

Windbit ESW2L3 Switch Series

ESW2L3: Layer 3 Managed Access Switch

Introduction

The ESW2L3 series are next-generation gigabit Ethernet switches launched by Teldat according to its design philosophy of security, high efficiency, energy saving, and high availability because of the support of up two redundant power supply units. This series can provide full gigabit access and flexibly extensible 10G uplink data exchanges. With a new hardware architecture and the latest modular OS, the ESW2L3 series are capable of providing more resource entries, faster hardware processing, a better user experience, and a 24x7x365 service.

Product Highlights

- Various interface types and 10GE uplinks
- L3 access switch with VXLAN support
- PoE/PoE+ models
- Enterprise-class high reliability for corporations
- High-bandwidth, low-latency and flexibility
- Rectifies faults with non-stop services
- High MTBF because of the two power modules

Interfaces

24x10/100/1000Eth, 4x10 SFP+ ports	ESW2L3-24GE4XS-E
24x10/100/1000, 4x10 SFP+ ports, PoE+	ESW2L3-24GE4XS-P
48x10/100/1000Eth, 4x10 SFP+ ports	ESW2L3-48GE4XS-E
48x10/100/1000, 4x10 SFP+ ports, PoE+	ESW2L3-48GE4XS-P
1 x Console port, 1 x USB port	All models
1 x Management port	All models



Competitive Advantage

Full gigabit access to LANs

Ready for large enterprises, institutions, and campuses, such as the LANs in government buildings, universities, and big manufacturing/energy/other organizations

10Gbps 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, ESW2L3 switches can include redundant power modules.

Key Features

- **Security Protection Policies** The ESW2L3 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 ESW2L3 supports STP, RSTP, and MSTP to achieve fast convergence, improve the fault tolerance capability, ensure stable network operation(with RLDLP), and link load balancing.
- **Software-Defined Networking (SDN)** ESW2L3 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
- **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 ESW2L3 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 ESW2L3 permits routine network diagnosis based on SNMP, RMON, Syslog, and USBbased backup log and configuration. Customers can use various management modes such as CLI, web-GUI, Telnet, and CWMP-based zero-touch.

HARDWARE TECHNICAL FEATURES

Data Interfaces

4 x 1G/10G SFP+ ports
24 or 48 x 10/100/1000M adaptive electrical ports

Packet forwarding rate

24x ports: 96Mpps/126Mpps. 48x ports: 132Mpps/166Mpps
Switching Capacity
24x ports: 96Mpps/126Mpps. 48x ports: 132Mpps/166Mpps

Environmental specifications

Operating temperature: 0°C to 45°C
Operating humidity: 10% to 90% RH
Storage temperature: -40°C to 70°C

Power over Ethernet support(Some models)

IEEE 802.3af and 802.3at power supply standards
Scheduled powering on /off PoE ports on the basis of time policy
Maximum PoE output power: 720W(24x)/1440W(48x)

Dimensions and Weight

442 × 420 × 43.6 mm, 1RU
Weight: 24x-4,2kg, 24xPoE-4,3kg, 48x-4,3kg, 48xPoE-4,6kg
Fan speed regulating and alarm function

Modular Power Supplies, 70-1000W models

Rated voltage range: 100 V to 240 V
Maximum voltage range: 90V(176V PoE models) to 264 V
Frequency: 50 Hz to 60 Hz

SOFTWARE TECHNICAL FEATURES

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), sing/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/v2c/c3
Web GUI, Syslog/Debugging, RMON (1, 2, 3, 9), CWMP
OpenFlow Special 1.3, Cloud Management

ADDITIONAL TECHNICAL FEATURES

Console interface

RJ45 female connector
External storage interface
1x USB port

MTBF

>36 years with dual power modules
Primary airflow
Left/Front-to-rear airflow

CPU and storage

1.2 GHz dual-core processor
Flash memory: 2 GB SDRAM: 1 GB

Scenarios

