



Cisco Embedded Service 9300 Series Switches Software Configuration Overview

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General Description

The Cisco ESS 9300 is an embedded Ethernet switch card. The compact design simplifies integration and offers system integrators the ability to use the Cisco ESS 9300 in a wide variety of applications. The Cisco ESS 9300 consists of one switch card.

The Cisco ESS-9300-10X-E board supports up to 10 ports of 10GE fiber and includes a Gig0/0 management port. The management port is active in ROMMON mode (when IOS-XE is not running). The board has a thermal power consumption of 35 Watts.

Cisco IOS XE Release 17.17.1 introduces the Cisco ESS-9300-8X16T of the Curtiss-Wright VPX3-623.

The Cisco ESS-9300-8X16T of the Curtiss-Wright VPX3-623 supports up to eight 10GE interfaces. By default, two 10GE interfaces are configured in backplane mode, while six are in optical mode. It does not include a management port. The board has a thermal power consumption of 35 Watts.



Important

The Cisco ESS-9300-8X16T of the Curtiss-Wright VPX3-623 is exclusively available from Curtiss-Wright as a component of the Curtiss-Wright VPX3-623. It is never sold alone through any Cisco sales channels.

There are no cooling plates sold with the switch. It is up to the integrator to design a thermal solution.

This table highlights the hardware map between Cisco ESS-9300-8X16T of the Curtiss-Wright VPX3-623 and the Cisco ESS-9300-10X-E:

Table 1: Key Features

Category	Features	Cisco ESS-9300-10X-E	Cisco ESS-9300-8X16T of the Curtiss-Wright VPX3-623
Hardware	Small form-factor with mezzanine card	Supported with 4.595 in.(H) x 2.904 in.(W)	Supported with 5.1 in.(H) x 2.9 in.(W)
	Ethernet management port	Optional	Not supported
	Optical ports	10X10 GE optical ports with Enhanced Small Form-Factor Pluggable (SFP+).	<ul style="list-style-type: none"> • 8x10GE interfaces. By default, 2x10GE interfaces are configured in backplane mode and 6x10GE interfaces in the optical mode. • 10X1 GE Copper ports
	ARM Quad-Core A53	Supported	Supported
	Alarms	<ul style="list-style-type: none"> • Two—input • One— output 	<ul style="list-style-type: none"> • Four—input • One— output
	4GB DDR4 DRAM with ECC	Supported	Supported
	Eight GB onboard eMMC flash storage (2.5 GB usable space).	Supported	Supported
Software	IOS-XE, Network Essentials and Network Advantage	Supported	Supported
Industrial temperature	-40°C to +85°C	Supported	Supported

Few of the key hardware features of the Cisco ESS 9300 series switch are:

- [Alarms](#)
- [ALT Boot](#)
- [Backplane Ports](#)
- [Factory reset](#)
- [Generic Online Diagnostics \(GOLD\)](#)
- [Intelligent Platform Management Interface \(IPMI\)](#)
- [Optical ports](#)
- [Power-on Self Test \(POST\)](#)

- [Zeroization](#)

The port mapping for the hardware device to the IOS-XE device is:

Table 2: Device Port Mapping between Cisco ESS 9300-10X-E and Cisco ESS-9300-8X16T of the Curtiss-Wright VPX3-623

Device Port	Cisco ESS 9300 (ESS 9300-10X-E)	Cisco ESS 9300 (ESS-9300-8X16T of the Curtiss-Wright VPX3-623)
Management Port	GigabitEthernet0/0	Not supported
Interfaces	TenGigabitEthernet1/1 - 1/10	<ul style="list-style-type: none"> • TenGigabitEthernet1/1 - 1/8 • Gigabit Ethernet Ports 2/1-2/10
USB	usbflash0:	usbflash1:

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.



Note Cisco ESS-9300-8X16T of the Curtiss-Wright VPX3-623 doesn't support:

- SD card
- Express button setup

SFP Support

Both 100BASE-X and 1000BASE-X SFP transceivers are supported. [Supported SFP and SFP+ Modules, on page 4](#) lists the specific SFP transceivers and their characteristics.



Note

- SFP is not supported on the Cisco ESS-9300-8X16T of the Curtiss-Wright VPX3-623.
- LRM optics are not supported since the SFP is direct driven from the Cisco ASIC.

Supported SFP and SFP+ Modules

Table 3: Supported Modules

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
CWDM-SFP-xxxx= (8 freq)	CWDM 1000BASE-X	GE		SMF	COM	Yes
DWDM-SFP-xxxx= (40 freq)	DWDM 1000BASE-X	GE		SMF	COM	Yes
SFP-GE-S=	1000BASE-SX	GE	550m	MMF	EXT	Yes
SFP-GE-L=	1000BASE-LX/LH	GE	550m/10km	MMF/SMF	EXT	Yes
GLC-SX-MM=	1000BASE-SX	GE	550m	MMF	COM	No
GLC-LH-SM=	1000BASE-LX/LH	GE	550m/10km	MMF/SMF	COM	No
GLC-TE=	1000BASE-T	GE	100m	Copper	EXT	N/A
GLC-T=	1000BASE-T	GE	100m	Copper	COM	N/A
SFP-10G-BXD-I=	10GBASE-BX10	10GE	10km	SMF	IND	Yes
SFP-10G-BXU-I=	10GBASE-BX10	10GE	10km	SMF	IND	Yes
SFP-10G-SR-X=	10GBASE-SR	10GE	400m	MMF	EXT	Yes
SFP-10G-LR-X=	10GBASE-LR	10GE	10km	SMF	EXT	Yes
SFP-10G-SR=	10GBASE-SR	10GE	400m	MMF	COM	Yes
SFP-10G-LR=	10GBASE-LR	10GE	10km	SMF	COM	yes
GLC-T-RGD=	1000BASE-T	GE	100m	Copper	IND	N/A
SFP-H10GB-CUxM=	10G Passive Twinax	10GE	1m/3m/5m	Twinax	COM	N/A
SFP-H10GB-ACUxM=	10G Active Twinax	10GE	7m/10m	Twinax	COM	N/A