DPtech LSW3620 Series Ethernet Switches

Overview

As the next generation high performance 10-Gigabit Ethernet switches independently developed by DPtech, the LSW3620 Series provides high density Gigabit access and non-convergent 10 Gigabit uplink capabilities. Based on the industry's leading high performance hardware architecture and DPtech's ConPlat operating system, its features include sound layer 2 and 3 processing capabilities, enhanced access security and access control policy, VSM (Virtual Switching Matrix) N:1 VEM (Virtual Extension Matrix), vertical virtualization, low power consumption, and fanless quiet design. It is ideal for building the next generation Self-Secure, energy-efficient, and virtual secure networks.

Product Features

■ **High density Gigabit access and 10-Gigabit uplink**

With 24/48 high density 100M or Gigabit interfaces and 4 reinforced 10-Gigabit uplink interfaces, the LSW3620 Series enables convergence-free interconnection and meet the high performance and no congestion requirements for large secure networks.

■ **Virtual Switching Matrix (VSM)**

The LSW3620 Series adopts Virtual Switching Matrix (VSM) technology, which performs virtualization of multiple physical devices into a single logical device for unified configuration and management. VSM brings about the following benefits to users:

Unified management VSM technology enable users to log in to a logical device from any port of any device, achieving unified management of all devices in the Virtual Switching Matrix without physically connecting to each device for configuration and management.

Simplified services VSM is compatible with various layer 2 and layer 3 network protocols. In a layer-3 network, VSM technology can perform virtualization of multiple layer-3 switches into a single logical device for unified routing computing. Thanks to the cross-device link aggregation technology, aggregation on physical ports of different devices can be realized. The Series also supports load sharing and can be used to replace the traditional spanning tree protocols, increasing bandwidth utilization and shorten the convergence time in case of a network failure.

Flexible expansion hot-plug is enabled when a new device joins or leaves the VSM group. Therefore, there will be no impact on the normal operation of other devices, ensuring flexible expansion as needed.

■ **Full support of IPV4/IPv6 dual stack**

Based on the leading ConPlat operating system, the LSW3620 Series supports IPV4/IPv6 dual stack, in addition to static routing, RIP, OSPF routing protocols of IPV4/IPv6. It can be

flexibly deployed on a network with only IPv4 or IPv6, or with both IPv4 and IPv6, thus satisfying the transition requirements from IPv4 to IPv6.

■ **Sound security control**

LSW3620 Series provides multiple authentication modes based on MAC address, 802.1x, and Portal, capable of meeting the authentication requirements for printers, mobile terminals, and desktop PCs. With a built-in authentication server, it also supports large-capacity local access authentication.

It supports dynamic or static binding of user identity, such as user account, IP, MAC, VLAN, and interface. It enables dynamic ACL distribution policy based on VLAN, which simplifies user configuration. The LSW3620 Series is provided with enhanced ACL rules by supporting large-capacity ingress and egress ACLs.

To address ARP attacks and ARP viruses, the primary threat of LAN security, the LSW3620 Series provides sound ARP protection by supporting ARP Detection, one-click ARP binding, authorized ARP, ARP source suppression, and ARP source address inspection, thus guarding against all APR attacks thoroughly.

■ **Energy-efficient quiet design**

With industry-leading energy-saving chips and compatibility with IEEE 802.3az EEE (Energy Efficient Ethernet) technology, the LSW3620-24GT4XGS enables automatic adjustment of energy usage according to network connection utilization. For idle Ethernet ports, the energy consumption at both ends will be reduced. When data transmission is started, normal power supply will be resumed. In this way, it realizes intelligent adjustment of power supply requirements.

As the industry's only 10-Gigabit fanless switch, the LSW3620-24GT4XGS adopts a fanless quiet design, which not only minimizes noise in environments, but also improves the device reliability by avoiding single-point failure caused by fans.

Product Series

LSW3620-24GT4XGS

LSW3620-48GT4XGS

Product Model	LSW3620-24GT4XGS	LSW3620-48GT4XGS
Service interface	24 Gigabit RJ45+4 10-Gigabit SFP+	48 Gigabit RJ45+4 10-Gigabit SFP+
Switching capacity	336Gbps/3.36Tbps	336Gbps/3.36Tbps
Packet forwarding rate	108Mpps/268Mpps	144Mpps/268Mpps
Weight	2.4kg	3.7kg
Power supply	54W (AC 110~220V)	54W (AC 110~220V)
Host power consumption	Static: 14.4W Full load: 20.6W	Static: 27.5W Full load: 39W
Operating environment	-10℃~55℃, interface lightning protection	-10℃~55℃, interface lightning protection
Fan	Fanless	with fan
MAC	Support static, dynamic, black hole MAC entries Support source MAC address filtering	
VLAN	Support 4K 802.1Q VLAN Support VLAN based on MAC/ IP subnet/authentication policy/interface VLAN Support Voice VLAN Support QinQ	
Port features	Support port aggregation, port mirroring, RSPAN, port isolation, port traffic identification	
Spanning tree	Support STP, RSTP, MSTP	
DHCP	Support DHCP Client, DHCP Relay, DHCP Snooping	
Virtualization	Support VSM (Virtual Switching Matrix) N:1 virtualization technology, which performs virtualization of multiple physical devices into a single logical device	
IP routing	Support static routing, RIPv1/2, OSPF Support RIPng, OSPFv3 Support policy-go-together	
Multicast	Support IGMP Snooping, IGMP Proxy, GMRP Support PIM-SM/PIM-SSM/PIM-DM	
ACL	Support ACL rules based on VLAN, MAC address, IP address, TCP/UDP port number	
QoS	Support 8 priority queues per port Support traffic classification based on 802.1p/DSCP/TOS Support speed limit on ports and streams Support SP, WRR, SP + WRR queue scheduling	

Security features	Support local and centralized authentication based on MAC address
	Support local and centralized authentication based on 802.1x
	Support local and centralized authentication based on Portal
	Support dynamic ARP detection, one-click ARP binding, authorized ARP, ARP source suppression, ARP source address inspection
	Support port isolation, port security
	Support broadcast storm suppression
	Support SSH2.0
Management and Maintenance	Support MON
	Support IEEE 1588v2 PTP
	Support real-time temperature detection and alarm
	Support SNMP, CLI, Web management, and Unified Management Center (UMC)
	Support local and remote output of system logs, operation logs, debugging information

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