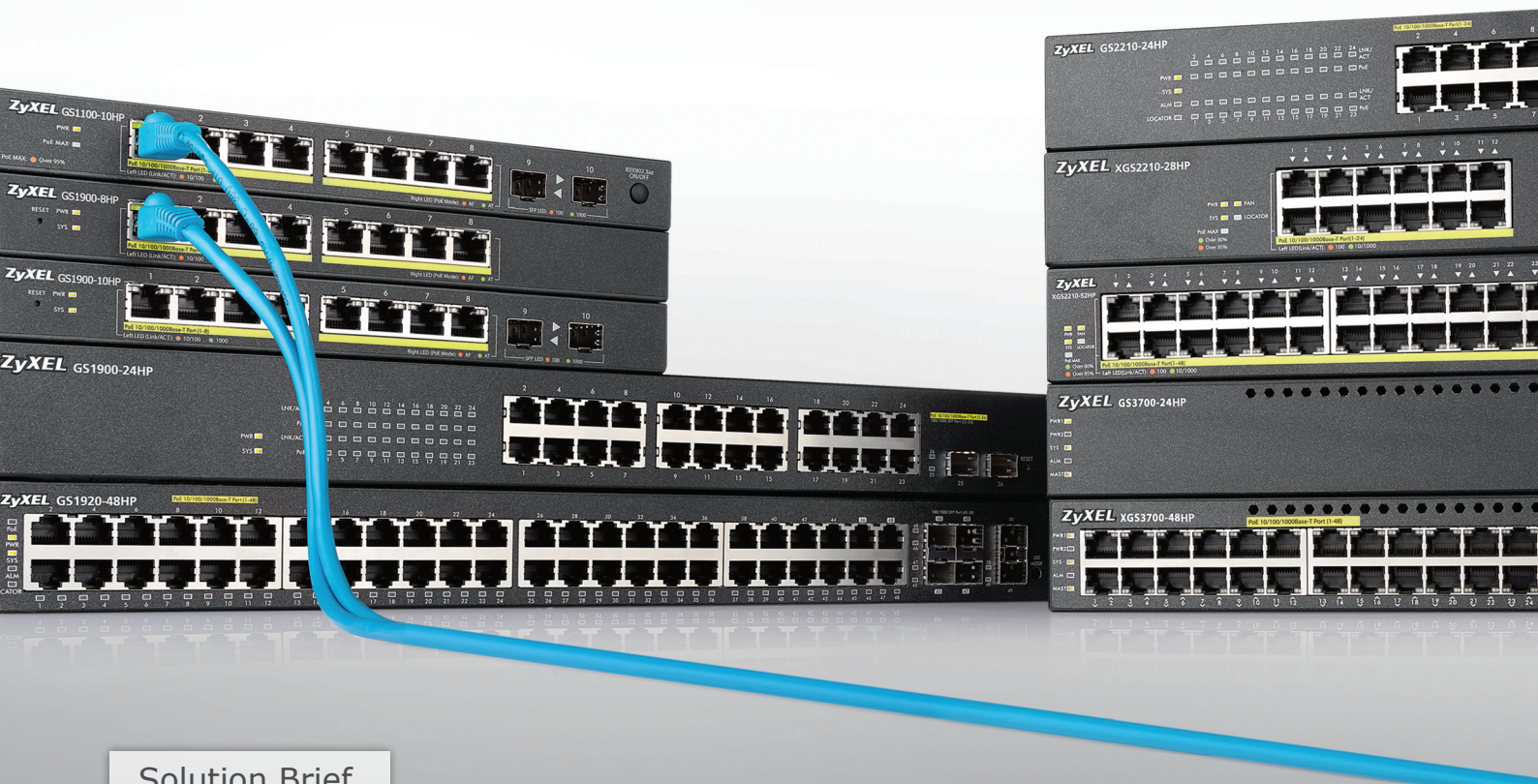


ZyXEL



Solution Brief

PoE Switching



ZyXEL**One**network
Redefining network integration

Introduction

As demands for connection from networking devices such as IP phones, IP cameras and access points increase, deployment complexity and cost rise as well. For less cable usage and investment, Power over Ethernet (PoE) technology provides both data connection and electrical power to devices through just one cable.

To fulfill various applications and flexible network deployments in different sectors, ZyXEL offers a complete portfolio including a wide range of Unmanaged, Smart Managed, and Managed PoE switches that accommodate Power Devices (PD) without limitation thanks to the IEEE 802.3af and 802.3at standard support.

Why ZyXEL PoE Switches?

ZyXEL PoE switches offer high PoE power budget that is almost double which of the competitors, and they support the 802.3at standard to easily fulfill power-hungry PD requirement such as Dome camera, pan-tilt-zoom (PTZ) camera and the latest 802.11ac AP.

Additionally, the ZyXEL PoE switches are made with high-quality components to ensure stability and durable connectivity essential to PoE applications such as IP surveillance and more.

Benefits



High Power Budget

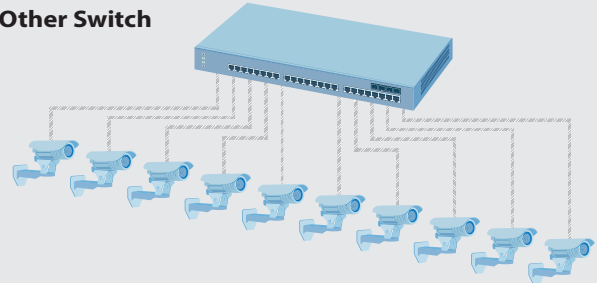
High power budget

ZyXEL PoE switches support the IEEE 802.3af PoE and 802.3at PoE Plus standards that provide up to 30 watts of power per port for advanced Powered Devices (PD) like 802.11ac wireless APs and video IP phones. Apart from this, ZyXEL 8- and 24-port PoE switches offers higher PoE power budget than others for more flexible PoE deployment.

ZyXEL Switch



Other Switch



Plug and Play

Plug and play

ZyXEL PoE switches support IEEE 802.3af and IEEE 802.3at standards so users can deploy normal or high-power PDs flexibly without additional settings. ZyXEL PoE switches provide complete portfolio from 8 to 48 ports and allow connections for both 15.4-watt IEEE 802.3af devices and 30-watt IEEE 802.3at devices without power-socket restriction to provide high-speed transmissions at the same time.



Intelligent PoE Technology

Intelligent PoE technology

The intelligent PoE technology enables more efficient use of power resources to deliver better ROI for businesses. In the Consumption Mode, the PoE switch automatically detects power consumption status of each PD and supplies only the required amount of power. This intelligent power allocation function minimizes the waste of power and helps businesses to save money while enabling the PoE switch to power more PDs.



Robust Power Management

Power supply policy

ZyXEL PoE switches can monitor individual and total power consumption levels and set power supply policies that maximize service availability. Users can assign certain ports to prioritized PDs to prevent system interruption due to the exceeded power budget from all PDs. The ZyXEL PoE switch is capable of adjusting power classification of the PD according to the power supply policy to make sure PDs function well and to offer businesses with a reliable PoE solution.

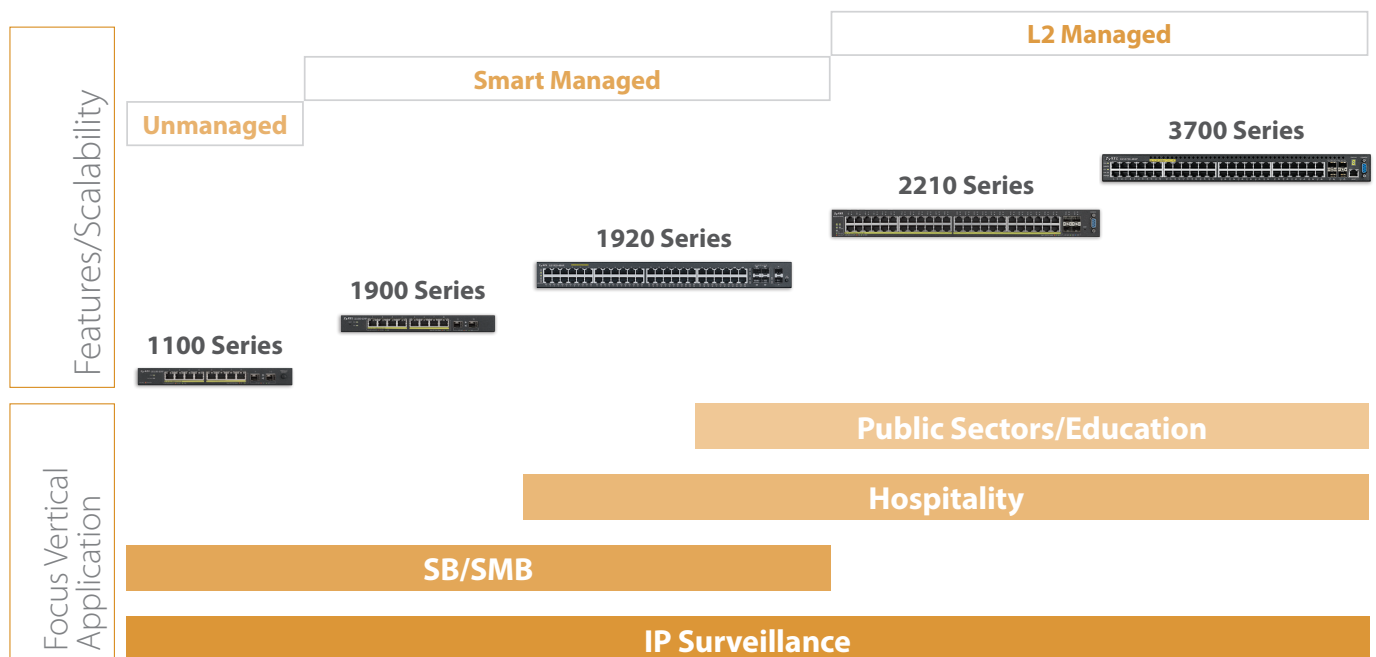


ZyXEL One Network experience

Aiming for relieving our customers from repetitive operations of deploying and managing a network, ZyXEL One Network is designed to simplify the configuration, management, and troubleshooting, allowing our customers to focus on the business priorities. ZyXEL One Network presents an easy-to-use tool, ZyXEL One Network Utility (ZON Utility), to realize speed network setup. ZyXEL Smart Connect allows ZyXEL networking equipment to be aware and recognize each other and further facilitating the network maintenance via one-click remote functions such as factory reset or power cycling. ZyXEL One Network redefines the network integration across multiple networking products from switch to Wi-Fi AP and to Gateway.

ZyXEL even opens up its One Network protocols to third-party developers to help them delivering more integrated, easy-to-deploy network applications.

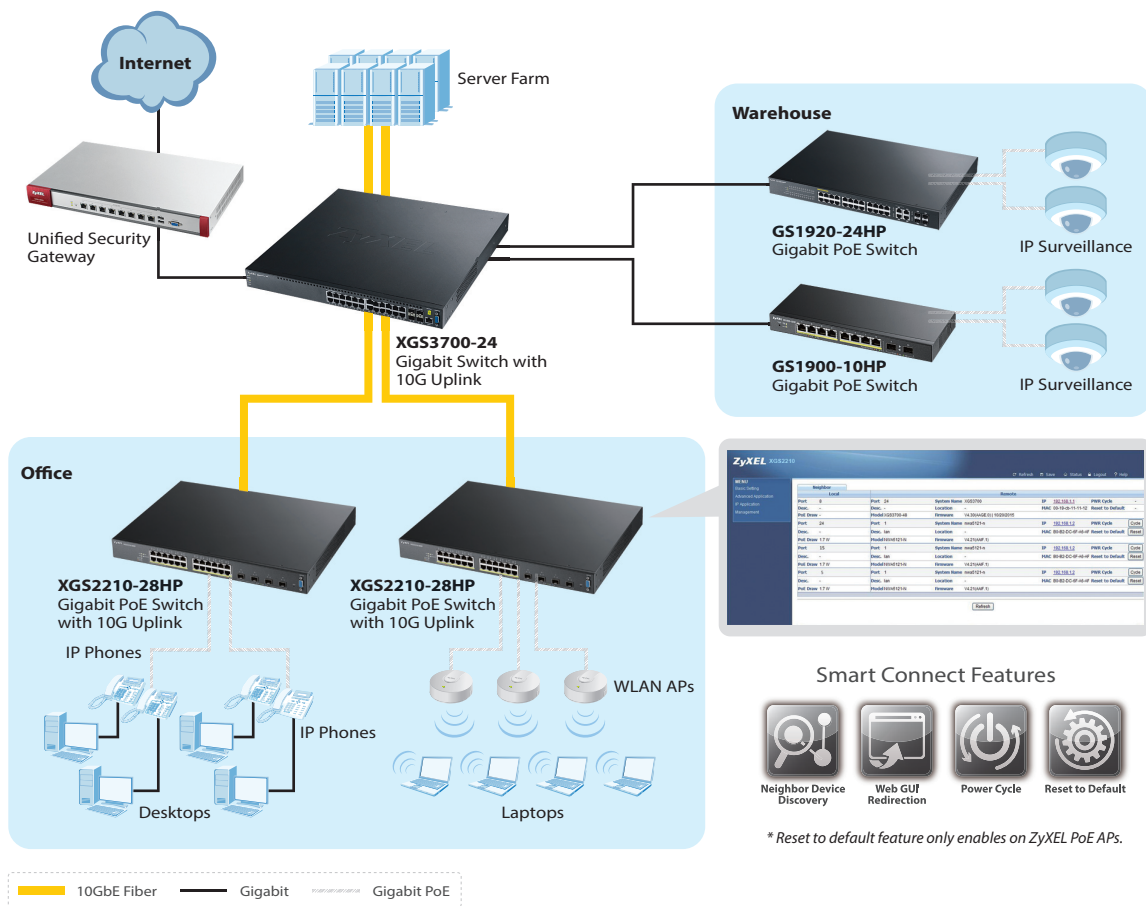
ZyXEL PoE Switches Portfolio







Application Diagram







Flexible network deployment






ZyXEL's PoE solution makes it easy for different sectors to deploy powered devices like VoIP phones, wireless APs and IP surveillance cameras in challenging places like ceilings, walls, outdoors, or wherever electrical outlets are not easily available. In addition, the neighboring features of ZyXEL One Network can detect ports used by a neighboring device and display its IP information on the Web GUI of ZyXEL PoE to allow one-click remote control actions via that IP. For example, if there's a connected PD fails to operate, users can reset device to default or power cycle it remotely from the GUI.







ZyXEL PoE Switches Feature Matrix

Type	Unmanaged			
Model	ES1100-8P	ES1100-16P	GS1100-8HP	GS1100-10HP
Product photo				
Port Density				
10/100 Mbps	4	8	-	-
10/100 Mbps PoE	4	8	-	-
100/1000 Mbps	-	-	4	-
100/1000 Mbps PoE	-	-	4	8
Gigabit SFP slots	-	-	-	2
Dual-personality Gigabit (SFP/RJ-45)	-	-	-	-
Performance				
Switching capacity (Gbps)	1.6	3.2	16	20
Forwarding rate (Mpps)	1.2	2.4	11.9	14.9
MAC addresses	1 K	8 K	8 K	8 K
Power over Ethernet				
Standard compliance	IEEE 802.3af	IEEE 802.3af	IEEE 802.3af, IEEE 802.3at	
Total PoE power budget (watt)	64	130	75	130
Green Features				
Fanless	Yes	-	Yes	Yes
IEEE Energy Efficient Ethernet	Yes	Yes	Yes	Yes

Type	Smart Managed					
Model	GS1900-8HP	GS1900-10HP	GS1900-24HP	GS1900-48HP	GS1920-24HP	GS1920-48HP
Product photo						
Port Density						
10/100 Mbps	-	-	-	-	-	-
10/100 Mbps PoE	-	-	-	-	-	-
100/1000 Mbps	-	-	-	24	-	-
100/1000 Mbps PoE	8	8	24	24	24	44
Gigabit SFP slots	-	2	2	2	-	2
Dual-personality Gigabit (SFP/RJ-45)	-	-	-	-	4	4
Performance						
Switching capacity (Gbps)	16	20	52	100	56	100
Forwarding rate (Mpps)	11.9	14.9	39	74	41.7	74
MAC addresses	8 K	8 K	8 K	8 K	16 K	16 K
Power over Ethernet						
Standard compliance	IEEE 802.3af, IEEE 802.3at					
Total PoE power budget (watt)	70	77	170	170	375	375
Green Features						
Fanless	Yes	Yes	-	-	-	-
IEEE Energy Efficient Ethernet	Yes	Yes	Yes	Yes	Yes	Yes

Type	Layer 2 Managed				
Model	GS2210-8HP	GS2210-24HP	GS2210-48HP	XGS2210-28HP*	XGS2210-52HP*
Product photo					
Port Density					
10/100 Mbps	-	-	-	-	-
10/100 Mbps PoE	-	-	-	-	-
100/1000 Mbps	-	-	-	-	-
100/1000 Mbps PoE	8	24	48	24	48
Gigabit SFP slots	-	-	2	-	-
10 Gigabit SFP+ slots	-	-	-	4	4
Dual-personality Gigabit (SFP/RJ-45)	2	4	4	-	-
Performance					
Switching capacity (Gbps)	20	56	100	128	176
Forwarding rate (Mpps)	15	41.7	74	95.2	130.9
MAC addresses	16 K	16 K	16 K	16 K	16 K
Power over Ethernet					
Standard compliance	IEEE 802.3af, IEEE 802.3at				
Total PoE power budget (watt)	180	375	375	375	375
Green Features					
Fanless	-	-	-	-	-
IEEE Energy Efficient Ethernet	Yes	Yes	Yes	Yes	Yes

* Available in 2016 Q2.

Type	Layer 2+ Managed			
Model	GS3700-24HP	GS3700-48HP	XGS3700-24HP	XGS3700-48HP
Product photo				
Port Density				
10/100 Mbps	-	-	-	-
10/100 Mbps PoE	-	-	-	-
100/1000 Mbps	-	-	-	-
100/1000 Mbps PoE	24	48	24	48
Gigabit SFP slots	4	4	-	-
10 Gigabit SFP+ slots	-	-	4	4
Dual-personality Gigabit (SFP/RJ-45)	-	-	-	-
Performance				
Switching capacity (Gbps)	56	104	128	176
Forwarding rate (Mpps)	41.7	77	95	131
MAC addresses	16 K	16 K	16 K	16 K
Power over Ethernet				
Standard compliance	IEEE 802.3af, IEEE 802.3at			
Total PoE power budget (watt)	Single PSU: 460; Dual PSU:1000			
Green Features				
Fanless	-	-	-	-
IEEE Energy Efficient Ethernet	Yes	Yes	Yes	Yes

For more product information, visit us on the web at www.ZyXEL.com



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