# ENOS SOFTWARE FEATURES LIST

# (ETHERNEXION UNIFIED NETWORK OPERATING SYSTEM)

**Version: V1.5**
**Release Date: 2025/12/29**

## Overview

ENOS (ETHERNEXION Network Operating System) is the unified, high-performance core powering the entire ETHERNEXION switch portfolio. Backed by over a decade of proven commercial deployment, ENOS features an advanced modular architecture that ensures seamless hardware decoupling and exceptional flexibility. Through quarterly release cycles, we deliver continuous feature enhancements and optimizations, ensuring your network remains resilient and high-performing in an ever-evolving digital landscape.

## keywords

- Unified Software Ecosystem: A single, consistent software platform powering the entire product portfolio for seamless management.
- Field-Proven Reliability: Over 10 years of rigorous iteration and extensive commercial deployment in diverse network environments.
- Modular Architecture: A highly flexible, component-based design that allows for precise feature pruning and rapid hardware porting.
- Decade of Innovation: Continuous evolution through 10+ years of real-world feedback and systematic code refinement.

## Features List table

Tips for reading: ○-support X- nonsupport

EB - Basic license, with Layer2 features and few Layer3 features

MS - Advanced license with Full layer3 features exclude MPLS

MA - Premium license with Full layer3 features include MPLS

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Ethernet basic features | Ethernet | Interface | Ethernet interface operating modes(full duplex, half duplex, and auto-negotiation) | ○ | ○ | ○ | |
| | | | Ethernet interface operating rates | ○ | ○ | ○ | |
| | | | Jumbo Frame | ○ | ○ | ○ | |
| | | | port-xconnect | ○ | ○ | ○ | |
| | | Flow-control | Flow-control tx/rx | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Ethernet basic features | Ethernet | Storm-control | Port based storm-control | ○ | ○ | ○ | |
| | | | VLAN based storm-control | ○ | ○ | ○ | |
| | | Port-block | Port-block(know/unknown unicast; know/unknown multicast/broadcast) | ○ | ○ | ○ | |
| | | Port-isolate | L2/L3/All Port-isolate | ○ | ○ | ○ | |
| | | | Uni-direction isolate | ○ | ○ | ○ | |
| | | L2 Protocol Tunnel | L2 Protocol Tunnel(support CFM/DOT1X/SLOW-PROTO/STP | ○ | ○ | ○ | |
| | | Forward mode | Store-and-forward | ○ | ○ | ○ | |
| | | | Cut-through | ○ | ○ | ○ | |
| | VLAN | VLAN Access mode | Access/Trunk | ○ | ○ | ○ | |
| | | | Default VLAN | ○ | ○ | ○ | |
| | | VLAN Classification | VLAN Classification(port based/mac based/IP based/protocol based) | ○ | ○ | ○ | |
| | | QinQ | Basic QinQ | ○ | ○ | ○ | |
| | | | Selective QinQ | ○ | ○ | ○ | |
| | | | VLAN Mapping(1:1 VLAN Translation) | ○ | ○ | ○ | |
| | | VLAN Statistics | VLAN Statistics | ○ | ○ | ○ | |
| | | Private VLAN | Private VLAN | ○ | ○ | ○ | |
| | | Voice VLAN | Voice VLAN | ○ | ○ | ○ | |
| | | Guest VLAN | Guest VLAN | ○ | ○ | ○ | |
| | MAC | MAC Address Table | Automatic learning and aging of MAC addresses | ○ | ○ | ○ | |
| | | | Hardware Learning | ○ | ○ | ○ | |
| | | | Static and dynamic MAC address entries | ○ | ○ | ○ | |
| | | | Blackhole MAC | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Ethernet basic features | MAC | MAC Flapping detect | MAC Flapping detect | ○ | ○ | ○ | |
| | | Port Bridge | Port Bridge | ○ | ○ | ○ | |
| | LAG | Link aggregation | Static-LAG & LACP | ○ | ○ | ○ | |
| | | | LAG load balance(SLB) | ○ | ○ | ○ | |
| | | | LAG load balance(DLB) | ○ | ○ | ○ | |
| | | | LAG load balance(RR) | ○ | ○ | ○ | |
| | | | LAG Self-healing | ○ | ○ | ○ | |
| | | | Link aggregation weighting | ○ | ○ | ○ | |
| Ethernet Ring protection features | xSTP | STP | Spanning-Tree Protocol | ○ | ○ | ○ | |
| | | RSTP | Rapid Spanning-Tree Protocol | ○ | ○ | ○ | |
| | | MSTP | Multi-instance Spanning-Tree Protocol | ○ | ○ | ○ | |
| | | Spanning-Tree Protocol Protection | BPDU Filter/Guard | ○ | ○ | ○ | |
| | | | Root Guard | ○ | ○ | ○ | |
| | | | Loop Guard | ○ | ○ | ○ | |
| | | | Anti TC-BPDU attack | ○ | ○ | ○ | |
| | ERPS | ERPS | Single ERPS ring | ○ | ○ | ○ | |
| | | | tangent ERPS rings | ○ | ○ | ○ | |
| | | | intersecting ERPS rings | ○ | ○ | ○ | |
| | | | compatible with RRPP | ○ | ○ | ○ | |
| | Loop back Detect | Loop back Detect | Loop back detection | ○ | ○ | ○ | |
| Layer2 Multicast | Layer2 Multicast | IGMP Snooping | IGMPv1/v2/v3 Snooping | ○ | ○ | ○ | |
| | | | Fast leave | ○ | ○ | ○ | |
| | | | Static IGMP snooping group | ○ | ○ | ○ | |
| | | MVR | MVR(Multicast VLAN Registration) | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| IPv4 Forwarding | ARP | ARP | Static and dynamic ARP entries | ○ | ○ | ○ | |
| | | | Aging of ARP entries | ○ | ○ | ○ | |
| | | | Gratuitous ARP | ○ | ○ | ○ | |
| | | ARP proxy | basic ARP-Proxy | ○ | ○ | ○ | |
| | | | local ARP-Proxy | ○ | ○ | ○ | |
| | IPv4 Unicast Routing | IPv4 Static Routes | IPv4 Static Routes | ○ | ○ | ○ | |
| | | | Black hole Routes | ○ | ○ | ○ | |
| | | | co-work with IP SLA | ○ | ○ | ○ | |
| | | | VRF(Virtual Routing and Forwarding) | ○ | ○ | ○ | |
| | | | uRPF check | ○ | ○ | ○ | |
| | | RIP | RIPv1/v2 | ○ | ○ | ○ | |
| | | OSPFv2 | OSPFv2 | X | ○ | ○ | |
| | | IS-IS | IS-IS | X | ○ | ○ | |
| | | BGP | IBGP | X | ○ | ○ | |
| | | | EBGP | X | ○ | ○ | |
| | | Route policy | Route-map | ○ | ○ | ○ | |
| | | | IPv4 prefix-list | ○ | ○ | ○ | |
| | | PBR | PBR(Policy-based Routing) | ○ | ○ | ○ | |
| | | ICMP | ICMP redirect | ○ | ○ | ○ | |
| | | | ICMP unreachable | ○ | ○ | ○ | |
| | | ECMP | ECMP(SLB) | ○ | ○ | ○ | |
| | | | ECMP(DLB) | ○ | ○ | ○ | |
| | | | ECMP(RR) | ○ | ○ | ○ | |
| | | | ECMP Self-healing | ○ | ○ | ○ | |
| | IPv4 Multicast Routing | IGMP | IGMPv1/v2/v3 | ○ | ○ | ○ | |
| | | | IGMP-Proxy | ○ | ○ | ○ | |
| | | | IGMP SSM Mapping | ○ | ○ | ○ | |
| | | PIM | PIM-SM | X | ○ | ○ | |
| | | | PIM-DM | X | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| IPv6 Forwarding | IPv6 Basic Protocol | ICMPv6 | ICMPv6 | X | ○ | ○ | |
| | | NDP | NDP | X | ○ | ○ | |
| | IPv6 Unicast Routing | IPv6 Static Routes | IPv6 Static Routes | X | ○ | ○ | |
| | | RIPng | RIPng | X | ○ | ○ | |
| | | OSPFv3 | OSPFv3 | X | ○ | ○ | |
| | | IS-IS | IS-IS | X | ○ | ○ | |
| | | BGP4+ | BGP4+ | X | ○ | ○ | |
| | IPv6 Multicast Routing | MLD v1/v2 | MLD v1/v2 | X | ○ | ○ | |
| | | MLD v1/v2 Snooping | MLD v1/v2 Snooping | X | ○ | ○ | |
| | | MVR6 | MVR6 | X | ○ | ○ | |
| | | PIM-SM v6 | PIM-SM v6 | X | ○ | ○ | |
| | IP Tunnel | IPv6 over IPv4 Tunnel | IPv6 over IPv4 Tunnel | X | ○ | ○ | |
| | | 6to4 Tunnel | 6to4 Tunnel | X | ○ | ○ | |
| | | ISATAP Tunnel | ISATAP Tunnel | X | ○ | ○ | |
| | IPv6 Service | DHCPv6 | DHCPv6 Relay | X | ○ | ○ | |
| | | | DHCPv6 Snooping | X | ○ | ○ | |
| | | IPv6 Prefix List | IPv6 Prefix-list | X | ○ | ○ | |
| Device reliability features | BFD | BFD | BFD for Static route | X | ○ | ○ | |
| | | | BFD for OSPFv2 | X | ○ | ○ | |
| | | | BFD for VRRP/Track | X | ○ | ○ | |
| | | | BFD for PBR | X | ○ | ○ | |
| | VRRP | VRRP | VRRP | ○ | ○ | ○ | |
| | | | Track for VRRP | ○ | ○ | ○ | |
| | Smart Link | Smart Link | multi-instance | ○ | ○ | ○ | |
| | | | load balance | ○ | ○ | ○ | |
| | | | Multi-Link | ○ | ○ | ○ | |
| | | | Monitor-link | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Device reliability features | MLAG | MLAG | MLAG basic | ○ | ○ | ○ | |
| | | | MLAG orphan Port | ○ | ○ | ○ | |
| | Stacking | Stacking | Maximum number of stacked devices: 8<br>Stack port: Any port or AGG | ○ | ○ | ○ | *1 |
| Ethernet OAM | EFM | EFM (802.3ah) | Auto detection | X | ○ | ○ | |
| | | | Network fault detection | X | ○ | ○ | |
| | | | Network fault handle | X | ○ | ○ | |
| | | | remote loop back | X | ○ | ○ | |
| | CFM | CFM (802.1ag) | Hardware CCM detect | X | ○ | ○ | |
| | | | MAC Ping | X | ○ | ○ | |
| | | | MAC Trace | X | ○ | ○ | |
| | Y.1731 | Y.1731 | Loss measure(LM) | X | ○ | ○ | *2 |
| | | | Latency and Jitter measure | X | ○ | ○ | |
| PoE features | PoE | System Power management | Power supply on-spot detection | ○ | ○ | ○ | |
| | | | Power supply capability detection | ○ | ○ | ○ | |
| | | | Power capability auto configuration (PSE) | ○ | ○ | ○ | |
| | | Power Supply Management | Legacy PD detection | ○ | ○ | ○ | |
| | | | PD max power management | ○ | ○ | ○ | |
| | | | PD priority management | ○ | ○ | ○ | |
| | | | Power Supply Task Plan management(Not ready) | ○ | ○ | ○ | |
| | | | PD Mandatory power supply | ○ | ○ | ○ | |
| | | operations management | PSE log | ○ | ○ | ○ | |
| | | | PSE Chipset temperature inquire | ○ | ○ | ○ | |
| | | | PSE firmware update | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| QoS features | QoS | Traffic classification | Traffic classification based on COS/DSCP (simple classification) | ○ | ○ | ○ | |
| | | | Traffic classification based on ACL ( complex classification) | ○ | ○ | ○ | |
| | | | Traffic classification based on inner header of the tunnel packets | ○ | ○ | ○ | |
| | | Traffic behaviors | Queue scheduling | ○ | ○ | ○ | |
| | | | Remark the priority fields(COS/DSCP) of the packet based on ACL | ○ | ○ | ○ | |
| | | | Remark the priority fields(COS/DSCP) of the packet based on Table Map | ○ | ○ | ○ | |
| | | | Flow redirection | ○ | ○ | ○ | |
| | | | Flow mirror | ○ | ○ | ○ | |
| | | Traffic policing | Traffic policing based on direction(in/out) of Port | ○ | ○ | ○ | |
| | | | Traffic policing based on direction(in/out) of VLAN | ○ | ○ | ○ | |
| | | | Traffic policing based on direction(in/out) of flow | ○ | ○ | ○ | |
| | | | Traffic policing based on direction(in/out) of aggregated flow | ○ | ○ | ○ | |
| | | Traffic shaping | Queue based traffic shaping | ○ | ○ | ○ | |
| | | | Port based traffic shaping | ○ | ○ | ○ | |
| | | Congestion management | SP(Strict Priority)scheduling | ○ | ○ | ○ | |
| | | | WDRR(Weighted Deficit Round Robin)scheduling | ○ | ○ | ○ | *3 |
| | | | SP + WDRR mixed scheduling | ○ | ○ | ○ | *4 |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| QoS features | QoS | Congestion avoidance | TD(Tail Drop) | ○ | ○ | ○ | |
| | | | WRED(Weighted Random Early Detection) | ○ | ○ | ○ | |
| | | Traffic statistics | Packet counts and bytes statistics based on traffic classification | ○ | ○ | ○ | |
| | | | Packet counts and bytes statistics based on the color after traffic policing | ○ | ○ | ○ | |
| | | | Forwarded and discarded packet counts and bytes statistics | ○ | ○ | ○ | |
| | | ECN (Explicit congestion notification) | ECN tags based on Tail Drop | ○ | ○ | ○ | *5 |
| | | | ECN tags based on WRED | ○ | ○ | ○ | |
| Data Center | VARP | Virtual gateway | VARP(Virtual-ARP) | ○ | ○ | ○ | |
| | | | VARP subnet | ○ | ○ | ○ | |
| | Tunnel | VxLAN | Manual configure VxLAN tunnel | ○ | ○ | ○ | |
| | | | VxLAN distributed gateway | ○ | ○ | ○ | |
| | | | VxLAN active-active access | ○ | ○ | ○ | |
| | | | Interconnect across Data Centers based on VxLAN | ○ | ○ | ○ | |
| | | | Edit DSCP in VxLan outer header | ○ | ○ | ○ | |
| | | | BGP EVPN | X | ○ | ○ | |
| | | | Support to enable/disable overlay split horizon per-VNI | ○ | ○ | ○ | |
| | | GRE Tunnel | GRE Tunnel | ○ | ○ | ○ | |
| | | NVGRE Tunnel | NVGRE Tunnel | ○ | ○ | ○ | |
| | | GENEVE Tunnel | GENEVE Tunnel | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Data Center | DCB | DCBX | LLDP support DCBX TLV | ○ | ○ | ○ | |
| | | PFC | PFC | ○ | ○ | ○ | |
| Metro Feature | MPLS | LDP | LDP | X | X | ○ | |
| | | MPLS Forwarding | MPLS Forwarding | X | X | ○ | |
| | | VPWS | VPWS (L2VPN) | X | X | ○ | |
| | | VPLS | VPLS (L2VPN) | X | X | ○ | |
| | | L3VPN | L3VPN | X | X | ○ | |
| | | MPLS OAM | MPLS OAM | X | X | ○ | |
| | | MPLS Stats | MPLS Stats | X | X | ○ | |
| | | ACL | ACL | X | X | ○ | |
| | | Qos | Qos | X | X | ○ | |
| Security and management | System Security | SSH | SSHv1/v2 | ○ | ○ | ○ | |
| | | | RSA Key generation | ○ | ○ | ○ | |
| | | RADIUS | RADIUS | ○ | ○ | ○ | |
| | | TACAS+ | TACAS+ | ○ | ○ | ○ | |
| | | AAA | Authentication | ○ | ○ | ○ | |
| | | | Authorization | ○ | ○ | ○ | |
| | | | Accounting | ○ | ○ | ○ | |
| | | Dot1x | Port based dot1x | ○ | ○ | ○ | |
| | | | MAC based dot1x | ○ | ○ | ○ | |
| | | | Guest VLAN | ○ | ○ | ○ | |
| | | ACL | MAC/IP ACL | ○ | ○ | ○ | |
| | | | Basic Mode ACL | ○ | ○ | ○ | |
| | | | Port-group ACL | ○ | ○ | ○ | |
| | | | VLAN-group ACL | ○ | ○ | ○ | |
| | | | IPv6 ACL | ○ | ○ | ○ | |
| | | | ACL UDF | ○ | ○ | ○ | |
| | | | Time Range | ○ | ○ | ○ | |
| | | ARP Inspection | ARP Inspection | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Security and management | System Security | IP Source Guard | IP Source Guard | ○ | ○ | ○ | |
| | | Port Security | Limitation on MAC address learning on interface | ○ | ○ | ○ | |
| | | VLAN Security | Limitation on MAC address learning on VLAN | ○ | ○ | ○ | |
| | | Control Plane Policy (COPP) | Black list/wihte list | ○ | ○ | ○ | |
| | | | Rate limit | ○ | ○ | ○ | |
| | | CPU Traffic Limit | CPU Traffic Limit | ○ | ○ | ○ | |
| | | Prevent DDOS attack | Prevent DDOS attack (ICMP Flood/Smurf/Fraggle/LAND/SYN Flood) | ○ | ○ | ○ | |
| | | Login filter | Telnet/SSH ACL filtering | ○ | ○ | ○ | |
| | | | Telnet/SSH IPv6 ACL filtering | ○ | ○ | ○ | |
| | | MAC Security | MacSec(802.1AE) | ○ | ○ | ○ | *6 |
| | | Link-Flapping detection | Link-Flapping detection | ○ | ○ | ○ | |
| | Network Management | DHCP | DHCP Server | ○ | ○ | ○ | |
| | | | DHCP Relay | ○ | ○ | ○ | |
| | | | DHCP Snooping | ○ | ○ | ○ | |
| | | | DHCP Client | ○ | ○ | ○ | |
| | | | DHCP Option82 | ○ | ○ | ○ | |
| | | | DHCP Option252 | ○ | ○ | ○ | |
| | | RMON | RMON | ○ | ○ | ○ | |
| | | sFlow | sFlow v4/v5 | ○ | ○ | ○ | |
| | | IP SLA | IP SLA | ○ | ○ | ○ | |
| | | IPFIX | IPFIX | ○ | ○ | ○ | |
| | | EFD | Elephant Flow Detection | ○ | ○ | ○ | *7 |
| | | NTP | NTP(Network Time Protocol) | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Security and management | Network Management | PTP（IEEE 1588） | TC（Support P2P/E2E、Ethernet/Udp Transport） | ○ | ○ | ○ | |
| | | | BC/OC(Support OneStep/TwoStep、Request-response/Peer-delay Ethernet/Udp Transport) | ○ | ○ | ○ | |
| | | Err-disable | Err-disable detection and recovery | ○ | ○ | ○ | |
| | | DNS | Static DNS Client | ○ | ○ | ○ | |
| | | LLDP | LLDP | ○ | ○ | ○ | |
| | Terminal Services | Command Line Interface | Configurations through CLI (Command Line Interface) | ○ | ○ | ○ | |
| | | Help information | Banner configuration | ○ | ○ | ○ | |
| | | | Help information in English | ○ | ○ | ○ | |
| | | Terminal service | Vty Terminal service | ○ | ○ | ○ | |
| | | | Console Terminal service | ○ | ○ | ○ | |
| | | Management interface | In-band management interface and configuration | ○ | ○ | ○ | |
| | | | Out-band management interface and configuration | ○ | ○ | ○ | |
| Configuration and maintenance | Configuration Management | SNMP | Network management based on SNMPv1/v2c/v3 | ○ | ○ | ○ | |
| | | | Public and private MIB | ○ | ○ | ○ | |
| | | | Public and private Trap | ○ | ○ | ○ | |
| | | WEB | Configuration and management based on WEB UI | ○ | ○ | ○ | |
| | | Cloud Management | Automatic device connection management | ○ | ○ | ○ | *8 |
| | | | Zero-configuration deployment | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Configuration and maintenance | Configuration Management | Cloud Management | Automatic network topology | ○ | ○ | ○ | |
| | | | Network monitoring and alarm notification | ○ | ○ | ○ | |
| | | | Configuration and one-click rollback | ○ | ○ | ○ | *8 |
| | | | Cross-network tunneling connection to network device(web/ssh/telnet) | ○ | ○ | ○ | |
| | | | Scheduled tasks deployment | ○ | ○ | ○ | |
| | | RPC-API | Configuration and management based on RPC-API | ○ | ○ | ○ | |
| | | Smart Config | Smart Config(Automatically configuration when system start) | ○ | ○ | ○ | |
| | | system profile configuration | change the system specifications by choose different STM Profiles | ○ | ○ | ○ | |
| | | Restore factory default configuration | Restore factory default configuration | ○ | ○ | ○ | |
| | File System | File system | File system(support directory and file management) | ○ | ○ | ○ | |
| | | Upload and download | Upload and download files through FTP or TFTP | ○ | ○ | ○ | |
| | | | Upload and download files through Xmodem | ○ | ○ | ○ | |
| | Debugging And Maintenance | Debug | per-module Debug features | ○ | ○ | ○ | |
| | | | ICMP Debug | ○ | ○ | ○ | |
| | | BHM | Software process monitor: BHM(Beat Heart Monitor) | ○ | ○ | ○ | |
| | | | Hardware Watch Dog | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Configuration and maintenance | Debugging And Maintenance | Log & alarm | CPU usage display and alarm | ○ | ○ | ○ | |
| | | | Memory usage display and alarm | ○ | ○ | ○ | |
| | | | Device temperature, PSU, FAN, status display and alarm | ○ | ○ | ○ | |
| | | | User operation logs | ○ | ○ | ○ | |
| | | | Management of logs, alarms, and debugging information | ○ | ○ | ○ | |
| | | VCT | VCT(Virtual Cable Test) | ○ | ○ | ○ | |
| | | system diagnostics | Detailed Diagnostic-information collection | ○ | ○ | ○ | |
| | | Reboot | Manual reboot | ○ | ○ | ○ | |
| | | | Schedule Reboot | ○ | ○ | ○ | |
| | | | Reboot Information logging | ○ | ○ | ○ | |
| | | network diagnostics | Ping | ○ | ○ | ○ | |
| | | | IPv6 Ping | ○ | ○ | ○ | |
| | | | Trace route | ○ | ○ | ○ | |
| | | mirror | Port mirror | ○ | ○ | ○ | |
| | | | Flow mirror | ○ | ○ | ○ | |
| | | | Remote mirror | ○ | ○ | ○ | |
| | | | Multi-destination mirror(m:n) | ○ | ○ | ○ | |
| | | | Use CPU as mirror source | ○ | ○ | ○ | |
| | | | Use CPU as mirror destination and analyze packet | ○ | ○ | ○ | |
| | | | ERSPAN | ○ | ○ | ○ | |
| | | CPU statistics | To CPU/From CPU packets statistics | ○ | ○ | ○ | |

| Type | Sub Type | Feature | Description | EB | MS | MA | Remark |
|---|---|---|---|---|---|---|---|
| Configuration and maintenance | Debugging And Maintenance | L2 Ping | layer2 network connectivity detection - L2Ping (MAC Ping/Trace) | ○ | ○ | ○ | |
| | | UDLD | UDLD(Unidirectional Link Detection) | ○ | ○ | ○ | |
| | | unidirectional | unidirectional forwarding of the fiber | ○ | ○ | ○ | |
| | | Loop back | port loop back | ○ | ○ | ○ | |
| | | | hardware loop back(internal/external) | ○ | ○ | ○ | |
| | | System time | Time configuration | ○ | ○ | ○ | |
| | | | Timezone | ○ | ○ | ○ | |
| | Software | System software upgrate | Update via TFTP | ○ | ○ | ○ | |
| | upgrate | Uboot upgrate | Uboot upgrate | ○ | ○ | ○ | |

| Remark: |
|---|
| *1. Due to certain business strategies, the stacking feature may require an additional license to activate. |
| *2. Loss measure(LM) is not available on S7 and S9 series products.. |
| *3. WDRR(Weighted Deficit Round Robin)scheduling is not available on S9 series products.. |
| *4. SP + WDRR mixed scheduling is not available on S9 series products.. |
| *5. ECN tags based on Tail Drop is not available on S9 series products.. |
| *6. MacSec(802.1AE) is not available on S7 series products. |
| *7. Elephant Flow Detection is not available on S7 series products.. |
| *8. Cloud Management feature needs to be used with the DHCS Cloud Management system. DHCS can be deployed on public clouds or in a private environment. |

| Supported MIB |
| --- |
| • RFC 1155 SMI |
| • RFC 1157 SNMPv1 |
| • RFC 1212, RFC 1213, RFC 1215 MIB-II, Ethernet-Like MIB and TRAPs |
| • RFC 1493 Bridge MIB |
| • RFC 1643 Ethernet MIB |
| • RFC 1657 BGP-4 MIB |
| • RFC 1724 RIPv2 MIB |
| • RFC 1850 OSPFv2 MIB |
| • RFC 1905 RFC 1907 SNMP v2c, SMIv2 and Revised MIB-II |
| • RFC 2011 SNMPv2 for Internet Protocol using SMIv2 |
| • RFC 2012 SNMPv2 for transmission control protocol using SMIv2 |
| • RFC 2013 SNMPv2 for user datagram protocol suing SMIv2 |
| • RFC 2096 IPv4 Forwarding Table MIB |
| • RFC 2287 System Application Packages MIB |
| • RFC 2570–2575 SNMPv3, user-based security, encryption and authentication |
| • RFC 2576 Coexistence between SNMP Version 1, Version 2 and and Version 3 |
| • RFC 2578 SNMP Structure of Management Information MIB |
| • RFC 2579 SNMP Textual Conventions for SMIv2 |
| • RFC 2665 Ethernet-like interface MIB |
| • RFC 2819 RMON MIB |
| • RFC 2863 Interface Group MIB |
| • RFC 2863 Interface MIB |
| • RFC 3413 SNMP Application MIB |
| • RFC 3414 User-based Security model for SNMPv3 |
| • RFC 3415 View-based Access Control Model for SNMP |
| • RFC 4188 STP and Extensions MIB |
| • RFC 4363 Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering, and VLAN extensions |
| • Draft – blumenthal – aes – usm - 08 |
| • Draft – reeder - snmpv3 – usm - 3desede -00 |
| • Draft-ietf-idmr-igmp-mib-13 |

| Supported RFC |
| --- |
| • RFC 826 ARP |
| • RFC 854 Telnet client and server |
| • RFC 894 IP over Ethernet |
| • RFC 906 TFTP Bootstrap |
| • RFC 1027 Proxy ARP |
| • RFC 1058 RIP v1 |
| • RFC 1112 IGMP v1 |
| • RFC 1122 Host Requirements |
| • RFC 1195 Use of OSI IS-IS for Routing in TCP/IP and Dual Environments (TCP/IP transport only) |
| • RFC 1492 TACACS+RFC 1519 CIDR |
| • RFC 1587 OSPF NSSA Option |
| • RFC 1591 DNS |
| • RFC 1812 Requirements for IP Version 4 Routers |
| • RFC 2030 SNTP, Simple Network Time Protocol |
| • RFC 2068 HTTP server |
| • RFC 2080 RIPng for IPv6 |
| • RFC 2131 BOOTP/DHCP relay agent and DHCP server |
| • RFC 2138 RADIUS Authentication |
| • RFC 2139 RADIUS Accounting |
| • RFC 2154 OSPF w/Digital Signatures (password, MD-5) |
| • RFC 2236 IGMP v2 |
| • RFC 2267 Network Ingress Filtering |
| • RFC 2328 OSPF v2 (edge-mode) |
| • RFC 2338 VRRP |
| • RFC 2362 PIM-SM (edge-mode) |
| • RFC 2370 OSPF Opaque LSA Option |
| • RFC 2453 RIP v2 |
| • RFC 2460 Internet Protocol, Version 6 (IPv6) Specification |
| • RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) |

| Supported RFC (The End) |
| --- |
| • RFC 2463 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification |
| • RFC 2464 Transmission of IPv6 Packets over Ethernet Networks |
| • RFC 2474 DiffServ Precedence, including 12 queues/port |
| • RFC 2475 DiffServ Core and Edge Router Functions |
| • RFC 2526 Reserved IPv6 Subnet Anycast Addresses |
| • RFC 2597 DiffServ Assured Forwarding (AF) |
| • RFC 2598 DiffServ Expedited Forwarding (EF) |
| • RFC 2740 OSPF for IPv6 |
| • RFC 3176 sFlow |
| • RFC 3376 IGMP v3 |

## About ETHERNEXION:

ETHERNEXION - A technology-oriented company specializing in the development of ethernet switch products. EtherNexion is headquartered in Singapore, with a manufacturing base in Thailand and a business expansion office in India. With the continuous evolution of technology, ETHERNEXION has launched a range of differentiated ethernet switch products . Currently, the company's product line covers a range from 1G to 800G and can be used in scenarios such as enterprise networks, carrier networks, data centers, and AI computing. Currently, the main cooperation model for the company is OEM/ODM, dedicated to providing customers with flexible and end-to-end customized products and technical consulting services. Becoming the most trusted business partner for customers has always been the company's mission and principle.

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