### NETGEAR® BUSINESS



Experience the most versatile and easy to manage Advanced Smart switches in the market

As a leading provider of network equipment for SMBs, NETGEAR® understands the importance of reliable and high performance networks. With the growth of virtualization, cloud-based services and applications like VoIP, video streaming and IP surveillance, SMB networks need to extend beyond simple reliability to simpler management and remote monitoring to ensure your network is "always up". NETGEAR also understands that small business owners shouldn't have to understand networking and IT;

they need a network that's easy-to-setup and is reliable, so they can focus on their business, not their network. To that end, NETGEAR is introducing our most versatile and easy-to-manage switches ever, NETGEAR Smart Managed Pro switches with optional remote/cloud management, now with NETGEAR's exclusive FlexPoE.

Smart Managed Pro switches with optional remote/cloud management are the first switches from NETGEAR with anywhere configuration and management.

Using either the NETGEAR Insight app on your mobile device or tablet, or the Insight Cloud Portal from your PC, Mac, or tablet, you can quickly discover, setup, monitor and manage your Smart Managed Pro switches with optional remote/ cloud management from anywhere in the world! With their remote cloud manageability, sleek design silent or whisper-quiet operation, they are the most versatile switches in the market for any environment. Whether at home, out of the office or on a business trip, you can still manage and monitor your network as if you were right there.

## Innovative features for the most versatile and easy-to-manage switches in the market

#### Your network. Anytime. Anywhere.

Smart Managed Pro switches with optional remote/cloud management fundamentally change the way you think of networks and IT. Using the NETGEAR Insight app with Smart Managed Pro switches with optional remote/cloud management and Wireless Access Points provide

- Instant in-app discovery & set-up
- Local or remote configuration and monitoring from your mobile device, PC, Mac or tablet

- Centralized network configuration polices with auto-join and configure (zero-touch provisioning)
- Multi-site/remote network management and monitoring with single pane-of-glass view
- Multi-switch/multi-port concurrent configuration using the Port Config Wizard

## Remote monitoring and management from the palm of your hand!

With the NETGEAR Insight app, you can setup, manage, and monitor your networks from anywhere, anytime, from the palm of your hand on your phone or tablet! Or, for a larger screen experience, you can use the Insight Cloud Portal from your PC, Mac, or tablet web browser.

## Smart Managed Pro Gigabit Switches with optional Remote Management

## Network-centric configuration and management

NETGEAR Smart Managed Pro switches with optional remote/cloud management and Wireless Access Points using the NETGEAR Insight app allow for cross-device automated configuration of VLANs, QoS, ACLs, and LAGs. Auto-join and configure (zero-touch privisioning) allows for additional devices added seamlessly.

### Fully-integrated cloud-manageable devices

NETGEAR Smart Managed Pro switches with optional remote/cloud management are fully-integrated, cloud-manageable, plug-and-play devices. Just connect to your network and without any setup, they're passing traffic. For configuration setup, management, and monitoring, you can use the Insight mobile app on your mobile device or the Insight Cloud Portal from your PC, Mac, or tablet web browser. No additional cloud controller, appliance, network manager, or onpremise cloud server necessary

### Clean, sleek silent (or whisper-quiet) designs

Select Smart Managed Pro switches with optional remote/cloud management have a modern, clean design, with at-a-glance power/cloud and and PoE max LEDs for quick status monitoring. Additionally, on-port LEDs for link/activity and PoE power allow for port-specific connectivity monitoring. Both models are fanless for silent, anywhere deployment in noise-sensitive environments, and include a wallmount kit for flexible placement.

### Build a future-proof network with NETGEAR Smart Managed Pro switches

- Extensive L2+/L3 Lite switching features including static routing
- Comprehensive IPv6 management, QoS and ACL support, ensuring investment protection and a smooth migration to IPv6-based networking
- Advanced QoS with IPv4/IPv6 ingress traffic filtering (ACLs) and prioritization (QoS)
- Dynamic VLAN assignment for easy user authentication and location independent access to network
- Up to 126W<sup>§</sup> PoE power, with the flexibility to supply power-hungry devices such as 11ac and 11ax Wireless APs, VoIP voice and video phones, security/surveillance cameras including PTZ, and other IoT devices
- Advanced per-port PoE controls (set specific power budget per port in addition to automatic class-defined) and PoE scheduling
- Interchangeable external power adapter allows you to increase (or decrease) your PoE Budget as needed with NETGEAR FlexPoE power

#### **NETGEAR** quality and reliability

- Industry-leading 5-year Limited Hardware Warranty\*
- Minimal down-time with Next-Business-Day Replacement Warranty
- Get deployment assistance with 90-days Free Advanced Technical Support\*\*







### Outstanding power flexibility with NETGEAR's exclusive FlexPoE



Powered by the industry's first flexible PoE+ integrated technology, you can increase or decrease the PoE budget by simply purchasing a new NETGEAR FlexPoE power supply, effectively futureproofing small business networks and budgets. With NETGEAR's exclusive FlexPoE, these two switches help businesses cost effectively increase their power budget to expand their network as needed.

All ports support PoE/PoE+ up to 30W per port, which 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. And with Insight remote/cloud management, you can enable/disable/reboot PoE on a per port basis or setup PoE schedules for the most efficient energy usage as needed.

Both models have 8 copper Gigabit Ethernet PoE+ ports featuring NETGEAR FlexPoE power. The GC108P ships with a strong 64W§ of PoE budget, while the GC108PP features an astounding 126W§ of PoE power budget. Should you need more power in the future, rather than replace the entire switch, with NETGEAR FlexPoE you can just purchase the optional NETGEAR FlexPoE EPS130W Power Adapter, which will boost the PoE budget of your GC108P to the same 126W§ as the GC108PP model.

<sup>§</sup> NETGEAR FlexPoE power - interchangable external power adapter allows for increasing or decreasing your PoE budget at any time with optional NETGEAR FlexPoE power adapters.



### Hardware at a Glance

			FRONT		REAR			
Model Name	Form- Factor	LEDs (System)	LEDs (Per Port)	100M/1G Copper (RJ-45) Ports	PoE/PoE+ (802.3af/802.3at) Ports	PoE Budget (as shipped)	PA Supported & PoE Budget	Power Supply
GC108P	Desktop, Wall mount (fanless)	Power/ Cloud, PoE Max	Speed/Link/ Activity, PoE	8	8 PoE+	64W <sup>§</sup>	67.5W (64W PoE) 130W (126W PoE)	External Adapter
GC108PP	Desktop, Wall mount (fanless)	Power/ Cloud, PoE Max	Speed/Link/ Activity, PoE	8	8 PoE+	126W <sup>§</sup>	130W (126W PoE) 67.5W (64W PoE)	External Adapter



GC108P: 8-Port Gigabit Ethernet PoE+ Smart Managed Pro Switch with FlexPoE Power

- 8 x 1000BASE-T Copper PoE+ ports supporting 1G/100M speeds
- 64W§ FlexPoE power budget budget (fanless, 0dB)
- Fanless (0dB), wall mountable, Kensington lock slot



GC108PP: 8-Port Gigabit Ethernet Hi-Power PoE+ Smart Managed Pro Switch with FlexPoE Power

- 8 x 1000BASE-T Copper PoE+ ports supporting 1G/100M speeds
- 126W§ FlexPoE power budget budget (fanless, 0dB)
- Fanless (0dB), wall mountable, Kensington lock slot

<sup>§</sup> NETGEAR FlexPoE power - interchangable external power adapter allows for increasing or decreasing your PoE budget at any time with optional NETGEAR FlexPoE power adapters.



### Software at a Glance

MANAGEM	MANAGEMENT			LAYI	ER 2+ / LAYE	R 3 LITE FEATU	JRES		
Device Management	Network-wide Management	IPv4/IPv6 ACL and QoS	IPv4/IPv6 Multicast Filtering	VLANs	Auto-VoIP, Auto-Video	Convergence	Link Aggregation/ Port Trunking	Jumbo Frame Support	IPv4 Static Routing
Local web browser- based management GUI Optional NETGEAR Insight mobile app or Insight Cloud Portal for local/remote/anywhere management from your mobile device, PC, Mac, or tablet IPv4 & IPv6 management	Centralized network configuration (policies) Auto-join & configure (zero-touch provisioning) Mulit-site, multi-network single pane-of-glass view Multi-switch/ multi-port concurrent configuration	L2, L3, L4 Ingress	IGMP and MLD Snooping	Static, Dynamic, Voice, Video, MAC, Protocol- based, and Private	Yes	LLDP-MED, RADIUS, 802.1X	LACP and Manual Static LAGs (up to 8 LAGs with max 8 members)	Yes (up to 10,000 packet size)	Yes

### Performance at a Glance

Model Name	CPU & Memory	Fabric (Full- duplex)	Latency (64-byte Packet)	Packet Buffer	Packet Forwarding Rate (64-byte)	ACLs	MAC Address Table ARP/NDP Table VLANs	Static Routes (IPv4)	Priority Qeues	Mul- ticast IGMP Groups
GC108P GC108PP	500MHz Single Core, 128MB RAM, 32MB SPI FLASH	16Gbps line-rate	3.460 µs	512 KB	11.9 Mfps	100 (shared)	8K MAC (dynamic) 512 ARP / 512 NDP 64 VLANs	32	8 (WRR)	256

# Smart Managed Pro Gigabit Switches with optional Remote Management

### Features and Benefits

Hardware Features	
Fully-integrated Cloud-manageable Devices	Require no additional hardware (cloud keys, network portals, local servers, VPN or proxy appliances etc) to directly connect to the cloud and allow remote management. No additional hardware, no software or server to setup; nothing. Just connect and go.
1000BASE-T Copper Ethernet PoE+ ports	Support high-density VoIP, Surveillance and Wi-Fi AP deployments, scalable for future growth. Never face the risk of running out of PoE ports or PoE power budget.
NETGEAR FlexPoE Power	Interchangeable external power adapter allows you to increase (or decrease) your PoE budget as needed by purchasing an optional NETGEAR FlexPoE power adapter.
Power/Cloud LED	Quickly confirm switch has power and is connected to the cloud/internet.
Fanless & Silent	Fanless design for silent operation; great for deployment in noise-sensitive environments.
Energy Efficient Ethernet (IEEE 802.3az)	Maximum power reduction for ongoing operation cost savings.
Desktop or Wall mount	Flexible deployment on desktop, wall or other location using 75mm VESA-compliant mounts, and the included wall mount kit.
Kensington Lock Slot	Prevent theft, removal, or tampering when used for desktop deployment.
Software Features	
Remote setup, management, and monitoring anywhere, anytime, from your mobile device, PC, Mac, or tablet	Locally or remotely setup, configure, manage, monitor or even trouble- shoot your network from anywhere, anytime. Check network status, view dashboards for network health and activity, power cycle PoE ports, etc, and update firmware remotely. No need to be on-site, open up ports to your network, or VPN into it.
Auto-join and Configure (Zero-Touch Provisioning)	Additional Insight Managed devices added to the network automatically inherit settings and configuration.
Multi-site, Multi-network Single Pane-of-Glass View	View and configure multiple networks across multiple sites, all from one single app; NETGEAR Insight.
Comprehensive IPv6 Support for Management, ACLs and QoS	Build current network with future in mind. Ensure investment protection and a smooth migration to an IPv6-based network without switch replacement.
IPv4 Static Routing	A simple way to provide segmentation of the network with internal routing through the switch - reserving the router for external traffic routing only, making the entire network more efficient.
Robust security features:  • 802.1x authentication (EAP)  • Port-based security by locked MAC  • ACL filtering to permit or deny traffic based on MAC and IP addresses	Build a secured, converged network with all types of traffic by preventing external attacks and blocking malware while allowing secure access for authorized users.
Comprehensive QoS features:  • Port-based or VLAN 802.1p-based prioritization  • Layer 3-based (DSCP) prioritization  • Port-based egress rate limiting	Advanced controls for optimized network performance and better delivery of mission-critical traffic such as voice and video.



## Data Sheet | GC108P, GC108PP

# Smart Managed Pro Gigabit Switches with optional Remote Management

Software Features (continued)	
Auto-VoIP, Auto-Voice VLAN, and Auto-Video VLAN	Automatic Voice over IP prioritization (Auto-VoIP) simplifies most complex multi-vendor IP telephone deployments either based on protocols (SIP, H.323 and SCCP) or on OUI bytes (default database and user-based OUIs) in the phone source MAC address, providing the best class of service to VoIP streams (both data and signaling) over other ordinary traffic by classifying traffic, and enabling correct egress queue configuration. Similarly, Auto-Video VLAN enables IGMP snooping to minimize broadcast streams.
IGMP Snooping and MLD Snooping	Facilitate fast receiver joins and leaves for multicast streams. Save cost and improve network efficiency by ensuring multicast traffic only reaches designated receivers without the need of an extra multicast router.
Protected Ports	Ensure no exchange of unicast, broadcast, or multicast traffic between the protected ports on the switch, thereby improving the security of your converged network. This allows your sensitive phone phone conversations to stay private and your surveillance video clips can be forwarded to their designated storage device without leakage or alteration.
DHCP Snooping	Ensure IP address allocation integrity by only allowing DHCP messages from trusted DHCP servers and dropping malformed DHCP messages with a port or MAC address mismatch.
Dynamic VLAN Assignment (RADIUS)	IP phones and PCs can authenticate on the same port but under different VLAN assignment policies. Users are free to move around and enjoy the same level of network access regardless of their physical location on the network.
Private VLAN	Private VLANs help reduce broadcast with added security.
Port Trunking/Link Aggregation (LACP)	Build up bigger bandwidth to support aggregated uplink/downlink traffic or to provide redundant link(s). Aggregate up to 8 ports for 8Gbps connections.
Loop Prevention and Auto-DoS Prevention	Detect and prevent (auto port shutdown) accidental network loops and protect against DoS attacks.
PoE Timer and Scheduling	Allows IT administrators to increase network security, better utilize network resources and conserve energy by scheduling or remotely controlling on/ off of PoE ports.
Port Mirroring and Cable Test	Many-to-one port mirroring for better and quicker network diagnostics and troubleshooting. Cable test easily identifies bad Ethernet cables.
Firmware Updates from Cloud	Direct cloud-to-device firmware updates, initiated and/or scheduled using the Insight app, all from the palm of your hand, anytime, anywhere!
Multiple Language Local GUI	Product documentation and local-only web user interfaces are translated, giving you the ability to select your preferred language <sup>‡</sup> .

<sup>&</sup>lt;sup>‡</sup>English, German, and Japanese are the current supported languages in the local-only web GUI. The Insight mobile app and Insight Cloud Portal support local languages per the device used (phone or computer browser).



## Why Smart Managed Pro switches with optional remote/cloud management?

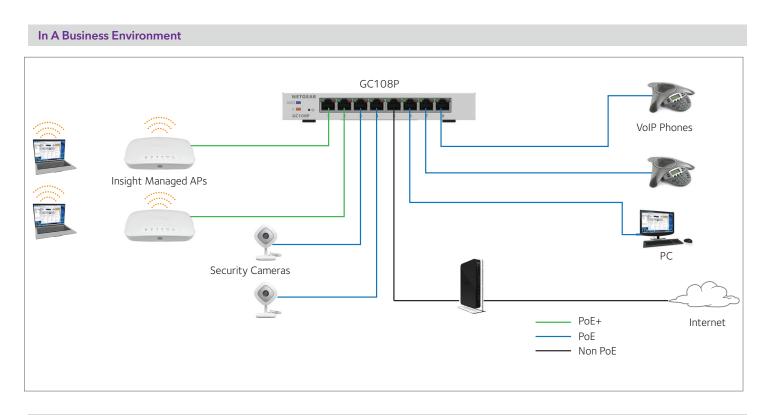
NETGEAR is revolutionizing unified, centralized network management with it's new line of Smart Managed Pro switches with optional remote/cloud management and Wireless Access Points, all managed from the palm of your hand, anytime, anywhere, on your phone or tablet using the NETGEAR Insight mobile app. Or, for a larger screen experience, from your PC, Mac, or tablet web browser using the Insight Cloud Portal.

- Ideal for SMBs, offices, retail stores, education, healthcare, owner-operated businesses, etc.
- IT expert or no networking experience at all: Smart Managed Pro switches with optional remote/cloud management let you focus on your business, not maintaining your network.
- Know immediately if and when your network is not running perfectly; not after you've already lost business or suffered significant down-time.
- Advanced L2+/L3 Lite network features such as IPv4/IPv6 management, VLANs, DiffServ QoS, LACP Link Aggregation,
   Spanning Tree, Static Routing, advanced per-port PoE controls and PoE scheduling will satisfy even the most advanced small business networks.
- Fundamentally change and simplify network usability for easier and smoother deployment of voice, video, and WLAN on the same converged platform.
- Industry-leading 5-year warranty on switches, 5-year Next-Business-Day (NBD) replacement, and 90-days free technical support\*\* for peace-of-mind.

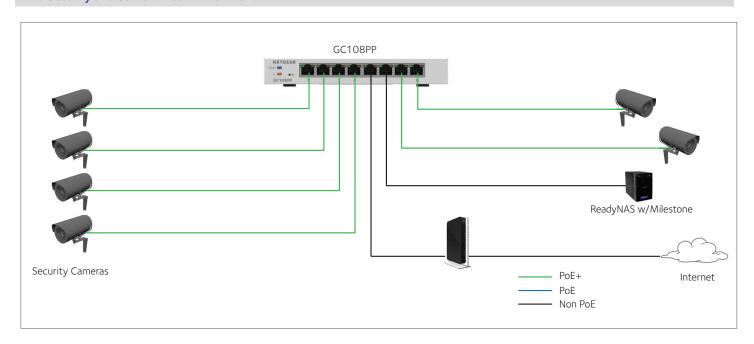
Within small and medium-sized organizations, there is growing adoption of PoE devices such as VoIP phones, IP security cameras, wireless access points, proximity sensors, LED lighting, door locks, and other IoT devices that require network switches capable of supporting dense PoE installations. Wireless access points and pan-tilt-zoom HD cameras using Wave 2 802.11ac Wi-Fi also require PoE+ power (802.3at), increasing the power demands on PoE switches. Therefore, PoE-capable versions (GC110P, GC510PP) are designed with PoE power budgets to meet the current and future needs of wireless converged networks.



### **Example Application**



#### In a Security and Surveillance Environment





### PoE/PoE+ Classes and Power

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 802.3af)	0.44 W	0.44 - 12.95 W
1	PoE and PoE+	Very low power	4.0 W	0.44 - 3.84 W
2	PoE and PoE+	Low power	7.0 W	3.84 - 6.49 W
3	PoE and PoE+	Mid Power	15.4 W	6.49 - 12.95 W
4	PoE+ only	High Power (full 802.3at)	30.0 W	12.95 - 25.5 W

### **Accessory Power Adapters**

With NETGEAR's exclusive FlexPoE Power, you can increase (or decrease) your PoE budget anytime by simply upgrading your switch's power adapter, without having to purchase a new switch.

If you only need a lower power budget now, you can use the GC108P with it's strong  $64W^{\S}$  of future-proof PoE budget. And then if you need more power later, just upgrade your power adapter with a new EPS130W FlexPoE power adapter from NETGEAR. Your switch will then have the same 126W§ of PoE power budget as the GC108PP.

If you have many power-hungry devices and need a high PoE budget now, you can choose the GC108PP with it's astounding  $126W^{5}$ of PoE power. This unique combination from NETGEAR Business makes these switches the most adaptive and flexible PoE switches anywhere.



Large screen access via Insight Cloud Portal







My NETGEAR Devices ▽ AP1 - North AE:BE:1C:AE:BE:1C 192.522.1.2 MySwitch1 AE:BE:1C:AE:BE:1C 192.235.23.12 MySwitch3 192 235 23 12 Cuppa Joe Coffee AP1 - North MySwitch2 AE:BE:1C:AE:BE:1C 192.235.23.12

Port configuration and monitoring

Network dashboard

Single pane-of-glass view of multiple networks/locations





# Smart Managed Pro Gigabit Switches with optional Remote Management

Technical Specifications	GC108P	GC108PP
Gigabit Ethernet RJ-45 Copper ports (10M/100M/1G) - 1000BASE-T		8
PoE/PoE+ ports	8 PoE+ (64W§ FlexPoE budget)	8 PoE+ (126W§ FlexPoE budget)
Gigabit SFP (fiber) ports (100M/1G) - 1000BASE-X		NA
Power Supply	External Input: 54V/1.25A	External Input: 54V/2.4A
Kensington Lock	Yes	s (rear)
LEDs		
Front (per device)	Power/Cloud/Interne	et Connection, PoE Max
Front (per port)	Speed/Link/Activity	(left), PoE Power (right)
Unified Network Management (Discovery, Setup	o, Monitoring, And Management)	
Discovery, setup, monitoring and management	NETGEAR Insight mobile app on phone Mac, or tablet web browser	e or tablet; Insight Cloud Portal from PC,
Remote/Cloud management	Anywhere, anytime, from the palm of yo any PC, Mac, or tablet web browser usin	our hand using Insight mobile app or from ng the Insight Cloud Portal
Centralized network configuration (policies)	Centralized network configuration (polic Wireless Access Points, and Business-cla for VLANs, ACLs, QoS, and LAGs	
Device auto-join and configure (zero-touch provisioning)	Additional Insight Managed devices add to the network automatically inherit the	
Multi-site, multi-network single pane-of-glass view	Manage multiple sites, locations, and ne mobile app or Insight Cloud Portal	etworks in a single view using the Insight
Multi-switch, multi-port concurrent configuration for ACLs, VLANs, QoS, PoE, etc	Apply settings and policies on multiple all at the same time using the Port Confi	
Performance Specification		
CPU	500MHz Single Core, 128	BMB RAM,, 32MB SPI FLASH
Packet buffer memory (Dynamically shared across only used ports)	5′	12KB
Forwarding modes	Store-ar	nd-forward
Bandwidth (non-blocking, full duplex)	16	Gbps
Priority queues		8
Priority queuing	Weighted Round Robi	n (WRR) and Strict Priority
MAC Address database size (48-bit MAC addresses)	8K (d	lynamic)
Multicast Groups	,	256
Number of IPv4 static routes		32
Number of IPv6 static routes	1	V/A
Number of ARP/NDP cache entries	512 ARF	P / 512 NDP
Number of VLANs		64
Number of DHCP snooping bindings	2	256



Performance Specification	GC108P	GC108PP
Access Control Lists (ACLs)	100 shared for MAC, I	P and IPv6 ACLs
Packet forwarding rate (64 byte packet size) (Mfps or Mpps)	11.9	
1G Copper latency (µsec) (64-byte; 1518-byte; 9216-byte frames)	64-byte: 3.46 1518-bye: 3.3 9216-byte: 3.5	60 µsec
1G SFP Fiber latency (μsec) (64-byte; 1518-byte; 9216-byte frames)	N/A	
Jumbo frame support	Up to 10,000 p	acket size
Acoustic noise level @ 25° C (dBA) (ANSI-S10.12)	0 dBA (fan	less)
Mean Time Between Failures (MTBF) @ 25° C	2,635,395 hrs	(301 yrs)
POE Configuration		
Number of PoE (802.3af) / PoE+ (802.3at) ports	8 PoE+	-
Total PoE power budget (watts) - NETGEAR FlexPoE	64W§ FlexPoE	126W§ FlexPoE
Advanced per-port PoE controls (enable/disable/power limit)	Yes	
Advanced per-port PoE scheduling/timers	Yes	
L2 Services - VLANS		
IEEE 802.1Q VLAN Tagging	Yes	
IP-based VLANs	Yes	
MAC-based VLANs	Yes	
Auto-VoIP VLAN / Auto-Voice VLAN	Yes, based on OUI bytes (default database a source MAC address	nd user-based OUIs) in the phone
Auto-VoIP	Yes, based on protocols (SIP, H.323 and SCC	CP). Prioritzes traffic to a higher queue.
Voice VLAN	Yes, based on either VLAN ID or 802.1p prio necting VoIP phone using LLDP-MED.	rity, packets are passed onto the con-
Auto-Video VLAN	Yes	
Private VLAN	Yes	
L2 Services - Availability		
Broadcast, multicast, unknown unicast storm control	Yes	
IEEE 802.3ad - LAGs (LACP)	Yes	
IEEE 802.3x (full duplex and flow control)	Yes	
IEEE 802.1D Spanning Tree Protocol	Yes	
IEEE 802.1w Rapid Spanning Tree Protocol	Yes	
IEEE 802.1s Multiple Spanning Tree Protocol	Yes	
Layer 2 DHCP Relay	No	



L2 Services - Multicast Filtering	GC108P	GC108PP
IGMP snooping (v1, v2 and v3)		Yes
MLD snooping support (v1 and v2)		Yes
IGMP snooping queries		Yes
Block unknown multicast		No
Multicast VLAN Registration (MVR)		Yes
Multicast groups		256
L3 Services - DHCP		
DHCP client		Yes
DHCP snooping		Yes
Number of DHCP snooping bindings		256
L3 Services - Routing		
IPv4 static routes		32
IPv6 static routes		N/A
VLAN routing		Yes
Host ARP table / NDP cache (number of entries)	512	ARP / 512 NDP
ICMP Router Discovery Protocol (IRDP)		Yes
Number of IP VLAN interfaces (routed VLANs)		15
Link Aggregation		
IEEE 802.3ad - LAGs (LACP)		Yes
Manual Static LAG		Yes
# of Static or LACP LAGs # of members in each LAG	8 LAGs with m	ax 8 members in each LAG
Network Monitoring and Discovery Services		
802.1ab LLDP		Yes
LLDP-MED		Yes
SNMP		v1, v2c, v3
RMON group 1,2,3,9		Yes
Network Security		
IEEE 802.1x		Yes
Guest VLAN		Yes
RADIUS-based VLAN assignment via .1x		Yes
MAC-based .1x		Yes
RADIUS accounting		Yes



Network Security	GC108P GC108PP
Access Control Lists (ACLs)	L2/L3/L4
IP-based ACLs (IPv4 and IPv6)	Yes
MAC-based ACLs	Yes
TCP/UPD-based ACLs	Yes
MAC lockdown	Yes
MAC lockdown by the number of MACs	Yes
Control MAC # Dynamic learned entries (per port)	4096
Control MAC # static entries (per port)	48
IEEE 802.1x RADIUS port access authentication/type	Yes (EAP)
Port-based security by locked MAC addresses	Yes
Dynamic ARP inspection	No
Broadcast, multicast, unknown unicast storm control	Yes
DoS attacks prevention	Yes
Protected ports	Yes
Quality of Service	
Port-based rate limiting	Yes, egress
Port-based QoS	Yes
Support for IPv6 fields	Yes
DiffServ QoS	Yes, ingress
IEEE 802.1p COS	Yes
Destination MAC and IP	Yes
IPv4 and v6 DSCP	Yes
IPv4 and IPv6 ToS	IPv4 only
TCP/UDP-based	Yes
Weighted Round Robin (WRR)	Yes
Strict priority queue technology	Yes
Auto-VoIP VLAN / Auto-Voice VLAN	Yes, based on OUI bytes (default database and user-based OUIs) in the phone source MAC address
Auto-VoIP	Yes, based on protocols (SIP, H.323 and SCCP). Prioritzes traffic to a higher queue.
Voice VLAN	Yes, based on either VLAN ID or 802.1p priority, packets are passed onto the connecting VoIP phone using LLDP-MED.
Auto-Video VLAN	Yes



Other Features	GC108P	GC108PP
Advanced per-port PoE controls (enable/disable/power limit)	Yes	
Advanced per-port PoE scheduling	Yes	
Loop detection & prevention	Yes (both)	
DNS Client	Yes	
Option to enable/disable BPDU flooding when STP is disabled	Yes	
Option to enable/disable the flooding of EAPOL when 802.1x is disabled	Yes	

#### **IEEE Network Protocols**

- IEEE 802.3 Ethernet
- IEEE 802.3u 100BASE-T
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3af PoE
- IEEE 802.3at PoE+
- IEEE 802.3ad Trunking (LACP)
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- IEEE 802.3x Full-Duplex Flow Control
- IEEE 802.1Q VLAN Tagging
- IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED)
- IEEE 802.1p Class of Service
- IEEE 802.1D Spanning Tree (STP)
- IEEE 802.1s Multiple Spanning Tree (MSTP)
- IEEE 802.1w Rapid Spanning Tree (RSTP)
- IEEE 802.1x RADIUS Network Access Control

Management, Monitoring & Troubleshooting	
Cloud/Remote management	Yes
Insight mobile app & Insight Cloud Portal management	Yes
uPnP Discovery	Yes
Bonjour Discovery	Yes
Networking monitoring	Yes
Data/performance logs	Yes
Centralized network configuration/policies (network-centric management)	Yes
Device auto-join and configure (zero-touch provisioning)	Yes
Multi-site, multi-network single pane-of-glass view	Yes
Multi-switch, multi-port concurrent configuration	Yes
Network/global password (for all Insight Managed devices on a network)	Yes (per network/subnet via NETGEAR Insight mobile app and Insight Cloud Portal)
Password management	Yes
IP Access List	Yes
Configurable management VLAN	Yes
Admin access control via RADIUS and TACACS+	Yes



Management, Monitoring & Troubleshooting	GC108P		GC108PP
IPv6 management		Yes	
SNTP client over UDP port 123		Yes	
Firmware upgrade direct from Cloud (via mobile device or Insight Cloud portal)		Yes	
SNMP v1/v2c		Yes	
SNMP v3 with multiple IP addresses		Yes	
RMON group 1,2,3,9		Yes	
Port mirroring		Yes	
Many-to-one port mirroring		Yes	
Cable test utility		Yes	
Ping and tracerout client		Yes	
Local-only web browser-based management GUI with multiple language support <sup>‡</sup>		Yes	
SSL/HTTPS Web-based access (version)		No	
TLS Web-based access (version)		Yes (v1.0)	
TFTP/HTTP firmware upload/download		Yes	
Dual software (firmware) image		Yes	
Memory and flash log		Yes	
Syslog (RFC 3164)		Yes	
Power Consumption			
Max power (worst case, all ports used, full PoE, line-rate traffic) (Watts)	4.9 W		4.9 W
Max power (worst case, all ports used, full PoE, line-rate traffic) (Watts)	66.7 W		128.4 W
Min power (link-down standby) (Watts)	3.1 W		3.1 W
Heat Dissipation (min w/o PoE and max with full PoE) (BTU/hr)	Min: 10.70 BTU/hr Max: 228.11 BTU/hr		Min: 10.70 BTU/hr Max: 439.13 BTU/hr
Energy Efficient Ethernet (EEE) IEEE 802.3az		Yes (deactivated by default)	
Auto power down		Yes (deactivated by default)	
Physical Specifications			
Dimensions (W x D x H)	188 x 110 x 27 mm (7.4 x 4.3 x 1.1 in)		
Weight	0.52 kg (1.14 lb)		
Mounting options	Desk	top, wall mount, VESA-standard (	(75mm)



### Data Sheet | GC108P, GC108PP

# Smart Managed Pro Gigabit Switches with optional Remote Management

Operating Operating Temperature Humidity Altitude Storage Storage Temperature Humidity (relative)	Switch: 0° to 45°C (32° to 113°F) External Power Adapter: 0° to 40°C (32° to 104°F) 90% maximum relative humidity (RH), non-condensing 10,000 ft (3,000 m) maximum  -20° to 70°C (-4° to 158°F)			
Humidity Altitude Storage Storage Temperature	External Power Adapter: 0° to 40°C (32° to 104°F) 90% maximum relative humidity (RH), non-condensing 10,000 ft (3,000 m) maximum  -20° to 70°C (-4° to 158°F)			
Altitude Storage Storage Temperature	10,000 ft (3,000 m) maximum  -20° to 70°C (-4° to 158°F)			
Storage Storage Temperature	-20° to 70°C (- 4° to 158°F)			
Storage Temperature				
· .				
Humidity (relative)	05% maximum rolative humidity (DLI) non condensing	-20° to 70°C (- 4° to 158°F)		
Tarriary (Forasiro)	95% maximum relative humidity (RH), non-condensing			
Altitude	10,000 ft (3,000 m) maximum			
Electromagnetic Emissions and Immunity Certification	ns			
Certifications	CE Mark, Commercial EN55032:2015+AC:2016, Class A CISPR 32:2015, Class A EN55024:2010+A1:2015 EN61000-3-2:2014, Class A EN61000-3-3:2013 VCCI-CISPR 32:2016, Class A RCM, AS/NZS CISPR 32:2015 Class A 47 CFR FCC Part 15, Subpart B, Class A ANSI C63.4:2014 ICES-003:2016 Issue 6, Class A BSMI CNS 13438, Class A KCC KN32 / KN35 GB4943.1-2011, YD/T993-1998, GB/T9254-2008, Class A	4		
Safety Certifications				
Certifications	CB Mark, Commercial IEC 60950-1:2005 (ed.2) + Am 1:2009 + Am 2:2013 UL 60950-1, 2nd, 2014 and CAN/CSA C22.2 No. 60950-1-07, 2r EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2: RCM, AS/NZS 60950.1:2015 BSMI CNS14336-1 GB4943.1-2011, YD/T993-1998, GB/T9254-2008, Class A	2013		
Narranty and Support				
Hardware Limited* Warranty	5 years (switch) 2 years (power adapter)			
Next-Business-Day (NBD) Replacement	5 years			
Fechnical support (online, phone)	90 days free from date of purchase*			
ProSUPPORT OnCall 24x7 Service Packs**	PMB0S12 (1 yr) PMB0S32 (3 yrs) PMB0S52 (5 yrs)			



Package Contents	
All models	NETGEAR Insight Managed 8-Port Gigabit Ethernet PoE+ Smart Cloud Switch with FlexPoE Power Rubber footpads for tabletop installation Wall mount kit (with 75mm VESA standard pattern) Category 5e flat Ethernet cable Quick Installation guide DC power adapter (power cord localized to country of sale)
Ordering Information	
GC108P-100NAS	North America and Latin America
GC108P-100PES	Europe
GC108P-100UKS	United Kingdom
GC108P-100AUS	Australia
GC108P-100JPS	Japan and Asia Pacific
GC108P-100PRS	China
GC108PP-100NAS	North America and Latin America
GC108PP-100PES	Europe
GC108PP-100UKS	United Kingdom
GC108PP-100AUS	Australia
GC108PP-100JPS	Japan and Asia Pacific
GC108PP-100PRS	China
Optional Accessories	
EPS130W-100xxx	130W FlexPoE External Power Adapter (power cable localized to country of sale)
Extended Support Contracts	
PMB0S12-10000S	1-Year OnCall 24x7 Service Pack**
PMB0S32-10000S	3-Year OnCall 24x7 Service Pack**
PMB0S52-10000S	5-Year OnCall 24x7 Service Pack**

<sup>§</sup>NETGEAR FlexPoE power - interchangable external power adapter allows for increasing or decreasing your PoE budget at any time with optional NETGEAR FlexPoE power adapters.

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<sup>‡</sup>English, German, and Japanese are the current supported languages in the local-only web GUI. The Insight mobile app and Insight Cloud Portal support local languages per the device used (phone or computer browser).

<sup>\*</sup>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 using the Insight mobile app or Insight Cloud portal within 90 days of purchase; see https://www.netgear.com/about/warranty for details. Intended for indoor use only.

 $<sup>{}^{\</sup>star\star}\text{The NETGEAR On Call 24x7 contract provides unlimited phone, chat and email technical support for your networking product.}$