

# Cisco Catalyst ESS9300 Embedded Series Switches



# Contents

Products overview	3
Primary features and its benefits	6
Hardware specifications	7
Network Scale specifications	8
Software features	8
Environmental specifications	10
Management and standards	10
Optics supported in ESS-9300-10X-E	13
Regulatory compliance standards	14
Ordering information	15
Warranty information	15
Product sustainability	16
Cisco and partner services	16
Cisco Capital	17
For more information	17
Document history	18

The Cisco® Catalyst® ESS9300 Embedded Series Switches are built for secure, high-bandwidth networking and are optimized for size, weight, and power to operate in extreme environments.

## Products overview

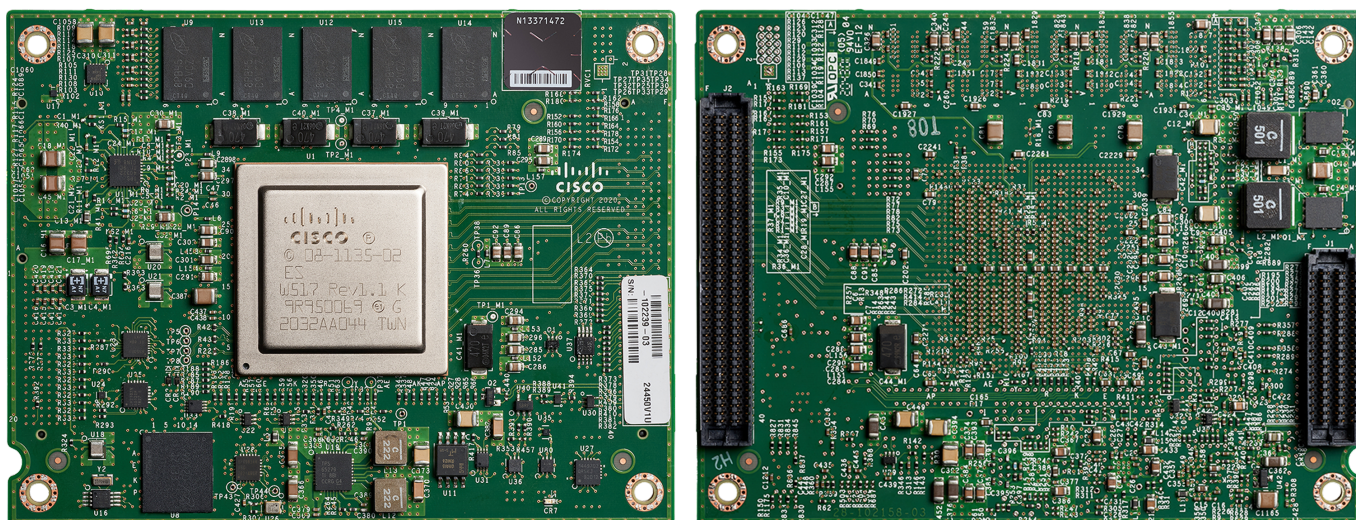
The Cisco Catalyst ESS9300 Embedded Series Switch revolutionizes Cisco's embedded networking portfolio with high-speed and security capabilities. These 1GE/10GE embedded switches are optimized to meet specialized form-factor, ruggedization, port density, and power needs of many applications requiring customization and complements Cisco's off-the-shelf Industrial Ethernet switching portfolio.

The small-form-factor, board configuration options, and optimized power consumption provide Cisco partners and integrators the flexibility to design custom solutions for defense, oil and gas, transportation, mining, and other industries. With its zeroization, secure boot, and physical alarm relay capabilities, the embedded switch has the crucial security features needed to protect networks from cyber and physical threats. The ESS9300 runs the trusted and feature-rich Cisco IOS® XE Software, allowing Cisco partners and integrators to offer their customers the familiar Cisco IOS Command-Line Interface (CLI) and management experience on their ESS9300 series – based solutions. Additionally, Cisco IOS® XE Software also offers a powerful graphical management interface that is built-in, called WebUI, for an even more enhanced user experience.

The Cisco Catalyst ESS9300 Embedded Switch is available in two configurations to meet the diverse operational needs:

### Configuration 1 - Custom Small Form Factor

- The Cisco Catalyst ESS9300 Embedded Switch in small form factor (ESS-9300-10X-E) is a ruggedized 10G embedded platform designed for embedded applications for tactical, outdoor, and mobile installations requiring low power, small size, and ruggedization.



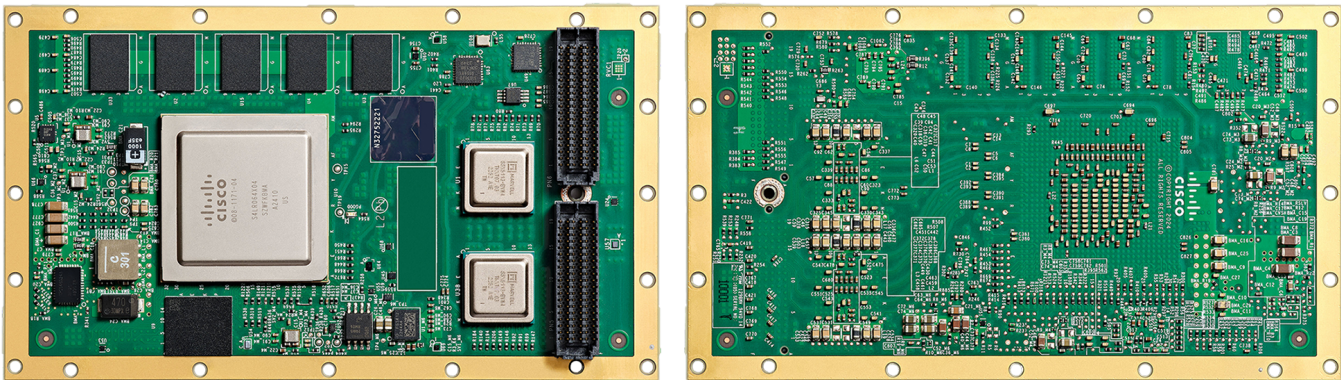
**Figure 1.**  
Cisco Catalyst ESS9300 Embedded Switch in small form factor (ESS-9300-10X-E)

**Note:** The ESS-9300-10X-E requires transformation by a qualified integrator into end product.

- Single board.
- Small form-factor board size (110 x 85 mm; 4.3 x 3.3 in.).
- 10 ports of 10G: Enhanced Small Form-Factor Pluggable (SFP+).
- Ethernet management port (optional).
- RS-232 and USB console.
- Common +3.3VDC and +5VDC power inputs.
- Advanced next-generation Cisco IOS XE software.
- Low power – 35W (typical).

#### Configuration 2 - C5ISR/EW Modular Open Suite of Standards (CMOSS) Mounted Form Factor

- The Cisco Catalyst ESS9300 Embedded Switch in XMC+ form factor (ESS-9300-8X16T-W-A) is a ruggedized 1G/10G embedded platform designed for use in [Sensor Open Systems Architecture \(SOSA\)](#) and [C5ISR/EW Modular Open Suite of Standards \(CMOSS\)](#) aligned system architectures. It is a component of a Curtiss-Wright product called the VPX3-623, and is not available from Cisco sales channels.
- CMOSS is a suite of standards to support the reduction of the size, weight and power of C5ISR and EW systems while increasing the flexibility and adaptability of these systems. [OpenVPX](#) is a part of CMOSS standards standardized platform for assembling modular computing systems, frequently referred to as VPX, and is the successor to the widely deployed VME standard.



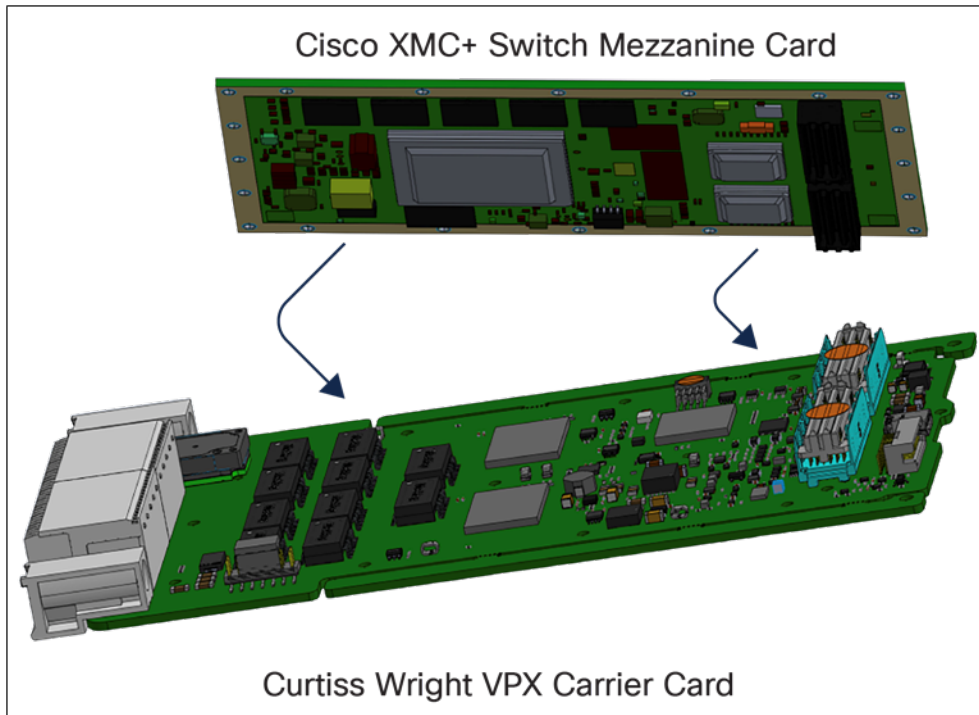
**Figure 2.**

Cisco Catalyst ESS9300 Embedded Switch in XMC+ form factor for the Curtiss-Wright VPX3-623

**Note:** ESS-9300-8X16T-W-A is exclusively available from Curtiss-Wright as a component of the Curtis-Wright VPX3-623 system. It is NOT sold separately.

The Cisco Catalyst ESS9300 Embedded Switch in XMC+ form factor is designed to act as a Mezzanine switch card in VPX3-623 module (as shown in Figure 3 below) for VPX system developed by Cisco partner Curtiss-Wright. This is the first time that Cisco switching will be available in the VPX form factor.





**Figure 3.**

The ESS-9300-8X16T-W-A mezzanine card plugs into the Curtiss Wright VPX3-623 carrier module to form a complete OpenVPX card for the 3U chassis and is exclusively sold by Curtiss-Wright

- Single board acting as a XMC+ mezzanine card in Curtis-Wright VPX3-623, conforming to VITA 88
- Board size 130 x 74 mm (5.1 x 2.9 in.)
- Copper and Optical Connectivity
- 2x Control Plane 10GBASE-KR interfaces
- 16x Gigabit 1000BASE-T interfaces – 10 ports usable on the Curtiss-Wright VPX3-623 carrier module
- 6x fixed optical 10GBASE-SR interfaces on rear VPX connector
- Network Advantage features

## Primary features and its benefits

Feature and its Benefits	ESS-9300-10X-E	Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W)
<b>1G and 10G links</b>	<ul style="list-style-type: none"> <li>• 10G links enable high-quality video and data communications for the next generation of bandwidth-intensive use cases such as tactical data centers, HD video surveillance, self-driving vehicles, and future-readiness.</li> <li>• Ports run at 1G when they are populated with a 1G SFP. See "Optics supported in ESS-9300-10X-E"</li> </ul>	<ul style="list-style-type: none"> <li>• 10G and 1G links to support network connectivity for SOSA and CMOSS.</li> <li>• This allows military applications for Mobile ground and airborne tactical data centers, Joint All Domain Command and Control (JADC2) and Joint Warfighting Cloud Capability (JWCC) network integration.</li> </ul>
<b>Switching features</b>	<p>Enables third-party integrators to offer rich enterprise-grade Layer 2 switching feature set to end customers.</p> <p>Layer 3 features available with network advantage license upgrade.</p>	Ships with layer 2 and layer 3 features.
<b>Robust industrial design</b>	Small form factor packing 10G allows integrators to pack higher port density into a compact form factor and build custom solutions that can withstand harsh environments (temperature range of -40° to 85° C, -40° to 185° F).	
<b>Security</b>	<ul style="list-style-type: none"> <li>• Enterprise-grade Cisco IOS XE switching security features help ensure highly secure voice, video, and data communications.</li> <li>• Secure boot and Cisco anti-counterfeit technology ensure authenticity for both hardware and software.</li> <li>• Zeroization is a feature that is important to the defense and government intelligence communities to ensure that network access and security credentials are not compromised by theft of hardware.</li> <li>• Alarm relay contacts can also be used to ensure physical integrity of the device enclosure.</li> </ul>	
<b>Manageability</b>	Facilitates easy deployment and rapid configuration with easy-to-use Web UI and familiar Cisco CLI.	
<b>Quality of service</b>	Allows customers to prioritize flows and helps ensure that mission-critical flows are not affected by low-priority traffic.	

## Hardware specifications

Description	ESS-9300-10X-E	Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W)
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>• 10 ports of 10G /1G (approved SFP+/SFPs), 1 management port of 10/100/1000BASE-T</li> <li>• RS-232 and USB console</li> </ul>	<ul style="list-style-type: none"> <li>• 2x Control Plane 10GBASE-KR interfaces</li> <li>• 6x fixed optical 10GBASE-SR interfaces on rear VPX connector</li> <li>• 16x Gigabit 1000BASE-T interfaces – 10 ports usable on the Curtiss-Wright VPX3-623 carrier module</li> <li>• LVCMOS console (3.3V)</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>• 4 GB DDR4 DRAM</li> <li>• 8 GB onboard eMMC flash storage (2.5 GB usable space)</li> </ul>	
<b>Power supply</b>	3.3VDC and +5VDC (+/-3%)	3.3VDC and +12VDC (+/-3%)
<b>Power consumption</b>	35W (typical)	<35W (typical) (Depends on Curtiss Wright carrier configuration)
<b>Connectors</b>	SEARAY Connector Series from SAMTEC: <ul style="list-style-type: none"> <li>• SEAF-20-05.0-S-06-2-A-K 120-pin (J1)</li> <li>• SEAF-40-05.0-S-06-2-A-K 240-pin (J2)</li> </ul>	VITA 88 Connectors
<b>Dimensions (W x D)</b>	110 x 85 mm (4.3 x 3.3 in.)	130 x 74 mm (5.1 x 2.9 in.)
<b>Weight</b>	88 g (3.1 oz)	<200g (<7 oz)

## Network Scale specifications

Features	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
Forwarding rate	Line rate for all ports and all packet sizes
Number of queues	8
Number of VRF <sup>1</sup>	32
MAC addresses	16,000
VLAN IDs	1000
Internet Group Management Protocol (IGMP) groups	1000
Number of Spanning Tree Protocol (STP) instances	128
Number of Generic Routing Encapsulation (GRE) tunnels	10

<sup>1</sup> Requires Network Advantage license.

## Software features

Network Essentials License	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
Layer 2 switching	IEEE 802.1Q VLAN Trunking, 802.1W Spanning Tree Rapid Reconfiguration, 802.1ab LLDP (Link Layer Discovery Protocol), 802.1s - Multiple Spanning Tree Protocol (MSTP) Standard Compliance, 802.1s VLAN Multiple Spanning Trees, 802.1Q Tunneling, 802.3 standard, Unidirectional Link Detection (UDLD), Cisco Discovery Protocol, unicast MAC filter, VLAN Trunk Protocol (VTP) v2 and v3, EtherChannel, voice VLAN, Per-VLAN Spanning Tree Plus (PVST+), and Rapid STP (RSTP)
Multicast	IGMPv1, v2, v3 snooping, IGMP filtering, IGMP querier
Management	Web UI, MIB, SmartPort, Simple Network Management Protocol (SNMP), syslog, Dynamic Host Configuration Protocol (DHCP) server, Switched Port Analyzer (SPAN) session (1), Full Flexible NetFlow (FnF), Network Time Protocol (NTP)
Security	Zeroization, secure boot, port security, IEEE 802.1X, DHCP snooping, dynamic Address Resolution Protocol (ARP) inspection, IP Source Guard, private VLAN. MAC authentication bypass, 802.1X multidomain authentication, storm control - unicast, multicast, broadcast, Secure Copy (SCP), Secure Shell (SSH), SNMPv3, TACACS+, RADIUS server/client, MAC address notification, Bridge Protocol Data Unit (BPDU) guard, hardware physical alarm inputs (2), and relay output (1), MACsec-128 (are supported on all 10x10G ports simultaneously at line rate), Generic Routing Encapsulation (GRE).



Network Essentials License	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
<b>Certificate Based MACsec</b> <b>Note: Network Advantage license required when using 256-bit MACsec</b>	<p>Certificate-based MACsec Encryption feature uses 802.1X port-based authentication with Extensible Authentication Protocol-Transport Layer Security (EAP-TLS) to carry Certificates for ports where MACsec encryption is required</p> <p>This feature makes it feasible to manage the key at the centralized server over preshared key-based MACsec</p> <p>Uses MACsec and the MACsec Key Agreement (MKA) Protocol</p>
<b>Quality of Service (QoS)</b>	Ingress policing, rate limit, egress queuing/shaping, auto QoS
<b>Layer 2 IPv6</b>	IPv6 host support, HTTP over IPv6, SNMP over IPv6

Network Advantage License	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
<b>IP routing</b>	OSPF (V2 and V3), RIP (V1 and V2), ISIS (for IPv4 and IPv6), EIGRP (for IPv4 and IPv6), PBR (Policy Based Routing), BGP
<b>Virtualization</b>	VRF-lite
<b>Security</b>	MACsec-256 (are supported on all 10x10G ports simultaneously at line rate)
<b>IP Multicast</b>	PIM Sparse Mode (PIM-SM), PIM dense mode (PIM-DM) and PIM Sparse dense mode
<b>High Availability</b>	Bidirectional Forwarding Detection (BFD) echo mode, HSRP (IPv4 and IPv6), VRRP (IPv4 and IPv6)

**Note:** Please refer to the “New Features for Cisco Catalyst IE and ESS Switches” section of each of the software release notes for a more complete list of features. The above tables attempt to provide the most popular features. Referring to the release notes also has the benefit of specifying the minimum required release to support the desired feature.

The main page for release notes is here: <https://www.cisco.com/c/en/us/support/ios-nx-os-software/ios-xe-17/products-release-notes-list.html>.

**Please be sure to select the titles that begin with,** “Release Notes for Cisco Catalyst IE9300 Rugged Series Switches, and Cisco Catalyst ESS9300 Embedded Series Switch.

## Environmental specifications

Specification	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
Industrial-grade board component temperature	-40° to 85° C (-40° to 185° F) component local ambient temperature specification
Operating temperature	-40° to 85° C (-40° to 185° F). Temperature range of a completed solution depends on the thermal design characteristics of the enclosure used by the system integrator
Storage temperature	-40° to 85° C (-40° to 185° F)
Operating altitude	4.572 km (15,000 ft) -40° to 74° C (-40° to 165° F) 12.2 km (40,000 ft) -40° to 25° C (-40° to 77° F)
Nonoperating altitude	12.2 km (40,000 ft)
Mean Time Between Failures (MTBF)	ESS-9300-10X-E - Ground, fixed, controlled: 48.2 years ESS-9300-8X16T-W-A - TBD

## Management and standards

Descriptions	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
SNMP MIB objects	BRIDGE-MIB CISCO-ACCESS-ENVMON-MIB CISCO-AUTH-FRAMEWORK-MIB CISCO-BRIDGE-EXT-MIB CISCO-BULK-FILE-MIB CISCO-CALLHOME-MIB CISCO-CAR-MIB CISCO-CDP-MIB CISCO-CONFIG-COPY-MIB CISCO-CONFIG-MAN-MIB CISCO-DATA-COLLECTION-MIB CISCO-DHCP-SNOOPING-MIB CISCO-ENTITY-VENDORTYPE-OID-MIB CISCO-ENVMON-MIB CISCO-ERR-DISABLE-MIB CISCO-FLASH-MIB CISCO-FTP-CLIENT-MIB CISCO-IF-EXTENSION-MIB CISCO-IGMP-FILTER-MIB CISCO-IMAGE-MIB CISCO-IP-STAT-MIB

Descriptions	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
	CISCO-LAG-MIB CISCO-LICENSE-MGMT-MIB CISCO-MAC-AUTH-BYPASS-MIB CISCO-MAC-NOTIFICATION-MIB CISCO-MEMORY-POOL-MIB CISCO-PAE-MIB CISCO-PING-MIB CISCO-PORT-QOS-MIB CISCO-PORT-SECURITY-MIB CISCO-PORT-STORM-CONTROL-MIB CISCO-PRIVATE-VLAN-MIB CISCO-PROCESS-MIB CISCO-PRODUCTS-MIB CISCO-ENTITY-ALARM-MIB CISCO-SNMP-TARGET-EXT-MIB CISCO-STP-EXTENSIONS-MIB CISCO-SYSLOG-MIB CISCO-UDLD-MIB CISCO-VLAN-IPTABLE-RELATIONSHIP-MIB CISCO-VLAN-MEMBERSHIP-MIB CISCO-VTP-MIB ENTITY-MIB ETHERLIKE-MIB HC-RMON-MIB IEEE8021-PAE-MIB IEEE8023-LAG-MIB IF-MIB LLDP-EXT-MED-MIB LLDP-MIB NOTIFICATION-LOG-MIB OLD-CISCO-CPU-MIB OLD-CISCO-SYSTEM-MIB RMON-MIB SMON-MIB SNMP-COMMUNITY-MIB SNMP-FRAMEWORK-MIB SNMP-MPD-MIB SNMP-NOTIFICATION-MIB

Descriptions	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
	SNMP-PROXY-MIB SNMP-TARGET-MIB SNMP-USM-MIB SNMP-VIEW-BASED-ACM-MIB SNMPV2-MIB 802.1X MIB
<b>IEEE standards</b>	IEEE 802.1D MAC Bridges, STP IEEE 802.1p Layer2 COS prioritization IEEE 802.1q VLAN IEEE 802.1s Multiple Spanning-Trees IEEE 802.1w Rapid Spanning-Tree IEEE 802.1X Port Access Authentication IEEE 802.1AB LLDP IEEE 802.3ad Link Aggregation (LACP) IEEE 802.3ah 100BASE-X SMF/MMF only IEEE 802.3x full duplex on 10BASE-T IEEE 802.3 10BASE-T specification IEEE 802.3u 100BASE-TX specification IEEE 802.3ab 1000BASE-T specification IEEE 802.3z 1000BASE-X specification IEEE 802.1AE MAC Security (MACsec) IEEE 802.3ap-2007 10GBASE-KRspecification (ESS-9300-8X16T-W-A only) Plus the applicable standards delivered via the supported optics
<b>RFC compliance</b>	RFC 768: UDP RFC 783: TFTP RFC 791: IPv4 protocol RFC 792: ICMP RFC 793: TCP RFC 826: ARP RFC 854: Telnet RFC 959: FTP RFC 1157: SNMPv1 RFC 1901,1902-1907 SNMPv2 RFC 2273-2275: SNMPv3 RFC 2571: SNMP Management RFC 1166: IP Addresses RFC 1256: ICMP Router Discovery



Descriptions	ESS-9300-10X-E and Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
	RFC 1305: NTP RFC 1492: TACACS+ RFC 1493: Bridge MIB Objects RFC 1643: Ethernet Interface MIB RFC 1757: RMON RFC 2068: HTTP RFC 2131, 2132: DHCP RFC 2236: IGMP v2 RFC 3376: IGMP v3 RFC 2474: DiffServ Precedence RFC 3046: DHCP Relay Agent Information Option RFC 3580: 802.1X RADIUS RFC 4250 - 4252 SSH Protocol RFC 4884 - Extended ICMP to Support Multi-part Messages RFC 2784 - Generic Routing Encapsulation (GRE)

## Optics supported in ESS-9300-10X-E

Part number	Specification	SFP type	Max distance	Cable type	Temp range*	DOM support
GLC-SX-MM-RGD=	1000BASE-SX	GE	550m	MMF	IND	Yes
GLC-LX-SM-RGD=	1000BASE-LX/LH	GE	550m/10km	MMF/SMF	IND	Yes
GLC-SX-MMD=	1000BASE-SX	GE	550m	MMF	EXT	Yes
GLC-LH-SMD=	1000BASE-LX/LH	GE	550m/10km	MMF/SMF	EXT	Yes
GLC-BX-D=	1000BASE-BX10	GE	10km	SMF	COM	Yes
GLC-BX-U=	1000BASE-BX10	GE	10km	SMF	COM	Yes
GLC-ZX-SM-RGD=	1000BASE-ZX	GE	Approx. 70km	SMF	IND	Yes
GLC-EX-SMD=	1000BASE-EX	GE	40km	SMF	EXT	Yes
SFP-GE-S=	1000BASE-SX	GE	550m	MMF	EXT	Yes
GLC-SX-MM=	1000BASE-SX	GE	550m	MMF	COM	No
GLC-T-RGD=	1000BASE-T	GE	100m	Copper	IND	NA
GLC-LH-SM=	1000BASE-LX/LH	GE	550m/10km	MMF/SMF	COM	No
GLC-TE=	1000BASE-T	GE	100m	Copper	EXT	NA
GLC-T=	1000BASE-T	GE	100m	Copper	COM	NA

Part number	Specification	SFP type	Max distance	Cable type	Temp range*	DOM support
<b>CWDM-SFP-xxxx= (8 freq)</b>	CWDM 1000BASE-X	GE		SMF	COM	Yes
<b>DWDM-SFP-xxxx= (40 freq)</b>	DWDM 1000BASE-X	GE		SMF	COM	Yes
<b>SFP-10G-BXD-I=</b>	10GBASE-BX10	10GE	10km	SMF	IND	Yes
<b>SFP-10G-BXU-I=</b>	10GBASE-BX10	10GE	10km	SMF	IND	Yes
<b>SFP-10G-LR-X=</b>	10GBASE-LR	10GE	10km	SMF	EXT	Yes
<b>SFP-10G-SR=</b>	10GBASE-SR	10GE	400m	MMF	COM	Yes
<b>SFP-10G-LR=</b>	10GBASE-LR	10GE	10km	SMF	COM	Yes
<b>SFP-H10GB-CUxM=</b>	10G Passive Twinax	10GE	1m/3m/5m	Twinax	COM	NA
<b>SFP-H10GB-ACUxM=</b>	10G Active Twinax	10GE	7m/10m	Twinax	COM	NA
<b>SFP-10G-T-X*</b>	10GBASE-T	10GE	Up to 30 meters	Cat6A/Cat7	EXT	NA

\* Requires 17.6.1 or greater

**Note:** Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A) uses fixed optics located on the carrier card

## Regulatory compliance standards

Compliance	ESS-9300-10X-E	Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
<b>Emissions</b>	CISPR32: 2015/AMD1: 2019, EN 55032:2013 FCC Part 15B, ICES-003	N.A.
<b>Immunity</b>	CISPR35, EN55035 EN55035:2017, CISPR35:2016 EN61000-4-2 ESD EN61000-4-3 Radiated Immunity EN61000-4-4 Electrical Fast Transients/ Bursts EN61000-4-5 Surge EN61000-4-6 Conducted immunity EN61000-4-8 Power Frequency Magnetic field immunity EN61000-4-10 Damped Oscillatory Magnetic field immunity EN61000-4-11 Voltage Dips and Interruptions EN61000-4-16 Conducted Low Frequency Immunity EN61000-4-18 Damped Oscillatory Wave Immunity	N.A.

Compliance	ESS-9300-10X-E	Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)
<b>MIL standard</b>	MIL-STD-461G	N.A.
<b>Safety</b>	CB to IEC62368-1 ed2 UL Recognition	CB to IEC62368-1 UL Recognition
<b>Hazardous Material</b>	RoHS (EU, China, Taiwan)	RoHS (EU, China, Taiwan)

**Note:** Regulatory tests were conducted using the test platform. The integrator is responsible for obtaining any necessary regulatory approvals at system level.

## Ordering information

### ESS-9300-10X-E

The ESS-9300-10X-E is available in the following configurations:

Product ID	Product description
<b>ESS-9300-10X-E</b>	ESS9300 board, no cooling plate, Network Essentials software
<b>ESS9300-NW-A=</b>	Cisco Network Advantage license for ESS9300 Series Spare

Curtiss-Wright VPX3-623 (ESS-9300-8X16T-W-A)



- ESS-9300-8X16T-W-A is designed to act as a Mezzanine switch card in VPX3-623 module for VPX system developed by Curtiss-Wright. This is only available from Curtiss Wright Defense Solutions for use with Curtiss Wright VPX3-623 system, jointly developed by Cisco. The ESS-9300-8X16T-W-A is NOT sold as a separate module nor is it available directly from Cisco.
- Please contact Curtiss-Wright sales directly to order the Curtiss-Wright VPX3-623.
- Please also note that this product is not available to order through Curtiss Wright until its target FCS in Q2CY25 which is subject to change without further notice. Please look at the VPX3-623 datasheet <https://www.curtisswrightds.com/resources/vpx3-623-cisco-powered-switch-data-sheet>.

## Warranty information

The ESS-9300-10X-E and ESS-9300-8X16T-W-A have a 1-year Limited Hardware Warranty

Further warranty information for the ESS9300 switch is available at <https://www.cisco.com/c/en/us/products/warranty-listing.html>.

## Product sustainability

Information about Cisco's Environmental, Social and Governance (ESG) initiatives and performance is provided in Cisco's CSR and sustainability [reporting](#).

Sustainability Topic		Reference
General	Information on product-material-content laws and regulations	<a href="#">Materials</a>
	Information on electronic waste laws and regulations, including our products, batteries and packaging	<a href="#">WEEE Compliance</a>
	Sustainability Inquiries	Contact: <a href="mailto:csr_inquiries@cisco.com">csr_inquiries@cisco.com</a>
	Information on product takeback and reuse program	<a href="#">Cisco Takeback and Reuse Program</a>
	Operating/non-operating environmental conditions	<a href="#">Environmental specifications</a>
Power	Power consumption	<a href="#">Product overview</a> <a href="#">Hardware specifications</a>
	Power supply	<a href="#">Hardware specifications</a>
Material	Product packaging weight and materials	Contact: <a href="mailto:environment@cisco.com">environment@cisco.com</a>
	Dimensions	<a href="#">Product overview</a> <a href="#">Hardware specifications</a>
	Weight	<a href="#">Hardware specifications</a>

## Cisco and partner services

At Cisco, we're committed to minimizing our customers' TCO, and we offer a wide range of services programs to accelerate customer success. Our innovative programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco Services helps you protect your network investment, optimize network operations, and prepare your network for new applications to extend network intelligence and the power of your business. Some of the primary benefits our customers can get from Cisco Services include:

- Mitigating risks by enabling proactive or expedited problem resolution.
- Lowering TCO by taking advantage of Cisco expertise and knowledge.
- Minimizing network downtime.
- Supplementing your existing support staff so they can focus on additional productive activities.

For more information about Cisco Services, refer to Cisco Technical Support Services or Cisco Advanced Services at <https://www.cisco.com/web/services/>.



---

## Cisco Capital

### **Flexible payment solutions to help you achieve your objectives**

Cisco Capital® makes it easier to get the right technology to achieve your objectives, enable business transformation, and stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services, and complementary third-party equipment in easy, predictable payments. [Learn more](#).

### For more information

For more information about the Cisco Catalyst ESS9300 Embedded Series Switch, visit <https://www.cisco.com/go/ess9300> or contact your local account representative.

## Document history

New or Revised Topic	Described In	Date
<b>MACsec-256 security feature</b>	<a href="#">Network Advantage License</a>	April 12, 2023
<b>Added ESS9300-NW-A= Network Advantage Spare License</b>	<a href="#">Ordering Information</a>	April 12, 2023
<b>Added Certificate based MACsec In Software Features</b>	Network Essential License	January 10, 2024
<b>Added a Footnote in Compliance Section</b>	Compliance Section	January 12, 2024
<b>Added ESS-9300-8X16T-W-A datasheet as a follow on in the ESS9300 series to ESS-9300-10X-E datasheet and added some additional common content</b>	<a href="#">New section for ESS-9300-8X16T-W-A</a>	September 30, 2024
<b>Reformatted Datasheet to be more readable and where applicable have single tables describing various for both ESS-9300-10X-E and ESS-9300-8X16T-W-A</b>	Entire datasheet	October 9, 2024
<b>Support for GRE tunnels, clarification of sales and availability of ESS-9300-8X16T-W-A, miscellaneous additional standards noted</b>	Multiple sections	February 13, 2025
<b>Verbiage to clarify that the ESS-9300-8X16T-W-A is NOT sold as a separate module nor is it available directly from Cisco. It is exclusively sold by Curtiss-Wright as a component of the VPX3-623</b>	Multiple sections	April 16, 2025
<b>Clarify the two configurations in different subsections for each variant of the ESS9300.</b>	<a href="#">Product overview</a>	July 1, 2025
<b>ESS-9300-8X16T-W-A availability and sales channels.</b>	<a href="#">Ordering information</a>	July 1, 2025

Americas Headquarters  
Cisco Systems, Inc.  
San Jose, CA

Asia Pacific Headquarters  
Cisco Systems (USA) Pte. Ltd.  
Singapore

Europe Headquarters  
Cisco Systems International BV Amsterdam,  
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at <https://www.cisco.com/go/offices>.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <https://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)