

## Industrial Ethernet Switches



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### Overview

DPtech Industrial Ethernet Switches are designed for power substation automation, transportation automation and robust outdoor applications in hazardous environments. To meet requirements of mission-critical applications and harsh environments, DPtech Industrial Ethernet Switches provide maximum reliability, real-time communication and comprehensive network security services. Compared with Ethernet switches, Industrial Ethernet Switches are more demanding on hardware design and electron-components, thus to ensure high reliability under hazardous conditions.

Traditional industrial Ethernet switches are usually based on open-source operation system, which has vulnerabilities and poor reliability issues, and lack of advanced Ethernet protocols. Due to deep understanding of industrial applications, DPtech launched next generation Industrial Ethernet Switches which are based on self-developed ConPlat operation system featured with most comprehensive networking and security services. DPtech Industrial Ethernet Switches can be applied in various harsh environments, which adopt fanless design and industry leading architecture, and provide -40~85 °C operating temperature and abundant network security services.

### Product Series

#### LSW3003-4GP-I-R



L2 Rackmount Industrial Ethernet Switch: 4 GE SFP ports and 3 extension slots

#### LSW3003-2GT2GP-I-R



L2 Rackmount Industrial Ethernet Switch: 2 GE RJ45 ports, 2 GE SFP ports and 3 extension slots

#### LSW3003-I-R



L2 Rackmount Industrial Ethernet Switch: 3 extension slots

#### LSW3003-16ST2GC-I-R



L2 Rackmount Industrial Ethernet Switch: 16 FE ST ports and 2 GE Combo ports

#### LSW5003-4GP-I-R



L3 Rackmount Industrial Ethernet Switch: 4 GE SFP ports and 3 extension slots

#### LSW 3003-16GP-I-R



L2 Rackmount Industrial Ethernet Switch: 16 GE SFP ports

**Industrial-Grade Construction** • Control electro-components selection according to industry standard, including industrial-class chips, industrial-class CPU, industrial-class power modules and pure aluminum shells.

### **Harsh Environment Compatibility**

- Fanless design, -40~85° C operating temperature range, IP40 protection, vibration and shock protection, dual power redundancy, fully compliant with IEC61850 standard.

### **Flexible Deployment**

- Support modular design with rich Ethernet ports such as RJ45, SFP, ST, SC, LC, etc.

### **Advanced Operation System**

- DPtech ConPlat OS with high availability, critical data transmission reliability and security guarantee.

### **Rich Network and Security Features**

- Support layer 2 features such as VLAN, STP/RSTP/MSTP, Multicast, Port Mirroring, QoS, port security, etc., also support layer 3 features such as RIP, OSPF, BGP, IPv4/ IPv6 dual stack.

### **Fast Network Failure Recovery**

- FRRP (Fast Ring Recovery Protocol) and FLRP (Fast Link Recovery Protocol) for 20ms end-to-end network failure recovery.

### **High Accuracy Time Synchronization**

- High-accuracy time synchronization such as NTP, SNTP, IEEE 1588v2 PTP, etc.

### **Easy management**

- Support SNMP, WEB and CLI management with default configuration templates, simplifying management and configuration; also support DPtech UMC (Unified Management Center) to provide efficient centralized management for massive devices under unattended environments.

## Specification

Item	LSW5003Series	LSW3003Series
Dimensions (W x D x H)	440mm×360mm×44mm	
Weight	5.1KG	
Max Power Consumption	45W	
Power Requirements	AC: 85V-264V	
	DC: 88V-300V/36V-75V	
	Rated Current: 1A	
Switching Capacity	64Gbps	
Port and Slot	LSW5003-4GP-I-: 4GE SFP ports and 3 extension slots LSW3003-I-R: 3 extension slots LSW3003-4GP-I-R : 4GE SFP ports and 3 extension slots LSW3003-2GT2GP-I-R: 2 GE RJ45 ports, 3 GE SFP ports and 3 extension slots LSW3003-16ST2GC-I-R: 16 FE ST ports and 2 GE Combo ports LSW3003-16GP-I-R: 16 GE SFP ports	
Interface Module	LSW-8FET-E: 8 FE RJ45 ports LSW-6FEST-E: 6 FE Optical ports(ST) LSW-6FES-E: 6 FE Optical ports (SC), LSW-8FEP-E: 8FE Optical ports (SFP)	LSW-8FET: 8 FE RJ45 ports LSW-6FEST: 6 FE Optical ports(ST) LSW-6FES:6 FE Optical ports (SC), LSW-8FEP: 8 FE Optical ports (SFP) LSW-6FET2FEP: 6 FE RJ45 Ports and 2 FE Optical ports(SFP)
Operating Environment	Operating Temperature:-40~85℃	
	Environment Humidity:0~95%RH (No Condensation)	
	IP40Protection	
	MTBF: More than 30 Years	
L2 Features	Support 802.1Q VLAN, IGMP Snooping, STP/RSTP/MSTP, 802.3xTraffic Management , QoS, 8 hardware queues, CAR, port aggregation, and port mirroring	
L3 Features	IPv4: static route, RIPv1/v2, OSPFv1/v2, Routing Policies	IPv4: static route
	IPv6: static route, RIPng, OSPFv3, Routing Policies	IPv6: static route
Security Features	Support storm suppression and broadcast/multicast/unknown unicast constrain	
	Support 802.1X authentication and ARP attack prevention	
	Support Access Control List (ACL)	
Broadcast Features	SupportGMRP, IGMP, IGMP Snooping, PIM-SM	

Management	Support IEEE 1588 PTP V2, SNMP, DHCP Client, DHCP Server, DHCP Relay	
	Support SNMP, CLI and Web GUI 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	
High Reliability	Support Fast Ring Recovery Protocol, link fault recovery time≤20ms Support Fast Link Recovery Protocol	
	Support redundant power supply unit	
	Support VRRP	-
Standards and Certifications	IEC61850-3 IEC60950(Safety Standard) EN 61000-3-2/EN 61000-3-3 EN55024 (EMC Industry Standard) FCC Part 15 Subpart B Class A, EN 55022 Class A GB/T 21563-2008 BG/T 17626	

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