



The Power of We™

Ethernet Switch Product Feature Comparison

The Avaya Ethernet Switch product line provides complete coverage ranging from entry-level branch office through premium high-performance wiring closet, to campus core and data center applications. Our continuous improvement program has led to a number of pioneering products and capabilities. Recent development includes the introduction of the 'Unified Access' solution, leveraging the high performance data plane of the ERS 8800 and the scalable control plane of the WLAN 8100 Series.

The Avaya Ethernet Switch portfolio:

- Virtual Services Platform 9000
- Ethernet Routing Switch 8800
- Ethernet Routing Switch 8300
- Virtual Services Platform 7000 Series
- Ethernet Routing Switch 5000 Series
- Ethernet Routing Switch 4000 Series
- Ethernet Routing Switch 3500 Series
- Ethernet Routing Switch 2500 Series

Core Ethernet Switching

The core plays a pivotal role in determining overall network availability and performance.

Positioned at the heart of the network, core Ethernet Switches provide the aggregation point between users (connected to the Access Switches) and applications (running to the data center infrastructure). 'Switch Clustering' is an Avaya capability that delivers simplified always-on resiliency, extending beyond just the Switches to empower true end-to-end application availability that clearly differentiates the Avaya strategy. The 'Distributed Top-of-Rack' capability delivers improved application performance by reducing the latency of server-to-server transactions. The key to our competitive advantage in the LAN Switching segment is our field-proven ability to create more resilient networks that need fewer and less complex elements, and our network design and build approach that ensures delivery of the highest levels of performance and



reliability. Avaya is again leading the market with the development of a true end-to-end network fabric capability; our 'Fabric Connect' leverages the Shortest Path Bridging standard - with key Avaya enhancements and extensions - to dramatically optimize availability, performance, and time-to-service.

greater resiliency, performance, efficiency, and flexibility. A common thread that links the portfolio is our truly resilient, high-performance 'Stackable Chassis' architecture - leveraging Flexible Advanced Stacking Technology (FAST) - one of many differentiators that makes our solutions genuinely unique and superior to competitive offerings.

Access Ethernet Switching

The Avaya portfolio of fixed-format 'Stackable Chassis' Switches reflects the evolution of a number of innovative products that offer converged data and voice services for the enterprise branch and remote sites. We have completely refreshed our award winning Stackable line with solutions that provide even

Learn More

To learn more about the Avaya Ethernet Switch product line, contact your Avaya Account Manager or Avaya Authorized Partner. Or, visit us online at [avaya.com](https://www.avaya.com).

Avaya Fixed-Format Ethernet Feature Matrix

| | Product Lines | ERS 2500 | ERS 3500 | ERS 4000 | | | ERS 5000 | | VSP 7000 |
|--------------------------|---|--|---|--|--------------------------|--|---|---|----------|
| | | | | 4500 Switches | 4500-PWR+ Switches | 4800 Switches | 5500 Switches | 5600 Switches | |
| Models | | 2526T 2526T-PWR 2550T 2550T-PWR | 3510GT 3510GT-PWR+ 3526T 3526T-PWR+ 3524GT 3524GT-PWR+ | 4526FX 4526T 4526T-PWR 4550T 4550T-PWR 4524GT 4524GT-PWR 4548GT 4548GT-PWR 4526GTX 4526GTX-PWR | 4526T-PWR+ 4526T-PWR+ | 4826GTS 4826GTS-PWR+ 4850GTS 4850GTS-PWR+ | 5510-24T 5510-48T 5520-24T-PWR 5520T-PWR 5530-24TFD | 5632FD 5650TD 5650TD-PWR 5698TFD 5698TFD-PWR | 7024XLS |
| Avaya UVP | Avaya VENA Fabric Connect | - | - | - | - | f | - | - | f |
| | Avaya VENA Switch Clustering | - | - | - | - | - | Y | Y | f |
| | Avaya VENA Stackable Chassis | Y | f | Y | Y | Y | Y | Y | Y |
| | Avaya VENA Distributed ToR | - | - | - | - | - | - | - | Y |
| | Avaya VENA Unified Access | - | - | - | - | f | - | - | - |
| | Avaya Energy Saver | - | f | Y | Y | Y | Y | Y | f |
| | Avaya Dynamic PoE Power Management | Y | Y | Y | Y | Y | Y | Y | - |
| | Avaya Automatic QoS | Y | Y | Y | Y | Y | Y | Y | - |
| | Avaya Custom Auto Negotiation Advertisement | Y | Y | Y | Y | Y | Y | Y | f |
| | Avaya Virtual Link Aggregation Control Protocol | Y | Y | Y | Y | Y | Y | Y | Y |
| Speeds & Feeds | 100BASE-FX | - | Y | Y | Y | Y | - | Y ¹ | Y |
| | 10/100BASE-TX | Y | Y | Y | Y | Y | - | - | - |
| | 1000BASE-T | Y | - | - | - | - | - | - | - |
| | 10/100/1000BASE-T | Y | Y | Y | Y | Y | Y | Y | Y |
| | 1000BASE-X SFP | Y | Y | Y | Y | Y | Y | Y | Y |
| | 10GBASE-X XFP | - | - | Y | - | - | Y | Y | - |
| | 10GBASE-X SFP+ | - | - | - | - | Y | - | - | Y |
| | 802.3af Power-over-Ethernet | Y ² | Y | Y | - | Y | Y | Y | - |
| | 802.3at Power-over-Ethernet | - | Y | - | Y | Y | - | - | - |
| | MAC Addresses | 16k | 16k | 8k | 8k | 8k | 16k | 16k | 128K |
| | Switch Fabric (Gbps) | 12.8-15.6 | 12.8-52 | 48.8-184 | 48.8-77.6 | 128-184 | 80-192 | 288-384 | 1,280 |
| | Forwarding Rate (Mpps) | 9.5-11.6 | 9.5-38.7 | 6.6-72 | 6.6-10.2 | 66-102 | 35.7-71.4 | 101.2-172.7 | 960 |
| | Virtual Backplane (Gbps) | 32 | f | 384 | 384 | 384 | 640 | 1,152 | 5,120 |
| Layer 2 | 802.1D Spanning Tree (STP) | Y | Y | Y | Y | Y | Y | Y | Y |
| | 802.1s Multiple STP | Y | Y | Y | Y | Y | Y | Y | Y |
| | 802.1w Rapid Reconfiguration STP | Y | Y | Y | Y | Y | Y | Y | Y |
| | Avaya Multiple Spanning Trees | Y | Y | Y | Y | Y | Y | Y | Y |
| | 802.1Q VLANs | 256 | 256 | 1,024 | 1,024 | 1,024 | 1,024 | 1,024 | 1,024 |
| | 802.1aq Shortest Path Bridging | - | - | - | - | - | - | - | f |
| | IPv6 VLANs | Y | Y | Y | Y | Y | Y | Y | Y |
| | Hardware Queues | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 802.1p/DSCP Quality of Service (QoS) | Y | Y | Y | Y | Y | Y | Y | Y |
| | Advanced QoS Filtering & Remarking | Y | Y | Y | Y | Y | Y | Y | Y |
| Layer 3 | Avaya Auto Discovery & Auto Configuration | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1AB Media End-point Discovery | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1AB Location TLV | Y | Y | Y | Y | Y | Y | Y | - |
| | IP Static/Default Routing | Y | Y | Y | Y | Y | Y | Y | f |
| | IP RIP v1/v2 Routing | - | f | Y | Y | Y | Y | Y | f |
| | IP OSPF Routing | - | - | Y | Y | Y | Y | Y | f |
| | IP BGP Routing | - | - | - | - | - | - | Y ⁵ | - |
| | IP VRRP | - | - | Y | Y | Y | Y | Y | f |
| | IP ECMP | - | - | Y | Y | Y | Y ⁴ | Y | f |
| | IP VRF-Lite | - | - | - | - | - | - | Y | - |
| Content-Based Forwarding | - | - | - | - | - | - | Y | - | |
| IPv6 Routing | - | f | f | f | f | - | Y | f | |
| Multi-Netting | - | - | f | f | f | Y | Y | - | |

| | Product Lines | ERS 2500 | ERS 3500 | ERS 4000 | | | ERS 5000 | | VSP 7000 |
|---|---|----------|----------|---------------|--------------------|---------------|----------------|---------------|----------|
| | | | | 4500 Switches | 4500-PWR+ Switches | 4800 Switches | 5500 Switches | 5600 Switches | |
| Security | DHCP Snooping / ARP Inspection | Y | Y | Y | Y | Y | Y | Y | f |
| | BPDU Filtering | Y | Y | Y | Y | Y | Y | Y | f |
| | IP Source Guard | Y | Y | Y | Y | Y | Y | Y | f |
| | 802.1X EAPoL (Single Host Single Authentication) | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1X Multiple Host Single Authentication (MHSA) | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1X Multiple Host Multiple Authentication (MHMA) | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1X MHMA Multi-VLAN | - | f | Y | Y | Y | Y | Y | - |
| | 802.1X Guest VLAN | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1X Non-EAP | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1X/NEAP & Guest VLAN support | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1X/NEAP Last Assigned RADIUS VLAN | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1X/NEAP Fail-Open VLAN | Y | Y | Y | Y | Y | Y | Y | - |
| | 802.1X/NEAP with VLAN Names | Y | Y | Y | Y | Y | Y | Y | - |
| | RADIUS Accounting | Y | Y | Y | Y | Y | Y | Y | Y |
| 802.1AE MACsec | - | - | - | - | f ³ | - | - | - | |
| Identity Engines | Y | Y | Y | Y | Y | Y | Y | - | |
| Multicast | IGMPv1 | Y | Y | Y | Y | Y | Y | Y | Y |
| | IGMPv2 | Y | Y | Y | Y | Y | Y | Y | Y |
| | IGMPv3 | Y | Y | Y | Y | Y | Y | Y | f |
| | PIM-SM | - | - | - | f | f | Y ⁴ | Y | f |
| | PIM-SSM | - | - | - | - | - | Y ⁴ | f | - |
| Resiliency | Flexible Advanced Stacking Technology (FAST) | Y | f | Y | Y | Y | Y | Y | Y |
| | Auto Unit Replacement (AUR) | Y | f | Y | Y | Y | Y | Y | Y |
| | 802.3ad Link Aggregation Control Protocol (LACP) | Y | Y | Y | Y | Y | Y | Y | Y |
| | Avaya Simple Loop Prevention Protocol (SLPP) | - | - | - | - | - | Y | Y | f |
| | Multi-Link Trunking (MLT) | Y | Y | Y | Y | Y | Y | Y | Y |
| | Distributed MLT | Y | Y | Y | Y | Y | Y | Y | Y |
| | Single Link Trunking (SLT) | - | - | - | - | - | Y | Y | f |
| | External HA Power (RPS 15) | - | - | Y | - | - | Y | - | - |
| Internal HA Power | - | - | - | Y | Y | - | Y | Y | |
| Management & Miscellaneous | Standardized CLI | Y | Y | Y | Y | Y | Y | Y | Y |
| | GUI Management | Y | Y | Y | Y | Y | Y | Y | Y |
| | SNMPv3 | Y | Y | Y | Y | Y | Y | Y | - |
| | SSHv2 | Y | Y | Y | Y | Y | Y | Y | Y |
| | TACACS+ | Y | Y | Y | Y | Y | Y | Y | Y |
| | RADIUS Authentication | Y | Y | Y | Y | Y | Y | Y | Y |
| | IPv6 Management | Y | Y | Y | Y | Y | Y | Y | Y |
| | 802.1ag Connectivity Fault Management | - | - | - | - | - | - | - | f |
| | IP Flow Information Export (IPFIX) | - | f | Y | Y | Y | Y | Y | f |
| | Multi-Port Mirroring | - | f | Y | Y | Y | Y | Y | f |
| 802.3az Energy Efficient Ethernet | - | f | - | f | f | - | - | Y | |
| Software Licensing | Y ⁶ | - | Y | Y | Y | Y | Y | f | |
| Based on: ERS 2500 4.4 ERS 3500 5.0 ERS 4000 5.7 ERS 5000 6.3 VSP 7000 10.1 | | | | | | | | | |
| Legend: Y = Support f = Future (i.e. Roadmapped & Hardware-ready) n = Scale - = Not supported | | | | | | | | | |
| Notes: ¹ Supported on ERS 5632TFD only ² ERS 2500 PWR models support PoE on half of their Link Ports ³ Future models ⁴ Supported on ERS 5520 models, but not 5510 models ⁵ Partial implementation; that is iBGP ⁶ Software Licensing available to field-enable Stacking on the stand-alone ERS 2500 models | | | | | | | | | |

Avaya Modular Ethernet Feature Matrix

| Product Lines | | ERS 8300 | ERS 8600/8800 | | | VSP 9000 |
|-----------------------------------|---|----------------|----------------|-----------------|----------------|----------|
| | | | 8600 R Modules | 8600 RS Modules | 8800 Modules | |
| | Avaya VENA Fabric Connect | - | Y | Y | Y | Y |
| | Avaya VENA Switch Clustering | Y | Y | Y | Y | Y |
| | Avaya VENA Unified Access | - | Y | Y | Y | - |
| | Avaya IP VPN-Lite | - | Y | Y | Y | - |
| | Avaya Energy Saver | Y | - | - | - | - |
| | Avaya Dynamic PoE Power Management | Y | - | - | - | - |
| | Avaya Automatic QoS | Y | Y | Y | Y | Y |
| | Avaya Custom Auto Negotiation Advertisement | Y | Y ⁹ | Y ⁹ | Y ⁹ | Y |
| | Avaya Virtual Link Aggregation Control Protocol | Y | Y | Y | Y | Y |
| Speeds & Feeds | 100BASE-FX | Y | Y | Y | Y | - |
| | 10/100BASE-TX | Y | - | - | - | - |
| | 1000BASE-T | Y | - | - | - | - |
| | 10/100/1000BASE-T | Y | Y | Y | Y | Y |
| | 1000BASE-X SFP | Y | Y | Y | Y | Y |
| | 10GBASE-X XFP | Y | Y | Y | Y | - |
| | 10GBASE-X SFP+ | - | - | - | Y | Y |
| | 802.3af Power-over-Ethernet | Y | - | - | - | - |
| | MAC Addresses | 16k | 64k | 64k | 64k | 128k |
| Switch Fabric (Gbps) | Up to 464 | Up to 512 | Up to 512 | Up to 512 | Up to 8,400 | |
| Forwarding Rate (Mpps) | Up to 345 | Up to 380 | Up to 380 | Up to 380 | Up to 1,050 | |
| Layer 2 | 802.1D Spanning Tree (STP) | Y | Y | Y | Y | Y |
| | 802.1s Multiple STP | Y | Y | Y | Y | Y |
| | 802.1w Rapid Reconfiguration STP | Y | Y | Y | Y | Y |
| | Avaya Multiple Spanning Trees | Y | Y | Y | Y | Y |
| | 802.1Q VLANs | 2k | 4k | 4k | 4k | 4k |
| | 802.1aq Shortest Path Bridging | - | Y | Y | Y | Y |
| | IPv6 VLANs | Y | Y | Y | Y | Y |
| | Hardware Queues | 8 | Up to 64 | Up to 64 | Up to 64 | 8 |
| | 802.1p/DSCP Quality of Service (QoS) | Y | Y | Y | Y | Y |
| | Advanced QoS Filtering & Remarking | Y | Y | Y | Y | Y |
| | 802.1Qbb Priority-based Flow Control | - | - | - | - | Y |
| | 802.3x Pause-based Flow Control | - | Y | Y | Y | Y |
| | Avaya Auto Discovery & Auto Configuration | Y | Y | Y | Y | - |
| | 802.1AB Core | Y | f | f | f | f |
| 802.1AB Media End-point Discovery | Y | - | - | - | - | |
| Layer 3 | IP Static/Default Routing | Y | Y | Y | Y | Y |
| | IP RIP v1/v2 Routing | Y | Y | Y | Y | Y |
| | IP OSPF Routing | Y | Y | Y | Y | Y |
| | IP VRRP | Y | Y | Y | Y | Y |
| | IP VRRP Backup Master | Y | Y | Y | Y | Y |
| | IP ECMP | Y | Y | Y | Y | Y |
| | IP BGP | Y ⁵ | Y | Y | Y | Y |
| | IPv6 Routing | Y ⁷ | Y ⁸ | Y ⁸ | Y ⁸ | Y |
| | Avaya VRF-Lite | Y | Y ⁸ | Y ⁸ | Y ⁸ | Y |
| | RFC 2547/4364 IP VPN | - | Y ⁸ | Y ⁸ | Y ⁸ | - |
| | Multi-Protocol Label Switching | - | Y ⁸ | Y ⁸ | Y ⁸ | - |
| | Microsoft Network Load-Balancing (NLB) | Y | Y | Y | Y | Y |
| | Multi-Homing | Y | Y | Y | Y | Y |
| | Mutli-Netting | - | Y | Y | Y | Y |
| Security | DHCP Snooping / ARP Inspection | Y | Y | Y | Y | f |
| | BPDU Filtering | Y | Y | Y | Y | f |
| | IP Source Guard | Y | Y | Y | Y | f |
| | 802.1X EAPoL (Single Host Single Authentication) | Y | Y | Y | Y | Y |
| | 802.1X Multiple Host Single Authentication (MHSA) | Y | - | - | - | - |
| | 802.1X Multiple Host Multiple Authentication (MHMA) | Y | - | - | - | - |
| | 802.1X Non-EAP | Y | Y | Y | Y | - |
| | RADIUS Accounting | Y | Y | Y | Y | - |
| | 802.1AE MACsec | - | - | - | - | Y |
| Identity Engines | Y | Y | Y | Y | f | |

| | Product Lines | ERS 8300 | ERS 8600/8800 | | | VSP 9000 |
|---|---|----------|----------------|-----------------|----------------|----------|
| | | | 8600 R Modules | 8600 RS Modules | 8800 Modules | |
| Multicast | IGMPv1 | Y | Y | Y | Y | Y |
| | IGMPv2 | Y | Y | Y | Y | Y |
| | IGMPv3 | Y | Y | Y | Y | Y |
| | PIM-SM | Y | Y | Y | Y | Y |
| | PIM-SSM | - | Y | Y | Y | Y |
| | DVRMP | - | Y | Y | Y | - |
| | MSDP | - | Y | Y | Y | - |
| | Multicast over SPB (MoSPB) | - | Y ⁶ | Y ⁶ | Y ⁶ | f |
| Resiliency | 802.3ad/ax Link Aggregation Control Protocol (LACP) | Y | Y | Y | Y | Y |
| | Avaya Simple Loop Prevention Protocol (SLPP) | Y | Y | Y | Y | Y |
| | Multi-Link Trunking (MLT) | Y | Y | Y | Y | Y |
| | Distributed MLT | Y | Y | Y | Y | Y |
| | Routed Split Mutli-Link Trunking (RSMLT) | Y | Y | Y | Y | Y |
| | Single Link Trunking (SLT) | Y | Y | Y | Y | Y |
| | Bi-Directional Forwarding Detection (BFD) | - | Y | Y | Y | - |
| Management & Miscellaneous | Standardized CLI | Y | Y | Y | Y | Y |
| | GUI Management | Y | Y | Y | Y | Y |
| | SNMPv3 | Y | Y | Y | Y | Y |
| | SSHv2 | Y | Y | Y | Y | Y |
| | TACACS+ | Y | Y | Y | Y | f |
| | RADIUS Authentication | Y | Y | Y | Y | Y |
| | IPv6 Management | Y | Y | Y | Y | Y |
| | 802.1ag Connectivity Fault Management (CFM) | - | Y | Y | Y | Y |
| | IP Flow Information Export (IPFIX) | Y | Y | Y | Y | Y |
| | Multi-Port Mirroring | - | Y | Y | Y | Y |
| | Layer 2 Remote Port Mirroring | - | Y | Y | Y | Y |
| | Layer 3 Remote Port Mirroring | - | - | - | - | Y |
| | 802.3az Energy Efficient Ethernet | - | - | - | - | - |
| | Software Licensing | Y | Y | Y | Y | Y |
| Based on: | | | | | | |
| ERS 8300 4.2.3 ERS 8800 7.2 VSP 9000 3.3 | | | | | | |
| Legend: | | | | | | |
| Y = Support f = Future (i.e. Roadmapped & Hardware-ready) n = Scale - = Not Supported | | | | | | |
| Notes: | | | | | | |
| ⁶ Requires V-Mode to be enabled; therefore requires the exclusive use of V-Mode capable hardware | | | | | | |
| ⁷ Requires the 8895SF, or the 8692SF with the Enhanced CPU Daughter Card (SuperMezz) upgrade | | | | | | |
| ⁸ Requires R, RS, or 8800 Series Interface Models | | | | | | |

About Avaya

Avaya is a global provider of business collaboration and communications solutions, providing unified communications, contact centers, networking and related services to companies of all sizes around the world. For more information please visit www.avaya.com.