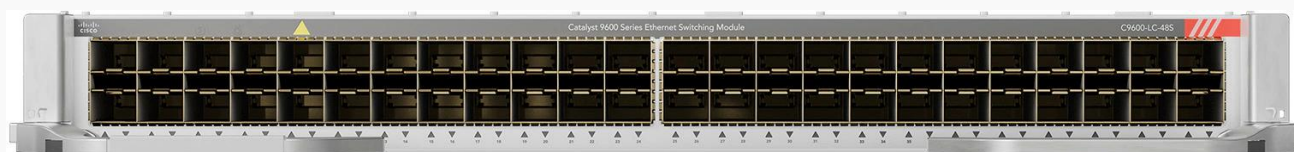## C9600-LC-48S DataSheet

Cisco C9600-LC-48S 48-port 1G/100M SFP line card for Catalyst 9600, 96Gbps full-duplex, hot-swappable, supports C9600-SUP-1, ideal for enterprise fiber aggregation

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C9600-LC-48S Description

Cisco Catalyst C9600-LC-48S, also known as the Catalyst 9600 48-port SFP line card, provides high-density 1G and 100M fiber aggregation for campus access, distribution, and aggregation networks. This module, compatible with the C9600-SUP-1 supervisor engine, delivers up to 48 non-blocking SFP ports and 96Gbps full-duplex per slot bandwidth. Designed for the Catalyst 9606R chassis, the C9600-LC-48S is ideal for organizations that need reliable, secure, and scalable fiber connectivity in enterprise or service provider deployments.

Product Highlights

Ports

Slot Bandwidth

Max rated power

Quick Specs

Ports	48 x SFP (1G/100M)
Supervisor Compatibility	C9600-SUP-1
Max Per Card Bandwidth	96 Gbps full-duplex per slot
Max Power Consumption	160W
MTBF	640,750 hours
Dimensions	1.7 × 15.0 × 13.41 in (4.32 × 38.1 × 34.06 cm)

Key Features

48 High-Density SFP Ports

Delivers 48 non-blocking SFP ports supporting 1G and 100M speeds, ideal for large-scale fiber access, aggregation, or distribution.

96 Gbps Full-Duplex Bandwidth per Slot

Provides up to 96Gbps full-duplex per slot, ensuring wire-speed forwarding and non-blocking performance across all ports.

Optimized for C9600-SUP-1 Supervisor

Fully compatible with the C9600-SUP-1, allowing seamless integration and reliable scaling in Catalyst 9606R chassis.

Enterprise Security and Policy Enforcement

Supports hardware-based ACLs, advanced QoS, and network segmentation for secure, policy-driven enterprise networking.

Operational Excellence & Programmability

Hot-swappable design, tool-free installation, and Cisco automation support (NETCONF, RESTCONF, YANG) for simplified operations and rapid deployment.

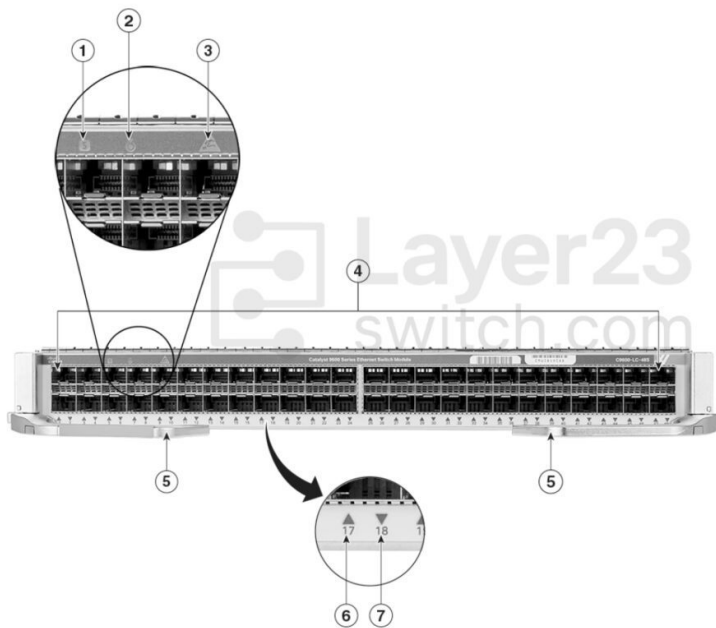# High Reliability, Energy Efficiency, and Compliance

MTBF up to 640,750 hours, low power consumption (160W max), 94% energy efficiency, and compliance with CE, UL, FCC, RoHS, WEEE, VCCI, CCC, BSMI.

Product Comparison

Parameter	C9600-LC-48S	C9600-LC-48YL	C9600-LC-24C
Port Types	48x SFP (1G/100M)	48x SFP56 (50/25/10/1G)	24x QSFP28 (100G/40G)
Supervisor Support	SUP-1	SUP-1, SUP-2	SUP-1, SUP-2
Max 1G Ports	48	48	N/A
Max 100M Ports	48	N/A	N/A
Max 10G/25G/50G Ports	N/A	48	N/A
Max 100G Ports	N/A	N/A	24
Slot Bandwidth	96 Gbps full-duplex	4.8 Tbps (SUP-2)	4.8 Tbps (SUP-2)
Power Consumption	160W	300W (SUP-2)	280W (SUP-2)
Dimensions (H×W×D)	1.7×15.0×13.41 in	1.7×15.0×13.41 in	1.7×15.0×13.41 in
MTBF	640,750 hrs	640,750 hrs	710,750 hrs
MACsec Support	UADP 3.0 ASIC only	UADP ASIC only	Yes (UADP 3.0 ASIC only)
Hot Swappable	Yes	Yes	Yes

Front Panel Components

1	Status LED	5	Ejector levers
2	Locate (Blue beacon) LED	6	Port Link LED for the port in the top row
3	Sharp-edge hazard icon	7	Port Link LED for the port in the bottom row
4	1G SFP ports	–	–

Specification

Parameter	Value	Parameter	Value
Product ID	C9600-LC-48S	Line Card Type	48-port SFP (1G/100M)
Compatible Chassis	C9606R	Supervisor Compatibility	C9600-SUP-1
Fan Tray Compatibility	C9606-FAN	Power Supply Support	C9600-PWR-3KWAC, C9600-PWR-2KWAC, C9600-PWR-2KWDC
Port Types	48x SFP (1G/100M)	Supported Speeds	1G, 100M
Non-blocking Architecture	Yes	Slot Bandwidth	96 Gbps full-duplex per slot

Parameter	Value	Parameter	Value
Maximum Port Density per Chassis	192 (4 cards in C9606R)	Hot Swappable	Yes
MACsec Support	UADP 3.0 ASIC only	Max Power Consumption	160W
Dimensions (H × W × D)	1.7 × 15.0 × 13.41 in (4.32 × 38.1 × 34.06 cm)	Weight	3.55 kg (7.83 lbs)
MTBF	640,750 hours	Operating Temperature	-5°C to 45°C (up to 6,000 ft)
Storage Temperature	-40°C to 75°C	Relative Humidity	10% to 95%, non-condensing
Altitude	-60 to 3,000 m (-197 to 9,843 ft)	Energy Efficiency	94% (typical)
Green Compliance	RoHS, WEEE, recyclable packaging	Regulatory Compliance	IEEE 802.3z, 802.3x, IEEE 802.3ab, CE, UL, FCC, VCCI, CCC, BSMI
Certifications	CE, UL, FCC, RoHS	Mixed Line Card Support	Yes, in any of 4 slots
Installation	Hot swappable, tool-free	Module MTBF	640,750 hours

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