



Control and Configure Beyond Plug-and-Play Connectivity

Today's growing businesses rely more on their network to carry out mission-critical business activities. Deployment of VoIP and IP surveillance needs the network intelligence to separate the voice and video traffic from data, and prioritize them accordingly. However, companies do not necessarily have more money or advanced training to deal with complex managed switches.

NETGEAR® Smart Managed Plus Switches meet this growing need by providing fundamental network features such as VLANs, QoS, and IGMP Snooping that will help optimize the performance of business networks. Smart Managed Plus Switches come in a variety of configurations ranging from 5 port desktop to 48 port rack mount.

Some models support Power-over-Ethernet (PoE) and can power devices such as IP phones, IP surveillance cameras and wireless access points with just an Ethernet cable; perfect for low cost PoE deployments. Smart Managed Plus Switches are the perfect upgrade from the plug-and-play unmanaged switch, delivering essential networking features at a very affordable price.

Highlights

- Enable network configuration and management at the price point of Unmanaged Switches
- Gigabit connection delivers up to 2000 Mbps of dedicated, non-blocking bandwidth per port
- Simple, yet useful network set-up on top of plug-and-play connectivity
- Flexible management via easy-to-use web browser-based management GUI or using the PC-based Utility application
- Web Interface with multiple language option₁
- VLAN support for traffic segmentation
- Quality of Service (QoS) for traffic prioritization
- Auto "denial-of-service" (DoS) prevention
- Troubleshoot connection issues via cable test
- Loop detection and broadcast storm controls
- IGMP snooping v1, v2 and v3 support for multicast optimization
- Rate limiting for better bandwidth allocation
- Port mirroring for network monitoring
- Link aggregation/port trunking for bigger uplink bandwidth (16-port and 24-port models support static manual LAGs only; GS750E supports static manual LAGs and LACP)
- Jumbo frame support
- Energy Efficient Ethernet (IEEE 802.3az) support for maximum power savings
- *Limited Lifetime Hardware Warranty (excludes external power adapters on applicable models)
- Lifetime 24/7 Chat Technical Support*
- Next-Business-Day Hardware Replacement*



Hardware at a Glance

		FRONT		REAR	INTERNAL
Model Name	Form-Factor	10/100/1000 Base-T RJ45 ports	PoE 802.3af Ports	Power Supply	PoE budget
GS105Ev2	Desktop	5	N/A	External Power Adapter	N/A
GS105PE	Desktop	5	2	NO POWER SUPPLY - must be powered from another PoE device	PoE pass-thru: 19W with 802.3at/7.9W with 802.3af input power
GS108Ev3	Desktop	8	N/A	External Power Adapter	N/A
GS108PEv3	Desktop	8	4	External Power Adapter	53W
GS116Ev2	Desktop	16	N/A	External Power Adapter	N/A
JGS516PE	Rack mount	16	8	Internal	85W
JGS524Ev2	Rack mount	24	N/A	Internal	N/A
JGS524PE	Rack mount	24	12	Internal	100W
GS750E	Rack mount	48 Copper and 2 SFP	N/A	Internal	N/A

Software at a Glance

Management	IP Multicast filtering	IEEE 802.3az Auto-EEE	VLANs	QoS	Port Trunking ²	Rate Limiting	Jumbo Frame Support
PC Utility Tool Web GUI	IGMP Snooping v1, v2 and v3	Yes	Port-based, IEEE 802.1Q-based VLANs	Port-based, IEEE 802.1p-based	16-ports and larger	Yes	Yes

²GS116Ev2, JGS516PE, JGS524Ev2, and JGS524PE support static manual LAGs only. GS750E supports static manual LAGs and LACP.

Features and Benefits

Hardware Features	
All Gigabit models	Making Smart Managed Plus Switch an ideal upgrade for SMB network combining management capability with higher speed and better performance
PoE offerings in Smart Managed Plus Switches	With half of the ports capable of supporting PoE, these PoE Smart Managed Plus models are the most cost-efficient Gigabit Ethernet solution for converged networks where PoE support is needed, but isn't necessary on all ports
Desktop and rack mount ^{††}	Flexible deployment for either desktop placement, undertable mount, wall mount as well as rack mount
Software Features	
VLAN	Segment network into smaller groups for more secure and efficient use of network resources
QoS	For optimized network performance and better delivery of mission-critical traffic such as voice and video
IGMP Snooping	For improved network efficiency on delivering multicast traffic
Link Aggregation/Port Trunking [‡]	Build up bigger bandwidth to support aggregated uplink traffic (16-port and larger models only)
Port Mirroring	For better and quicker network diagnostics and troubleshooting
Cable Test	Easily identify bad Ethernet cables
Multiple Language GUI	Product documentation and user interfaces are translated, giving you the ability to select your preferred language (English, German, and Japanese) [‡]

[†] Option only available on the GS108Ev3, GS108PEv3, GS116Ev2, GS750E, JGS516PE, JGS524Ev2, JGS524PE, GS105Ev2 and GS105PE. English, German, and Japanese are the current supported languages.

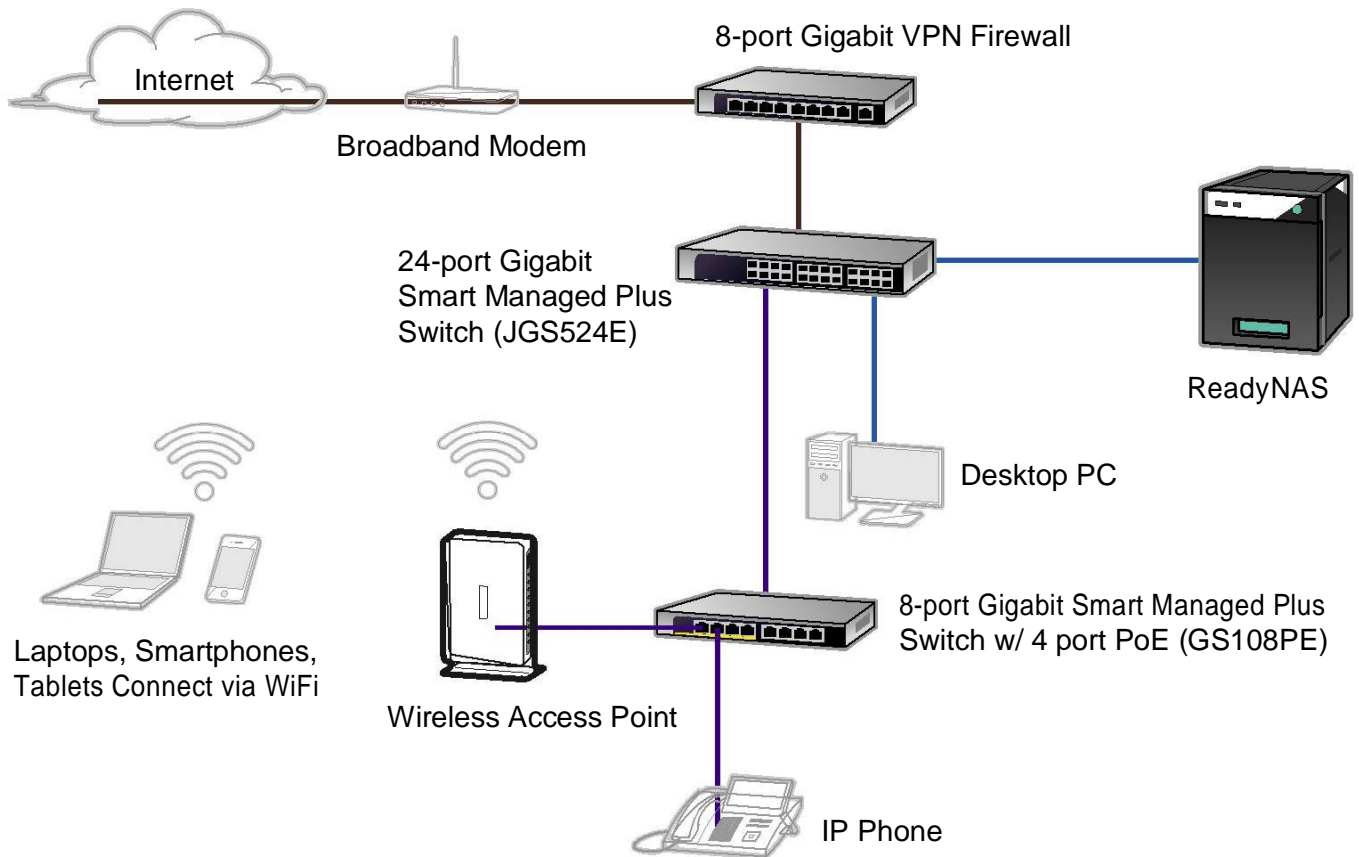
[‡] GS116Ev2, JGS516PE, JGS524Ev2, and JGS524PE support static manual LAGs only. GS750E supports static manual LAGs and LACP.

SMB Network Application

Key

VLAN 1 

VLAN 2 



Why the NETGEAR Gigabit Smart Managed Plus Switch is the ideal upgrade from Unmanaged Switches for SMB networks:

- Configurable with simple set-up
- Build multiple user groups
- Prioritize voice and video traffic
- Monitor and troubleshoot

Gigabit Ethernet Smart Managed Plus Switches

Technical Specifications	GS105Ev2	GS105PE	GS108Ev3	GS108PEv3	GS116Ev2	JGS516PE	JGS524Ev2	JGS524PE	GS750E
Gigabit ports	5	5	8	8	16	16	24	24	48
Fiber ports	0	0	0	0	0	0	0	0	2 SFP
# of PoE ports	N/A	2	N/A	4	N/A	8	N/A	12	N/A
Total PoE power budget (watts)	N/A	PoE pass-thru: 19W with 802.3at/ 7.9W with 802.3af input power	N/A	53	N/A	85	N/A	100	N/A
Max MAC entries	2K	2K	4K	4K	16K	16K	16K	16K	16K
Buffer size	128KB	128KB	192KB	192KB	768KB	768KB	768KB	768KB	1.5MB
Energy Efficient Ethernet (IEEE 802.3az) compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Performance Specification									
Forwarding modes	Store-and-forward								
Bandwidth	10Gbps	10Gbps	16Gbps	16Gbps	32Gbps	32Gbps	48Gbps	48Gbps	100Gbps
Priority queuing	Weighted Round Robin (WRR)								
Jumbo frame support	Up to 9K packet size	Up to 9K packet size	Up to 9720 bytes	Up to 9720 bytes	Up to 9K packet size	Up to 9K packet size	Up to 9K packet size	Up to 9K packet size	Up to 9K packet size
Acoustic noise (dB) (ANSI-S10.12)	0	0	0	0	0	24.5	0	24.4	0
Mean Time Between Failures (MTBF) (hrs)	2,531,294	1,685,972	2,525,259	1,242,394	504,993	840,354	243,476	643,506	1,055,076
L2 Services - VLANs									
VLAN (# Supported)	64	64	32	32	100	100	100	100	4000
IEEE 802.1Q VLAN Tagging	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Port-based VLAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
L2 Services - Availability									
Link Aggregation/ Port Trunking ²	No	No	No	No	Static Manual LAGs only	Static Manual LAGs only	Static Manual LAGs only	Static Manual LAGs only	Static and LACP
Number of Static Manual LAGs and # of members	N/A	N/A	N/A	N/A	8 LAGs and 2 to 4 members	8 LAGs and 2 to 4 members	8 LAGs and 2 to 4 members	8 LAGs and 2 to 4 members	8 LAGs and 2 to 8 members
L2 Services - Multicast Filtering									
IGMP Snooping (v1, v2 and v3)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Block unknown Multicast	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supported Multicast groups	128	128	128	128	64	64	64	64	128
L3 Services - DHCP									
DHCP client	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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