DPtech LSW3600-SI Series Ethernet Switches

Overview

DPtech LSW3600-SI series are next generation secure and energy-efficient Ethernet switch products self-developed by Hangzhou DPtech Technologies Co., Ltd. LSW3600-SI series adopt DPtech high performance hardware architecture, ConPlat operating system and up-to-date energy-efficient design. It support IEEE 802.3az EEE (Energy Efficient Ethernet) technology and use industry-level design to improve environment adaptability to SMEN (Small and Medium-sized Enterprise network). DPtech LSW3600-SI series features with comprehensive security and access control functionality, enhanced energy efficiency, industry-level reliability, abundant L2~3 layer features, high capacity multicast, stable operation and convenient management. Thus meet demands for Ethernet access with multi-service bearing, high security, low costs and easy management. LSW3600-SI series can be widely applied in various network such as SMEs (small and medium-sized enterprises), hotels, schools and etc.

Series

The DPtech LSW3600-SI series switches include the following models:

- LSW3600-24T2GC-SI: 24 10/100 BASE-T Ethernet ports, 2 Gigabit SFP ports (Combo).
- LSW3600-48T2GP2GC-SI: 48 10/100 BASE-T Ethernet ports, 2 Gigabit SFP ports and 2 Gigabit SFP ports (Combo).
- LSW3600-24GT4GP-SI: 24 10/100/1000 BASE-T Ethernet ports, 4 Gigabit SFP ports.
- LSW3600-48GT4GP-SI: 48 10/100/1000 BASE-T Ethernet ports, 4 Gigabit SFP ports.

LSW3600-24T2GC-SI

LSW3600-48T2GP2GC-SI

LSW3600-24GT4GP-SI

LSW3600-48GT4GP-SI

Features

Secure and Reliable Access Control

- LSW3600-SI series provide industry's most comprehensive security authentication, including Portal authentication, MAC authentication and 802.1x authentication. It can completely resolve use identity and

authentication, ensuring secure and reliable network access. It support centralized authentication and local authentication two deployment methods. Local authentication method provide authentication database integrated into switch, with a maximum of 256 local user authentication capability for each device, reducing user costs.

- LSW3600-SI series support 4K L2~4 ACL policy to strengthen access control. It allows VLAN assignment based on ports, MAC address and user authentication policy in order to satisfy mobile office network environment. ACL and VLAN can be dynamically allocated through security policy, ensure intelligent management of network access.

- LSW3600-SI series provide comprehensive attack protection methods.ARP Detection, which automatically receives legitimate users' IP-MAC relations through DHCP Snooping, filtering ARP spoofing attacks. ARP one-key binding and IP-MAC manual binding which used to discard ARP messages inconsistent with port binding information. It support authorized ARP which allow switch to form an ARP table to prevent network failure caused by gateway attacks. ARP source suppression, it helps to limit speed at ports or globally and prevent network fault caused by flooding attacks. It support ARP source address checking, to assess validity of ARP source address and help administrators to find and locate ARP attack source.

Energy Efficiency

- LSW3600-SI series support IEEE 802.3az EEE (Energy Efficient Ethernet) technology, which can automatically regulate energy demands according to utilization of network connection. It helps to reduce energy consumption when port is idle and restore normal power supply when normal data transfer starts, enable intelligent power supply.

- LSW3600-SI series use industry's advanced 28nm energy-efficient chips, greatly reducing power consumption while ensuring high performance.

- LSW3600-SI series adopt LDO (Low Dropout Regulator) technology, it helps to increase power conversion rate to above 90%,reduce energy consumption and improve service efficiency, with overall power consumption dropped by at least 20%.

Enhanced Environment Adaptability

- LSW3600-SI series adopt fanless design, which can avoid dissipation failure caused by fan loss and poor thermal dissipation caused by duct blocking. It helps to reduce hardware failure, decrease power consumption and avoiding noise problem.

- LSW3600-SI series use enhanced environment design, supporting 0~70℃ working environment, with stable operation in harsh environments.

- LSW3600-SI series enable lightning protection, along with reliable features, which can effectively avoid damages to devices caused by lightning strike through dedicated protection circuits at communication interface and power interface, resolving large scale network failure in thunderstorms.

- LSW3600-SI series provide real-time status monitoring to devices such as environment alarms, power, ports, and CPU status, etc., and can automatically output status information, to improve network management and ensure the stable operation of network.

Multi-Services capability

- LSW3600-SI series support QoS, which can manage uplink and downlink bandwidth at ports on demand, provide refined bandwidth management.
- LSW3600-SI series provide 8 priority queues for each port and manage data traffic according to priority, ensure high quality of critical services.
- LSW3600-SI series support 16K MAC, 4K VLAN and large routing table in order to meet high-capacity access demands.
- LSW3600-SI series support a maximum of 4K multicast table and able to meet application demands of high-density IP surveillance access.

Management

- LSW3600-SI series support Web management interface, which can simply and intuitively display various functions of switch.
- LSW3600-SI series provide local query and management to system logs and operation logs, which can also be output to a remote log server for centralized analysis and processing. Along with detailed classification and effectively information filtering, providing strong supports for network operation monitoring and network failure diagnostic.
- LSW3600-SI series support SNMPv1/v2/v3, provides centralized management for network devices through DPtech UMC management platform.

Specification

Item	LSW3600-24T2GC-SI	LSW3600-48T2GP 2GC-SI	LSW3600-24GT4GP-SI	LSW3600-48GT4GP-SI
Hardware Feature				
Switching Capacity	64Gbps	64Gbps	256Gbps	256Gbps
Packet Forwarding Rate	6.6Mpps	13.2Mpps	42Mpps	78Mpps
Physical Dimensions (W×D×H)	440*260*44 mm	440*260*44 mm	440*260*44 mm	440*260*44 mm
Weight	4 kg	4.1 kg	4 kg	4.1 kg

Service Interface	24 10/100 BASE-T Ethernet ports, 2 Gigabit SFP ports (Combo)	48 10/100 BASE-T Ethernet ports, 2 Gigabit SFP ports, 2 Gigabit SFP ports (Combo)	24 10/100/1000 BASE-T Ethernet ports, 4 Gigabit SFP ports	48 10/100/1000 BASE-T Ethernet ports, 4 Gigabit SFP ports
Power Supply	AC 110~220V	AC 110~220V	AC 110~220V	AC 110~220V
Maximum Power Consumption	10W	21W	22W	34W
Working Environment	0~70℃	0~70℃	0~70℃	0~70℃
Fanless Design	Yes	Yes	Yes	Yes
Software Feature				
MAC Address	- Support 16K MAC entries - Support static, dynamic and black hole MAC entries - Support source MAC address filtering			
VLAN	- Support 4K VLAN - Support MAC/IP subnet/Policy/Port based VLAN - Support Voice VLAN and QinQ			
Port Features	- Support port trunking - Support port mirroring and RSPAN - Support port isolation and port traffic identification			
Spanning Tree	Support STP, RSTP and MSTP			
DHCP	Support DHCP Client, DHCP Relay and DHCP Snooping			
IP Routing	- Support static routing - Support RIPv1/v2	- Support static routing - Support RIPv1/v2, OSPF and BGP - Support RIPng, OSPFv3 and BGP4+for IPv6 - Support VRRP - Support policy routing		
Multicast	- Support 1K layer 2 multicast entries - Support IGMP Snooping	- Support 4K L2/3 multicast entries - Support IGMP Snooping - Support IGMP Proxy and GMRP		
ACL	- Support 2K L2~4 ACL policy - Support ACL based on VLAN, MAC address, IP address, TCP/UDP port and protocol type			
QoS	- Support 8 priority queues for each port - Support 802.1p/DSCP/TOS traffic classification - Support port speed limit and flow speed limit - Support SP, WRR and SP+WRR queue scheduling			

Security Features	• Support 256 local user authentication • Support MAC authentication, local and centralized authentication • Support 802.1x authentication, local and centralized authentication • Support Portal authentication, local and centralized authentication • Support dynamic ARP detection, ARP one-key binding, authorized ARP, ARP source suppression and ARP source address checking • Support port isolation and port security • Support broadcast storm suppression • Support SSH2.0
Management Maintenance	• Support command line interface(CLI), Telnet and Console interface • Support SNMP and Web management • Support DPtech Unified Management Center (UMC) • Support real-time temperature detection and alarms • Support local and remote output for system logs, operation logs and debugging information

Ordering Information

Part Number	Model Description	Remarks
02050230	DPtech LSW3600-24T2GC-SI Host	Required
02050227	DPtech LSW3600-48T2GP2GC-SI Host	Required
02050201	DPtech LSW3600-24GT4GP-SI Host	Required
02050212	DPtech LSW3600-48GT4GP-SI Host	Required
02010005	1000BASE-SX SFP Transceiver, Multi-Mode (850nm, 550m, LC)	Optional
02010004	1000BASE-LX SFP Transceiver, Single Mode (1310nm, 10km, LC)	Optional
02000013	1000BASE-LH40 SFP Transceiver, Single Mode (1310nm, 40km, LC)	Optional
02010014	1000BASE-LH40 SFP Transceiver, Single Mode (1550nm, 40km, LC)	Optional