

NSW100 Series

8/24-port GbE L2 Nebula Cloud Managed Switch

The Zyxel Nebula NSW100 Series Cloud Managed Switches provide Layer-2 Gigabit access switching with 8/24-port PoE and non-PoE models. The PoE models support 802.3at PoE Plus standards to provide a 180/375-watt high-power budget. Every Nebula switch is designed to be managed completely from the Nebula Control Center. The cloud-based management interface provides site-wide configuration and monitoring of all ports, which allows multiple switches to be configured at the same time with a single click over the Web.

The Nebula switches bring many benefits of the cloud management systems, such as simplified configuration, easy management, site-wide visibility and real-time control for speedy branch network deployments into networks. Advanced settings such as user friendly ACL, VLAN-based QoS and PoE scheduling significantly improve the efficiency of network management.

Benefits

Zero-touch deployments

The Zyxel Nebula Cloud Managed Switches support plug-and-play installation through remote provision with simple steps. Every Nebula Switch automatically downloads the current network configuration to the device and enables auto-provisioning without the need for on-site network professionals.

Efficient network provisioning

Rather than traditional management operations that require network administrators to configure each device separately with repetitive command

Essential L2 features with user-friendly ACL and VLAN configuration

Optimized for quality voice and video traffic with high 375 (28P)/180 (10P)-watt power budget PoE technology

Support Port Mirroring for network traffic monitoring

Support DHCP Server Guard and IGMP snooping

RADIUS, static MAC forwarding and 802.1X authentication



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lines, all Nebula Switches connected to the Nebula Control Center can be centrally managed with a single management interface. For better network management efficiency, switch settings made in the Nebula Control Center can automatically propagate to all connected Nebula switches.

Increased network uptime

User misspecifications are commonly seen in setting up ACL, reconfiguring VLAN/IP or other similar operations, and these may cause interruption to cloud connection. The Zyxel Nebula Cloud Managed Switches provide stable network environments by incorporating a mechanism that detects and prevents configuration that could potentially cause network disconnection between the switch and Nebula Control Center.

Better user experience

Quality-of-service (QoS) functionality is essential for applications that require guaranteed quality for stable connections. The Zyxel Nebula PoE switches offer a smarter way for optimizing quality of service, which enables administrators to specify VLAN configuration with different priorities directly. This means that administrators can assign a priority to a specific VLAN through Nebula Control Center, and this priority can be applied to all tagged traffics for a specific VLAN. Traffics of the higher priority VLAN will receive preferential treatment and are serviced before VLANs with lower priorities. The same mechanism applies to voice VLAN configuration as well.

Holistic management

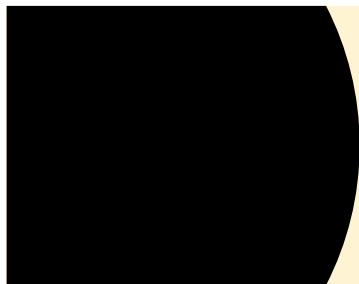
Zyxel Nebula Switches can automatically discover wired and wireless devices that connected to a network, and then draw the network topology to enable network administrators to easily troubleshoot issues remotely without the need for manual mapping and overlay monitoring software.



Real-time control of all the devices through a single pane of glass

Monitor switch port usage and bandwidth utilization by different time intervals and view historical status record with the intuitive management interface

Ultra Durable Hardware Design



Unlike normal switch hardware design with Electrolytic capacitors (E-cap), the Zyxel Nebula Cloud Managed Switches adopt solid capacitors to get rid of drying out, bursting and leaking problems. Solid capacitors ensure Nebula switches with longer lifetime, high stability and robust operation.

Model List

NSW100-10

8-port GbE Nebula Cloud Managed Switch

- 8 x GbE RJ-45 ports
- 2 x GbE combo (RJ-45/SFP) ports

NSW100-10P

8-port GbE Nebula Cloud Managed PoE Switch

- 8 x GbE PoE RJ-45 ports
- 2 x GbE combo (RJ-45/SFP) ports

- 24 x GbE RJ-45 ports
- 4 x GbE combo (RJ-45/SFP) ports

- 24 x GbE PoE RJ-45 ports
- 4 x GbE combo (RJ-45/SFP) ports

Applications Diagram

Nebula cloud management architecture



Specifications

Model		NSW100-10	NSW100-10P	NSW100-28	NSW100-28P
Product name		8-port GbE Nebula Cloud Managed Switch	8-port GbE Nebula Cloud Managed PoE Switch	24-port GbE Nebula Cloud Managed Switch	24-port GbE Nebula Cloud Managed PoE Switch
Switch class		Layer 2	Layer 2	Layer 2	Layer 2
Port Density					
Total port count		10	10	28	28
100/1000 Mbps		8	-	24	-
100/1000 Mbps PoE		-	8	-	24
Gigabit combo (SFP/RJ-45)		2	2	4	4
Performance					
Switching capacity (Gbps)		20	20	56	56
Forwarding rate (Mbps)		14.88	14.88	41.67	41.67
Packet buffer (byte)		448 K	1536 K	1536 K	1536 K
MAC address table		16 K	16 K	16 K	16 K
Power					
Input		100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz
Max. power consumption (watt)		12.3	230	27.2	454
Total PoE power budget (watt)		-	180	-	375
Physical Specifications					
Item	Dimensions (WxDxH)(mm/in.)	250 x 150 x 44/ 9.84 x 5.91 x 1.73	330 x 230.5 x 44.5/ 12.99 x 9.07x 1.75	441 x 131 x 44/ 17.36 x 5.16 x 1.73	440 x 330 x 44.5/ 17.32 x 12.99 x 1.75
	Weight (kg/lb.)	1.34/2.95	2.66/5.86	2.172/4.79	4.79/10.56
Packing	Dimensions (WxDxH)(mm/in.)	366 x 214 x 79/ 14.41 x 8.43 x 3.11	389 x 337 x 79/ 15.31 x 13.27 x 3.11	561 x 220 x 82/ 22.09 x 8.66 x 3.23	583 x 451 x 98/ 22.95 x 17.76 x 3.86
	Weight (kg/lb.)	2.27/5	3.65/8.05	3.263/7.19	5.747/12.67
Included accessories		• Power cord • Wall mount kit • Rack mounting kit	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit
Environmental Specifications					
Operating	Temperature	0°C to 50°C/ 32°F to 122°F	0°C to 50°C/ 32°F to 122°F	0°C to 50°C/ 32°F to 122°F	0°C to 50°C/ 32°F to 122°F
	Humidity	10% to 90%	10% to 90% (non-condensing)	10% to 90%	10% to 90% (non-condensing)
Storage	Temperature	-40°C to 70°C/ -40°F to 158°F	-40°C to 70°C/ -40°F to 158°F	-40°C to 70°C/ -40°F to 158°F	-40°C to 70°C/ -40°F to 158°F
	Humidity	10% to 90%	10% to 95% (non-condensing)	10% to 95%	10% to 95% (non-condensing)
MTBF (hr)		1,382,030	1,155,719	616,247	949,326
Heat dissipation (BTU/hr)		41.943	784.30	92.752	1,625.55
Acoustic noise (dBA)		0	53.2	0	59.6

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