

Windbit ESW4L3 Switch Series

ESW4L3 Next-Generation Core Switch

Introduction

The ESW4L3 series are high-performance multiservice switches launched by Teldat for the next-generation networks. These devices are designed for campuses and datacenters scenarios with an advanced hardware architecture for elevated processing and high operation experience.

The ESW4L3 provides flexible access services through 10GE/25GE optical ports and can offer uplink connectivity because of its 40GE/100GE ports. ESW4L3 switches have robust performance and rich security functions for the access layer of data center servers, the core layer of a small- or medium-sized network, or aggregation layer of a large-sized network.

Interfaces

48x 10GE/25GE (license required for 25G)	SFP28 ports
8 x 40GE/100GE	QSFP28 ports
OOB access	1 x MGMT port, 1 x console port
1 x USB 2.0 port	USB-based backup log and configuration

Destacar

- Full core switch with high speed interfaces
- Integrates diverse campus and data center features
- Provides Virtual Extensible LAN (VXLAN)
- Supports Virtual Switch Unit (VSU)
- High-bandwidth, low-latency and flexibility
- IPv4/IPv6 Dual-Stack Multi-Layer Switching
- Rectifies faults with non-stop services



Competitive Advantage

High speed 10G/25G access ports	Ready for large enterprises, institutions, and campuses, such as the LANs in government buildings, universities, and big manufacturing/energy/other organizations
100Gbps interfaces for uplink	The interconnection between switches/routers cannot be a bottleneck, high-speed interfaces avoid this problem, satisfying high-bandwidth requirements.
Low requirements for the installation	Multiple configuration methods make these switches the optimal LAN solution for offices, offering IT managers an agile and fast installation.
Ready for critical IT services	Many corporate branch offices can not stop because of a simple power issue with the network devices, ESW4L3 switches can include redundant power modules.

Key Features

- **Security Protection Policies** The ESW4L3 adopts the Network Foundation Protection Policy (NFPP) technology to rate-limit ARP packets, ICMP request packets, DHCP Request messages, etc ensuring network stability.
- **High reliability** The ESW4L3 supports STP, RSTP, and MSTP to achieve fast convergence, improve the fault tolerance capability, ensure stable network operation (with RLDP), and link load balancing.
- **Software-Defined Networking (SDN)** ESW4L3 is compatible with OpenFlow 1.3 as the times require, and will collaborate with SDN controller to easily build large-scale L2/L3 networks. The switches allow you to smoothly upgrade to an SDN network
- **VXLAN to build a logical L2 network over a L3 network** Flexible placement of multitenant segments throughout the data center that provides a solution to extend Layer 2 segments over the underlying shared network infrastructure.
- **Virtual Switching Unit (VSU)** VSU enables multiple physical devices to be connected through aggregate links and virtualized into one logical device, using the same IP address and enhancing network management.
- **IPv4/IPv6 Dual-stack Multi-layer Switching** The ESW4L3 includes a wide range of IPv4 protocols: IPv4 static routing, RIP, OSPFv2, IS-ISv4, and BGP4. Additionally, it also supports IPv6 protocols such as IPv6 static routing, RIPng, OSPFv3, IS-ISv6, and BGP4+.
- **Easy Network Maintenance** The ESW4L3 permits routine network diagnosis based on SNMP, RMON, Syslog, and USB-based backup log and configuration. Customers can use various management modes such as CLI, web-GUI, Telnet, and CWMP-based zero-touch.

CARACTERÍSTICA TÉCNICA DEL HARDWARE

Access Data Interfaces

48x 10G/25G* SFP28 ports

*10G ports can be promoted to 25G ports with a license

Switching Capacity

4,0 Tbps

MAX MAC addresses/ARP table/VRFs/IP4 unicast routes/IP6 unicast routes

128000/96000/1024/35000/65000

Environmental specifications

Operating temperature: 0°C to 45°C

Operating humidity: 10% to 90% RH

Storage temperature: -40°C to 70°C

Uplink ports

8 x 40G/100G QSFP ports

Dimensions and Weight

(W x D x H) 442 mm x 387 mm x 44 mm, 1RU

Weight: 10kg

4x front to rear fans with speed regulating and alarm function

Modular Power Supplies, 550W

Rated voltage range: 100 V to 240 V AC

Frequency: 50 Hz to 60 Hz

HVDC input: 240 V DC

CARACTERÍSTICA TÉCNICA DEL SOFTWARE

L2 Switching-1

IEEE 802.1Q(4K VLANs), Voice VLAN, Super VLAN and private VLAN
MAC address-based, port-based, protocol-based, and IP subnet-based
VLAN

Basic QinQ and selective QinQ

L2 Switching-3

LLDP/LLDP-MED, LLDP IPv6, and LLDP-POE

MAC address filtering

Setting the MAC address aging time

L3-Routing

IPv4 and IPv6 static routing,

RIP and RIPng OSPFv2 and OSPFv3 IS-ISv4 and IS-ISv6

BGP4 and BGP4+ Routing policy IPv4/VRF IPv4/IPv6 PBR

QoS

Port traffic rate limiting, 802.1p/DSCP/ToS traffic classification

Congestion management: SP, WRR, DRR, WFQ, SP+WFQ, SP+WRR,
SP+DRR, and SP+WFQ

Congestion avoidance: tail drop, RED, and WRED. 8 priority queues per port

Reliability

RLDP, L2 link connectivity detection, unidirectional link detection

Data Link Detection Protocol (DLDP), IPv4 VRRP v2/v3, IPv6 VRRP

BFD, Link monitoring, fault notification, and remote loopback

802.3ah(EFM)

L2 Switching-2

STP (IEEE 802.1.d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s)

Auto errdisable recovery, BPDU filter, BPDU guard, Port fast, Root guard

ERPS (G.8032 v1/v2), ring/tangent/intersecting ring, and load balancing

L3

IPv4/v6 DHCP client, DHCP relay, DHCP server, and DHCP snooping
DNS client, DNS proxy, and DNSv6 client. Neighbor Discovery (ND), ND
proxy

Static and dynamic ARP, ARP proxy, and ARP entry timeout

Security

Multiple AAA modes, RADIUS and TACACS+

IEEE802.1X authentication, MAC address bypass (MAB) authentication

BPDU guard, Port security, IP source guard, ARP spoofing prevention

Multicast

IGMPv1/v2/v3, IGMPv1/v2 snooping, IGMP fast leave

PIM-DM, PIM-SM, PIM-SSM, PIM SMv6, and PIM-SSMv6

MSDP for inter-domain multicast, MLDv1/v2 and MLD proxy, MLDv1/v2
snooping

Management

IPv4/v6 FTP client, FTP server, TFTP client, TFTP server, SNMP

v1/v2/c/c3

Web GUI, Syslog/Debugging, RMON (1, 2, 3, 9), CWMP

OpenFlow Special 1.3, Cloud Management

CARACTERÍSTICA TÉCNICAS ADICIONALES

Console interface

RJ45 female connector

External storage interface

1x USB port

MTBF

> 200,000 hours

Interface surge protection Telecom port: 4 kV (MGMT port)

CPU and storage

2.2 GHz quad-core processor

DDR4 4GB RAM, 8GB flash memory



Scenarios

Teldat Group



Founded in 1985, Teldat is a Spanish company whose mission is to provide companies with valuable solutions for cloud access, remote office communications, cyberse-curity and voice/data connectivity both in the office and in specific environments whether they are industrial, railway, vehicles or public services.

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