

# C9800-L-C-K9Datasheet

[GetaQuote](#)

## Overview

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The Cisco®Catalyst®[C9800-L-C-K9](#)is a fixed wireless controller with flawless software updates for small and mid size projects. Built from the ground up for intent-based networking, the Cisco Catalyst 9800-L brings together Cisco IOS®XE Software and Cisco RF quality to create a best-in-class wireless experience for your evolving and growing organization.

|                                 |                                                                                    |
|---------------------------------|------------------------------------------------------------------------------------|
| Product Code                    | C9800-L-C-K9                                                                       |
| Description                     | CiscoCatalyst9800-LWirelessControllerFiberUplink (ships with one AC Power Adapter) |
| Dimensions(HxWxD)               | 1.58in.(4.02cm)x8.5in.(21.59cm)x9.06in.(23.01cm)                                   |
| Maximum number of access points | 250                                                                                |
| Maximum number of clients       | 5000                                                                               |
| Maximum throughput              | 5 Gbps                                                                             |
| Maximum WLANs                   | 4096                                                                               |
| Maximum VLANs                   | 4096                                                                               |
| Fixed uplinks                   | 2x10G/Multigigabitcopperor2x10G/Multi giga bit fiber                               |
| Power supply                    | 110W,12VDC,AC/DC adapter                                                           |
| Maximum power consumption       | 84.5W(assumes2pc2.5WSFPandwith4.5WUSB load)                                        |

|                                 |                                                                                     |
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| Maximum number of clients       | 5000                                                                                |
| Maximum throughput              | 5 Gbps                                                                              |
| Maximum WLANs                   | 4096                                                                                |
| Maximum VLANs                   | 4096                                                                                |
| Fixed uplinks                   | 2x10G/Multigigabitcopperor2x 10G/Multigigabit fiber                                 |
| Power supply                    | 110W,12VDC,AC/DC adapter                                                            |
| Maximum power consumption       | 84.5W(assumes2pc2.5WSFPandwith4.5W USB load)                                        |

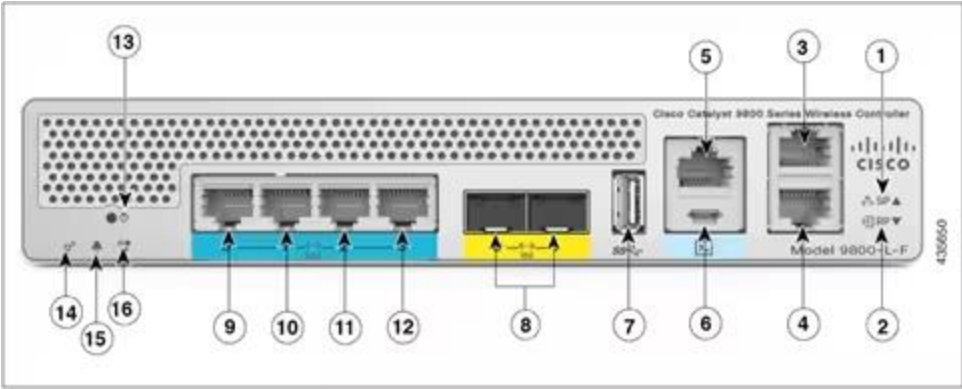
FrontPanelofHuaweiC9800-L-C-K9Switch



C9800-L-C-K9

|   |                                                    |     |                                                                           |
|---|----------------------------------------------------|-----|---------------------------------------------------------------------------|
| ① | Reset button                                       | ⑧   | USB3.0port                                                                |
| ② | RJ-45consoleport                                   | ⑨   | 2x 10G/Multigigabit copper (Figure 4) 2x 10G/Multigigabitfiber (Figure 5) |
| ③ | Service port(SP)(RJ-45) for out-of-band management | ⑩-⑬ | QuadRJ-452.5G/1G Multi giga bit Ethernet ports                            |
| ④ | Service port LED                                   | ⑩   | HighavailabilityLED                                                       |
| ⑤ | Redundancy port LED                                | ⑮   | Alarm LED                                                                 |
| ⑥ | Redundancy port                                    | ⑯   | HighavailabilityLED                                                       |
| ⑦ | Micro-BUSB console                                 |     |                                                                           |

PanelofHuaweiC9800-L-F-K9Switch



C9800-L-C-K9

Power Supply for Cisco Catalyst9800-LSeries

| Item        | Description                                                  |
|-------------|--------------------------------------------------------------|
| C9800-RMNT= | CiscoCatalyst9800SeriesWirelessController Rack Mount Bracket |

C9800-AC-110W=

Cisco Catalyst Wireless Controller 110W AC Power Supply

| Product Code                    | C9800-L-F-K9                                                                             | C9800-L-C-K9                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Description                     | Cisco Catalyst 9800-L Wireless Controller Fiber Uplink (ships with one AC Power Adapter) | Cisco Catalyst 9800-L Wireless Controller Copper Uplink (ships with one AC Power Adapter) |
| Dimensions(HxWxD)               | 1.58in.(4.02cm)x8.5in. (21.59 cm)x9.06in.(23.01 cm)                                      | 1.58in.(4.02cm)x8.5in. (21.59 cm)x9.06in.(23.01 cm)                                       |
| Maximum number of access points | 250                                                                                      | 250                                                                                       |
| Maximum number of clients       | 5000                                                                                     | 5000                                                                                      |
| Maximum throughput              | 5 Gbps                                                                                   | 5 Gbps                                                                                    |
| Maximum WLANs                   | 4096                                                                                     | 4096                                                                                      |
| Maximum VLANs                   | 4096                                                                                     | 4096                                                                                      |
| Maximum power consumption       | 84.5W(assumes 2pc 2.5WSFP and with 4.5W USB load)                                        | 84.5W(assumes 2pc 2.5WSFP and with 4.5W USB load)                                         |
| Maximum heat dissipation        | 288.2Btu/hr(assumes 2pc 2.5WSFP and with 4.5W USB load)                                  | 296.4Btu/hr(with 4.5W USB load)                                                           |

## C9800-L-F-K9 Specification

## C9800-L-C-K9 Specification

| Description                     | Cisco Catalyst 9800-L Wireless Controller Fiber Uplink (ships with one AC Power Adapter)            |
|---------------------------------|-----------------------------------------------------------------------------------------------------|
| Dimensions(HxWxD)               | 1.58in.(4.02cm)x8.5in.(21.59cm)x9.06in. (23.01 cm)                                                  |
| Maximum number of access points | 250                                                                                                 |
| Maximum number of clients       | 5000                                                                                                |
| Maximum throughput              | 5Gbps                                                                                               |
| Maximum WLANs                   | 4096                                                                                                |
| Maximum VLANs                   | 4096                                                                                                |
| Fixed uplinks                   | 2x10G/Multigigabit copper or 2x10G/Multigigabit fiber                                               |
| Power supply                    | 110W, 12VDC, AC/DC adapter                                                                          |
| Maximum power consumption       | 84.5W(assumes 2pc 2.5WSFP and with 4.5W USB load)                                                   |
| Deployment modes                | Centralized, Cisco Flex Connect®, and fabric                                                        |
| Form factor                     | 1RU; half-width chassis allow side-by-side installation in standard 19-in. rack                     |
| License                         | Smart License enabled                                                                               |
| Software                        | Cisco IOSXE                                                                                         |
| Management                      | Cisco DNA Center, Cisco Prime® Infrastructure, and third party (open standards APIs)                |
| Interoperability                | AireOS-based controllers                                                                            |
| Access points                   | Cisco Aironet® 802.11ac Wave 1 and Wave 2 access points, Cisco Catalyst 9100 802.11ax access points |

## Wireless

IEEE 802.11a, 802.11b, 802.11g, 802.11d,  
WMM/802.11e, 802.11h, 802.11n, 802.11k, 802.11r,  
802.11u, 802.11w, 802.11ac Wave 1 and Wave 2,  
802.11ax

## Wired,switching,androuting

IEEE802.310BASE-T,IEEE802.3u100BASE-TX specification,1000BASE-T,1000BASE-SX,1000-BASE-LH, IEEE 802.1Q VLAN tagging, IEEE 802.1AXLinkAggregation

- RFC768UDP

- RFC791IP

- RFC2460IPv6

- RFC792ICMP

- RFC793TCP

## DataRequestsForComments(RFCs)

- RFC826ARP

- RFC1122RequirementsforInternet Hosts

- RFC1519CIDR

- RFC1542BOOTP

- RFC2131DHCP

- RFC5415CAPWAPProtocolSpecification

- RFC5416CAPWAPBindingfor802.11

- Wi-FiProtectedAccess(WPA)

- IEEE802.11i(WPA2, RSN)

- RFC1321MD5Message-DigestAlgorithm

- RFC1851ESPTripleDESTransform

- RFC2104HMAC:Keyed-HashingforMessage Authentication

- RFC2246TLSProtocolVersion1.0

- RFC2401SecurityArchitecturefortheInternetProtocol

## Securitystandards

- RFC2403HMAC-MD5-96withinESPandAH

- RFC2404HMAC-SHA-1-96withinESPandAH

- RFC2405ESPDES-CBCCipherAlgorithmwith Explicit IV

- RFC2407Interpretationfor ISAKMP

- RFC2408ISAKMP

- RFC2409IKE

- RFC2451ESPCBC-ModeCipherAlgorithms

- RFC3280InternetX.509PKICertificateandCRL Profile

## Encryption

- RFC4347DatagramTransportLayer Security
- RFC5246TLSProtocolVersion1.2
- WiredEquivalentPrivacy(WEP)RC440,104and128 bits (both static and shared keys)
- AdvancedEncryptionStandard(AES):CipherBlock Chaining (CBC), Counter with CBC-MAC (CCM), Counter with Cipher Block Chaining Message Authentication Code Protocol (CCMP)
- DataEncryptionStandard(DES):DES-CBC,3DES
- Secure Sockets Layer (SSL) and Transport Layer Security(TLS): RC4128-bitandRSA1024-and2048-bit
- DTLS:AES-CBC
- IPsec:DES-CBC,3DES,AES-CBC
- 802.1AEMACsecencryption
- IEEE802.1X
- RFC2548MicrosoftVendor-SpecificRADIUS Attributes

## Authentication,Authorization,andAccounting(AAA)

- RFC2716PPPEAP-TLS
- RFC2865RADIUSAuthentication
- RFC2866RADIUSAccounting
- RFC2867RADIUSTunnel Accounting
- RFC2869RADIUSExtensions
- RFC3576DynamicAuthorizationExtensionsto RADIUS
- RFC5176DynamicAuthorizationExtensionsto RADIUS
- RFC3579RADIUSSupportfor EAP
- RFC3580IEEE802.1XRADIUSGuidelines
- RFC3748ExtensibleAuthenticationProtocol(EAP)
- Web-basedauthentication
- TACACSupportformanagementusers
- SimpleNetworkManagementProtocol(SNMP)v1,v2c, v3

## Management

- RFC854Telnet
- RFC1155ManagementInformationforTCP/IP-Based Internets
- RFC1156MIB

- RFC1157SNMP
- RFC1213SNMPMIBII
- RFC1350TFTP
- RFC1643Ethernet MIB
- RFC2030SNTP
- RFC2616HTTP
- RFC2665Ethernet-LikeInterfaceTypesMIB
- RFC2674DefinitionsofManagedObjectsfor Bridges with Traffic Classes, Multicast Filtering, and Virtual Extensions
- RFC2819RMONMIB
- RFC2863InterfacesGroup MIB
- RFC3164Sys log
- RFC3414User-BasedSecurityModel(USM)for SNMPv3
- RFC3418MIBforSNMP
- RFC3636DefinitionsofManagedObjectsfor IEEE 802.3MAUs
- RFC4741BaseNETCONFprotocol
- RFC4742NETCONFoverSSH
- RFC6241NetworkConfigurationProtocol(NETCONF)
- RFC6242NETCONFoverSSH
- RFC5277NETCONFeventnotifications
- RFC5717PartialLockRemoteProcedureCall
- RFC6243With-DefaultscapabilityforNETCONF
- RFC6020YANG
- CiscoprivateMIBs
- Web-based:HTTP/HTTPS

## Managementinterfaces

- Command-lineinterface:Telnet,SecureShell(SSH) Protocol, serial port

- CiscoPrimeInfrastructure  
Operatingtemperature:

## Environmentalconditionssupported

- 32°to104°F(0° to40°C)

Note:The maximumtemperatureisderatedby1.0°Cfor

every 1000ft (305m) of altitude above sea level. Non

operating temperature:

- -13° to 158°F (-25° to 70°C)

Operating humidity:

- 10% to 95% noncondensing

Non operating humidity:

- 0% to 95% noncondensing

Altitude:

- Operating altitude: 0 to 3000m (0 to 10,000 ft)
- Non operating altitude: 0 to 12,192m (0 to 40,000ft.)

Electrical input:

- AC input frequency range: 47 to 63Hz
- AC input range: 90 to 264VAC

Maximum power:

- 9800-L-C max measured power = 86.9W (with 4.5W USB load)
- 9800-L-F max measured power = 84.5W (assumes 2pc 2.5W SFP and with 4.5W USB load)

Maximum heat dissipation:

- 9800-L-C: 296.4Btu/hr (with 4.5W USB load)
- 9800-L-F: 288.2Btu/hr (assumes 2pc 2.5W SFP and with 4.5W USB load)

Sound power level measure:

- Normal: 40dBA at 25C
- Maximum: 42.9dBA at 40C

Power adapter:

- Input power: 100 to 240VAC; 50/60Hz

Safety:

- UL/CSA 60950-1
- IEC/EN 60950-1
- AS/NZS 60950.1
- CAN/CSA-C22.2 No. 60950-1

EMC-Emissions:

## Regulatory compliance

- FCC 47CFR15
- AS/NZSCISPR22
- CISPR22
- EN55022/EN55032(EMI-1)
- ICES-003
- VCCI
- KN32(EMI-2)
- CNS-13438

EMC–Emissions:

- EN61000-3-2PowerLineHarmonics(EMI-3)
- EN61000-3-3VoltageChanges,Fluctuations,andFlicker(EMI-3)