

Corning ONE™ SDN LAN

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Software Defined PoE Data Plane (SDPDP)

Product Overview |

The Software Defined PoE Data Plane (SDPDP) L2 managed switch is designed for enterprise markets and provides a complete solution from 1G to 10G, The SDPDP is an PoE switch and delivers a default 370 W of PoE power, but can be extended up to 740 W. It supports 24 10/100/1000BASE-T ports and 4 Gigabit SFP ports.

The SDPDP includes green-saving technologies (IEEE 802.3az and Green-Ethernet). Using this Energy Efficient Ethernet standard, the switch automatically decreases power usage when network traffic is low.

Key Features and Benefits |



- IEEE 802.3af & 802.3at
- 24-ports at 30 W to 740 W
- 4 integrated Gigabit SFP ports.
- L3 static routing
- Dynamic VLAN Assignment automatically assigns the same port to different VLANs
- PoE Timer can define a PoE power schedule for different customer applications.
- IGMP/MLD snooping manages multicast streams to ensure high-quality, smooth video.
- Supports the new IEEE 802.3az and Green Ethernet.
- Multiple security features, such as ACLs, storm control, 802.1X, port security, MAC filters, IP source guard, and AAA.
- 8 hardware queues, port-based QoS (IPv4/IPv6 DSCP), and DiffServ features to provide optimal real-time services.
- Provides DDOS protection
- Automatic voice VLANs, providing VoIP and IP cameras the optimum network traffic usage.

Product Specifications |

Ports

Switch Ports:
24 x RJ-45 10/100/1000 Ports (POE/POE+)
370 W Power budget w/o extender
4 x 1G SFP Uplink Ports
Management Ports on Front Panel:
1 x RJ-45 serial console

Performance

Switching Capacity: 56 Gbps
Forwarding Rate: 41.7 Mpps
Flash Memory: 32 MB
DRAM: 256 MB
Packet Buffer: 4.1 Mbits
MAC Addresses: 8K
Jumbo frames: 10K
MTBF: 370,636 hrs
Heat Dissipation: 1680 Btu/Hr
Acoustic Noise: 79.7 dB (A)

Power Supply

100-270 VAC, 50-60 Hz
490 W (950 W with optional extender)

Physical and Environmental

Dimensions (WxDxH): 44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)
Weight: 3.1 kg (6.85 lb)
Operating Temperature: 0°C to 40°C (32°F to 104°F)
Storage Temperature: -40°C to 70°C (-40°F to 158°F)
Operating Humidity: 10% to 95% non-condensing
Storage Humidity: 10% to 95% non-condensing
Altitude: 3000m

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L2 Features

Spanning Tree Protocol:

- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Rapid Spanning Tree Protocol (MSTP)

Loopback Detection

BDPU Filter/Guard

BDPU Forward

Root Guard

VLANs:

- Supports 4K IEEE 802.1Q VLANs
- Port-Based/MAC-Based/Protocol-Based VLANs
- Guest VLAN
- Auto Voice VLAN

Link Aggregation:

- Static Trunk
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)

IGMP Snooping:

- IGMP v1/v2/v3 snooping
- IGMP Filtering/Throttling
- IGMP Queries
- IGMP Immediate leave

MLD Snooping

LLDP/LLDP-MED

Green-Saving

- IEEE 802.3az

- Cable Length

- No Link Power-Saving

Jumbo Frame packet

Cable Diagnostic

Q-in-Q

mDNS

G.8032

IP Clustering

L3 Features

Static Routing

IPv6

IPv4/IPv6 Dual Protocol Stack

IPv6 Management

- IPv6 Ping/Trace

- IPv6 Telnet

- IPv6 Syslog

- IPv6 TFTP

HTTP over IPv6

SNMP over IPv6

PoE

Support IEEE 802.3af (15.4 W)/IEEE802.3at (30W) on each port

Total PoE Power Budget as follows:

- SDPDP (370 W)

- (Up to 740W using extension)

Dynamic Power Allocation

Auto disable after exceeding power budget

PoE Timer

Security

DDOS Protection

CPU Guard (CPU Protection)

Port Isolation

Port Mirror (One to One, One to Many)

Remote Mirror

Storm Control

Broadcast/Multicast/Unknown Storm Control

IEEE 802.1X

ACL

- Ingress Only

- L2/L3/L4

- ACL entry: 512

- IPv4/IPv6

- TCP/UDP-Based, MAC-Based ACL

Port Security

MAC Filter

MAC Authentication

Port max count per port

Dynamic VLAN Assignment

Dynamic ARP Inspection

AAA (RADIUS/TACACS+)

IP Source Guard

SSH v1.5/v2.0

- SSL v1/v2/v3

- SSL IPv4/IPv6

SFlow

- (10T/P/PE/28T/28P/28PP Trace on port -Ingress only)

- (52T/26T trace multi port)

Web Authentication

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Management

System password protection
NTP/SNTP
Dual Image/Configuration
Configuration upload/download
(HTTP/TFTP/FTP/SFTP)
Firmware upload/download (HTTP/TFTP/FTP/SFTP)
Auto Firmware Upgrade
RMON (groups 1,2,3 and 9)
SNMP
SNMP Trap
SNMP v1/v2/v3
SNMP Standard/Private MIB
Management Access (Console/SNMP/Web /Telnet)
Memory Flash Log
Event/Error Log/Syslog

DHCP v4/v6
Client//DHCP
Snooping
DHCP Snooping
Option82
Dynamic Provision (via
Option 66,67)
DHCP Relay v4 (v6)
Port Mirroring (One to One) TX/RX (both)
DNS Client without DNS proxy

Regulatory

WEEE
RoHS
Country of Origin: Taiwan

Ordering Information |

P/N	Short Description
1LAN-SDDP-24-P2	24 Port Gigabit Expandable PoE Switch Plus 4 SFP Uplink Ports (370W POE Budget)
1LAN-SDDP-24-P1	24 Port Gigabit Expandable PoE Switch Plus 4 SFP Uplink Ports (200W POE Budget)
1LAN-SFP-3405BC	Bi-Di SFP; SDDP-PTP to SDDP-PTP/SDDP-PTMP
1LAN-SFP-4305BC	Bi-Di SFP; SDDP-PTP/SDDP-PTMP to SDAN
1LAN-SFP-1GCU	Copper Ethernet SFPs (1G-TX)
1LAN-SFPP-10GB-LR	10Gb/s SFP+ Transceiver module, SMF, 1310nm, 10km
1LAN-SFPP-10GB-SR	10Gb/s SFP+ Transceiver module, MMF, 850nm, 300-meter
1LAN-SFP-1GB-LXLH	Gigabit SFP Transceiver, 1000Base-LX/LH, SMF, 1310nm, 10km
1LAN-OA-UPC	UPC Optical Attenuator