CISCO3945E/K9 Datasheet

Get a Quote

Overview

The Cisco router 3945E, supporting Modular Services Performance Engine (SPE) 250, delivers highly secure data, voice, video, and application services to large branch offices.

Quick Specs

Figure 1 shows the appearance of the CISCO3945E/K9.



Table 1 shows the Quick Specs of the CISCO3945E/K9.

Product Code	CISCO3945E/K9
Services Performance Engine module	w/SPE 250
Rack Units	3U
Interfaces	4 integrated 10/100/1000 Ethernet ports with 2 SFP ports
Expansion Slot(s)	4 service module slots 3 Enhanced High-Speed WAN Interface Card slots 3 onboard digital signal processor (DSP) slots
RAM	1 GB (installed) / 2 GB (max)
Flash Memory	256 MB (installed) / 8 GB (max)
Dimensions	13.3 x 43.8 x 47.6 cm
Package Weight	23.52 Kg

Product Details

Figure 2 shows the front panel of the Cisco 3945E router.



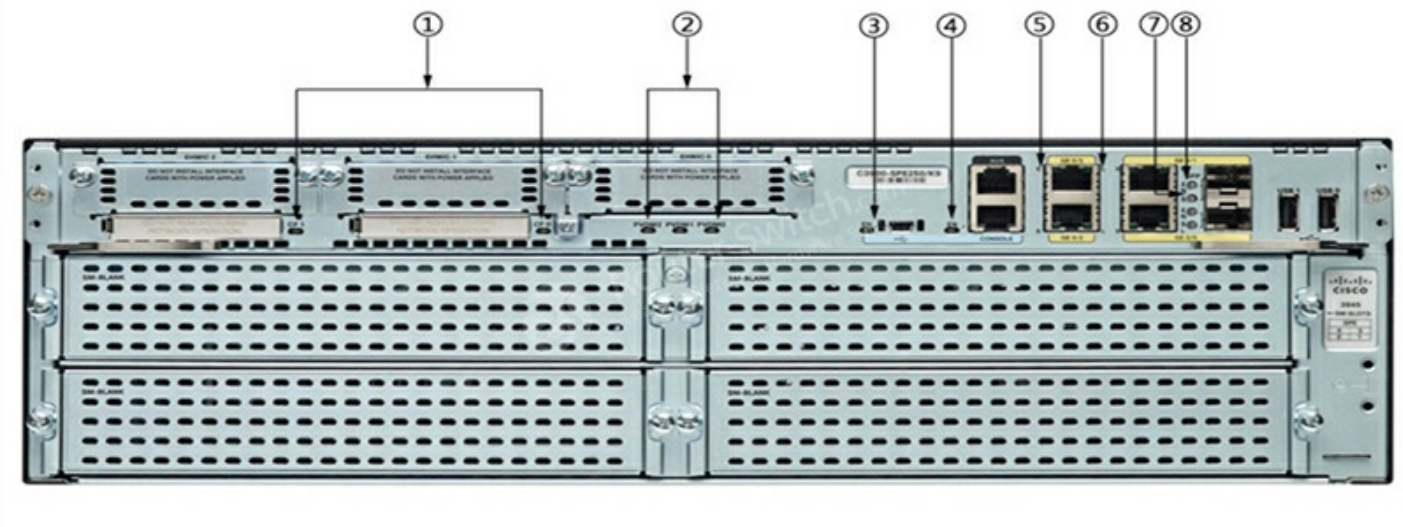
Note:

(1)	(2)	(3)
On/Off switch	Power connector	LEDs area

Table 2 shows the LEDs area description.

LED	Description	
SYS status LED	Solid green	Solid green indicates normal operation.
	Blinking green	System is booting or is in ROM monitor mode.
	Amber	System error.
	Off	Power is off or system board is faulty.
ACT status LED	Solid or blinking green	Solid or blinking indicates packet activity between the forwarding and routing engine and any I/O port.
	Off	No packet transfers are occurring.
POE	Green	IP phone power is on.
	Amber	IP phone power is not on.
PS1 / PS2	Green	System is running.
	Amber	System is not running.

Figure 3 shows the back panel of the Cisco router 3945E/K9 with LEDs.



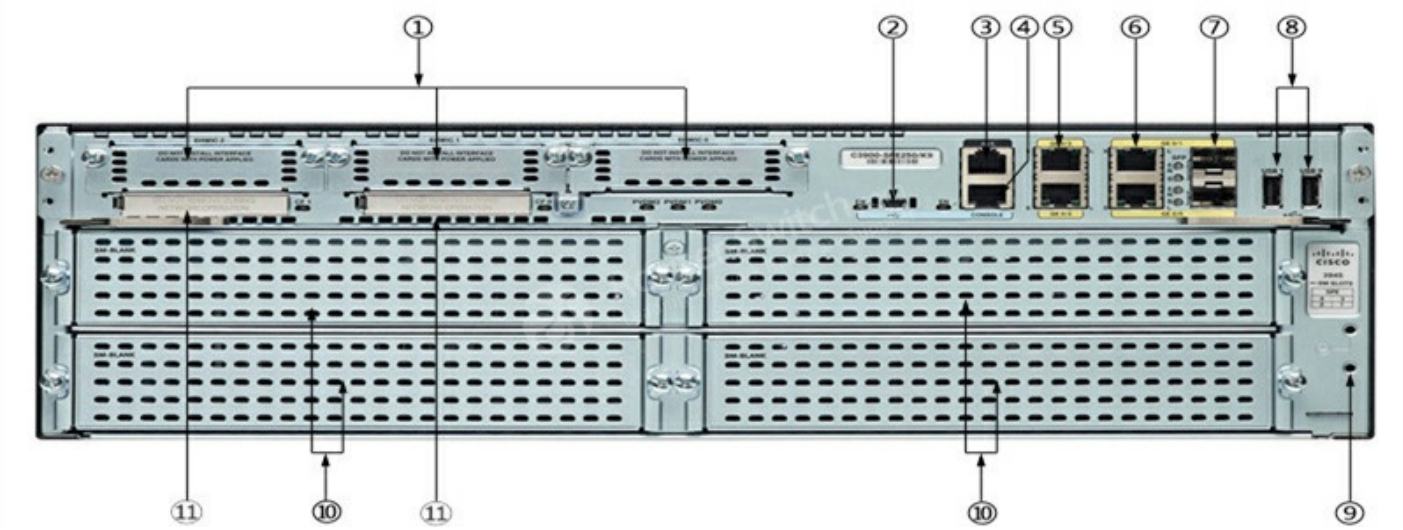
Note:

(1)	Compact flash 0 and 1 (0, right)	(5)	S (Speed)
(2)	PVDM3 0,1, and 2 (0, far right)	(6)	L (Link)
(3)	EN (Enable USB console)	(7)	SFP S
(4)	EN (Enable RJ-45 console)	(8)	SFP EN

Table 3 shows the description of these LEDs on the back panel.

LED	Color	Description	Location
CompactFlash 1	Green	Flash memory is busy.	Back Panel
	Amber	Initialized with error.	
	Blinking Green then turns off	CompactFlash is ready for removal.	
CompactFlash 0	Green	Flash memory is busy.	Back Panel
	Amber	Initialized with error.	
	Blinking Green then turns off	CompactFlash is ready for removal.	
S (Speed)	1 blink + pause	GE port operating at 10 Mb/s.	Back Panel
	2 blink + pause	GE port operating at 100 Mb/s.	
	3 blink + pause	GE port operating at 1000 Mb/s.	
L (Link)	Green	GE link is established.	Back Panel
	Off	No GE link is established.	
EN (RJ-45 console port)	Green	The RJ-45 console port is active.	Back Panel
EN (USB serial console port)	Green	The USB console port is active.	Back Panel
PVDM3 0,1, and 2	Green	PVDM is initialized.	Back Panel
	Amber	PVDM is detected but not initialized.	
	Off	No PVDM installed.	
SFP S	Blinking green	Blinking frequency indicates port speed.	Back Panel
SFP EN	Off	Not present.	Back Panel
	Green	Present and enabled.	
	Amber	Present with failure.	

Figure 4 shows the back panel of the Cisco 3945E router with slots and ports.



Note:

(1)	EHWIC 0,1, and 2 (0, far right)	(7)	SFP 1 and SFP 2 (1, Top)
(2)	USB serial port	(8)	USB 0 and USB 1 (1, Left)
(3)	AUX port	(9)	Ground
(4)	RJ-45 serial console port	(10)	Service module slots
(5)	10/100/1000 Ethernet ports (GE 0/3, Top; GE 0/2, Bottom)	(11)	Compact flash 0 and 1 (0, right)
(6)	10/100/1000 Ethernet ports (GE 0/1, Top; GE 0/0, Bottom)		

The Cisco 3900 Series offers field-replaceable SPEs which allow you to protect your initial investment in the Cisco 3900 platform for a longer time period and scale router performance as your network and branch-office needs grow.

Figure 5 shows the SPE area and you can upgrade these slots and ports directly by one SPE module.

The Cisco 3900 Series offers field-replaceable SPEs which allow you to protect your initial investment in the Cisco 3900 platform for a longer time period and scale router performance as your network and branch-office needs grow.





Modularity Features

The Cisco 3945E router provides enhanced modular capabilities.

Table 4 shows modules for this router.

Models	Description
C3900-SPE250/K9	Cisco Services Performance Engine 250 for Cisco 3945E router. (It's a configured item in the CISCO3945E/K9.)
SM-ES3G-16-P	Enhanced EtherSwitch Service Module, L2/L3 switching, 16* 10/100/1000 GE ports, Enhanced POE, Cisco EnergyWise technology
SM-ES3G-24-P	Enhanced EtherSwitch Service Module, L2/L3 switching, 24 * 10/100/1000 GE ports, Enhanced POE, Cisco EnergyWise technology

VWIC3-2MFT-G703	Cisco Voice/WAN Card VWIC3-2MFT-G703
HWIC-2T	2-Port Serial WAN Interface Card Cisco Router High-Speed WAN Interface card
EHWIC-1GE-SFP-CU	Cisco 1900, 2900, 3900 Router EHWIC WAN Card EHWIC-1GE-SFP-CU
EHWIC-4ESG	Four port 10/100/1000 Base-TX Gigabit Ethernet switch interface card for Cisco 1900 2900 3900 Routers
ISM-SRE-300-K9	Internal Services Module (ISM) with Services Ready Engine
PVDM3-16	16-channel high-density voice DSP module
MEM-CF-256U1GB	256MB to 1GB Compact Flash Upgrade for Cisco 1900,2900,3900
MEM-CF-256U2GB	256MB to 2GB Compact Flash Upgrade for Cisco 1900,2900,3900
MEM-CF-256U512MB	256MB to 512MB CF Upgrade for Cisco 1900,2900,3900 ISR
MEM-CF-256U4GB	256MB to 4GB Compact Flash Upgrade for Cisco 1900,2900,3900
MEMUSB-1024FT	1GB USB Flash Token

The Licenses

The Cisco 3945E/K9 router supports to upgrade with Licenses.

Table 5 shows the recommended license.

Licenses	Description
L-FL-39-HSEC-K9=	Cisco 3900 License L-FL-39-HSEC-K9 U.S. Export Restriction Compliance license for 3900 series
L-FL-39-SNA=	Cisco 3900 Router License - FL-39-SNA= SNA E-Delivery License for Cisco 3925/3945 for Cisco 3900 Series
L-SL-39-APP-K9=	Cisco Application Experience License ISR 3900 series - includes licenses for: AppX, DATA and WAASX.
L-SL-39-SEC-K9=	Cisco 3900 License L-SL-39-SEC-K9 Security E-Delivery PAK for Cisco 3900 Series
L-SL-39-UC-K9=	Cisco 3900 License L-SL-39-UC-K9 Unified Communication E-Delivery PAK for Cisco 3900 Series

Compare to Similar Routers

Table 6 shows the comparison of Cisco router 3925, 3945, 3925E and 3945E.

Model	CISCO3925/k9	CISCO3945/k9	CISCO3925E/k9	CISCO3945E/k9
SPE	w/SPE 100	w/SPE 150	w/SPE 200	w/SPE 250
Interface	3GE	3GE	4GE	4GE
EHWIC slots	4	4	3	3
SM slots	2	4	2	4
ISM slots	1	1	0	0
DSP	4	4	3	3
SFP	2	2	2	2
Rack Unit	3U	3U	3U	3U

Get more information

Do you have any question about the Cisco 3945E/K9 router?

Contact us now via **Live Chat** or **sales@router-switch.com**.

Specification

.

CISCO3945E/K9 Specification	
Services and Slot Density	
Embedded hardware-based cryptography acceleration (IPSec + Secure Sockets Layer [SSL])	Yes
Cisco Unified Communications Manager Express Sessions	450
Cisco Unified SRST sessions	1500
Total onboard WAN or LAN 10/100/1000 ports	4
RJ-45-based ports	4
SFP-based ports	2
Service-module slots	4
Doublewide service-module slots	1
EHWIC slots	3
Doublewide EHWIC slots	1
ISM slots	0
Online insertion and removal (OIR)	Services modules
Onboard DSP (PVDM) slots	3
Memory DDR2 ECC DRAM: Default	1 GB
Memory DDR2 ECC DRAM: Maximum	2 GB
Compact Flash (external): Default	Slot 0: 256 MB
	Slot 1: None
Compact Flash (external): Maximum	Slot 0: 4 GB
	Slot 1: 4 GB
External USB 2.0 slots (Type A)	2
USB console port (Type B) (up to 115.2 kbps)	1
Serial console port (up to 115.2 kbps)	1
Serial auxiliary port (up to 115.2 kbps)	1
Power-supply options	Internal: AC, PoE, and DC*
Redundant power supply	Internal: AC, PoE, and DC*
Power Specifications	
AC input voltage	100 to 240 VAC autoranging
AC input frequency	47 to 63 Hz
AC input current range, AC power supply (maximum)	7.1 to 3.0A
AC input surge current	<50A
DC Operating Input Voltage	24Vdc - 60Vdc

Max Input Current range, DC power supply	33.2 - 12.4
DC Input Surge Current	<50A
Typical power (no modules) (watts)	158
Maximum power with AC power supply (watts)	540
Maximum power with PoE power supply (platform only) (watts)	540
Maximum endpoint PoE power available from PoE power supply (watts)	520
Max power with DC input (W)	574
Maximum endpoint PoE power capacity with PoE boost (watts)	1040
Miscellaneous	
Dimensions (H x W x D)	5.25 x 17.25 x 18.75 in. (133.35 x 438.15 x 476.25 mm)
Rack height	3 rack units (3RU)
Rack-mount 19in. (48.3 cm) EIA	included
Rack-mount 23in. (58.4 cm) EIA	optional
Wall-mount	No
Package Weight	51.85 lb(23.52 kg)
Weight with AC power supply (no modules)	39 lb (17.7 kg)
Weight with PoE power supply (no modules)	40 lb (18.1 kg)
Typical weight (with modules)	60 lb (27.2 kg)
Airflow	Back to front
Optional airflow kit (includes filter)	None
Environmental specifications	
Operating conditions	
Temperature: 5906 ft (1800m) maximum altitude	32 to 104ºF (0 to 40ºC)
Temperature: 9843 ft (3000m) maximum altitude	32 to 104ºF (0 to 40ºC)
Temperature: 13123 ft (4000m) maximum altitude'	32 to 86ºF (0 to 30ºC)
Temperature: Short-term per NEBS/5906 ft (1800m) maximum altitude	23 to 122°F (-5 to 50°C)
Altitude	4000m (13000 ft)
Relative humidity	5 to 85%
Short-term (per NEBS) humidity	5% to 90%, not to exceed 0.024 kg water/kg of dry air
Acoustic: Sound pressure (typical/maximum)	57.6/77.6
Acoustic: Sound power (typical/maximum)	67.8/84.7
None operating conditions	
Temperature	-40 to 158ºF (-40 to 70ºC)
Relative humidity	5 to 95%

Altitude	15,584 ft (4750m)
Regulatory and Compliance	
Safety	UL 60950-1
	CAN/CSA C22.2 No. 60950-1
	EN 60950-1
	AS/NZS 60950-1
	IEC 60950-1
EMC	47 CFR, Part 15
	ICES-003 Class A
	EN55022 Class A
	CISPR22 Class A
	AS/NZS 3548 Class A
	VCCI V-3
	CNS 13438
	EN 300-386
	EN 61000 (Immunity)
	EN 55024, CISPR 24
	EN50082-1
Telecom	TIA/EIA/IS-968
	CS-03
	ANSI T1.101
	ITU-T G.823, G.824
	IEEE 802.3
	RTTE Directive

Want to Buy

Order Now Get a Quote

Why Router-switch.com

As a leading network hardware supplier, Router-switch.com focuses on original new ICT equipment of Cisco, Huawei, HPE, Dell, Hikvision, Juniper, Fortinet, etc.

200+
Countries we Sold

18,000+
Customers Trusted

$20,000,000
Inventory Available

50%-98%
Off Global List Price

100%
Safe Online Shopping

Contact Us

- Tel: +1-626-655-0998 (USA) +852-3050-1066 / +852-3174-6166
- Fax: +852-3050-1066 (Hong Kong)
- Email: sales@router-switch.com