE)					
M4250-10G2F-PoE+ (GSM4212P)	10 x GbE + 2 x 1G Dedicated SFP	8 PoE+	125W		
M4250-10G2XF-PoE+ (GSM4212PX)	10 x GbE + 2 x 10G Dedicated SFP+	8 PoE+	240W		
M4250-10G2XF-PoE++ (GSM4212UX)	10 x GbE + 2 x 10G Dedicated SFP+	8 Ultra90 PoE++	720W		
M4300 SERIES INTELLIGENT EDGE MANAGED SWITCHES (L2+ L3 STACKABLE)					
M4300-28G-POE+ (GSM4328PA)	24 x GbE + 2 x 10GBASE-T + 2 x 10GBASE-X SFP+	24 (PoE+)	480W 1 PSU (APS550W) 720W 2 PSUs		
M4300-28G-POE+ (GSM4328PB)	24 x GbE + 2 x 10GBASE-T + 2 x 10GBASE-X SFP+	24 (PoE+)	630W (110V) 720W (220V) 1 PSU (APS1000W) 720W 2 PSUs		
M4300-52G-POE+ (GSM4352PA)	48 x GbE + 2 x 10GBASE-T + 2 x 10GBASE-X SFP+	48 (PoE+)	480W 1 PSU (APS550W) 720W 2 PSUs		
M4300-52G-POE+ (GSM4352PB)	48 x GbE + 2 x 10GBASE-T + 2 x 10GBASE-X SFP+	48 (PoE+)	591W (110V) 860W (220V) 1 PSU (APS1000W) 1010W (110V) 1440W (220V) 2 PSUs		
M4300-16X (XSM4316PA)	16 x 100M/1G/2.5G/5G/10GBASE-T	16(PoE+)	199W 1 PSU (APS299W)		
M4300-16X (XSM4316PB)	16 x 100M/1G/2.5G/5G/10GBASE-T	16(PoE+)	500W 1 PSU (APS600W)		
M4300-96X (XSM4396K0)	Up to 96 x 100M/1G/2.5G/5G/10GBASE-T or SFP+; up to 24 x QSFP+	48 (PoE+)	484W (110V) 634W (220V) 1 PSU (APS1200W) 1440W (2 PSU) (APS1200W)		
RPS/EPS OPTIONS					
PRODUCT	DESCRIPTION	ORDERING SKU			
RPS4000	External / Redundant Power Supply (up to four switches - RPS or EPS mode)	RPS4000-200NES/200AJS			
APS1000W	Power Module for RPS4000	APS1000W-100NES /-100AJS			

Actual power supplied by the PoE switch may vary due to Ethernet cable length: The switch’s PoE budget requirement should be slightly higher than what the PD devices actually consume. PoE\_Poster\_30Sept20