C9600-LC-48TX DataSheet

Cisco C9600-LC-48TX 48-port multigigabit RJ45 line card for Catalyst 9600 switch, 960Gbps full-duplex, hot-swappable, supports C9600X-SUP-2 & C9600-SUP-1

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C9600-LC-48TX Description

Cisco Catalyst C9600-LC-48TX, also known as the Catalyst 9600 48-port multigigabit copper line card, provides high-density 10G/5G/2.5G/1G/100M/10M Ethernet aggregation for modern campus and enterprise core networks. This module supports 48 multigigabit RJ45 ports, is compatible with both C9600-SUP-1 and C9600X-SUP-2 supervisor engines, and delivers 960 Gbps full-duplex per slot bandwidth. The C9600-LC-48TX is ideal for organizations seeking scalable, non-blocking copper connectivity for access, aggregation, or distribution layers.

Product Highlights

Ports

Slot Bandwidth

Max rated power

Quick Specs

Ports	48 x Multigigabit RJ45 (10G/5G/2.5G/1G/100M/10M)
Supervisor Compatibility	C9600-SUP-1 / C9600X-SUP-2

Max Per Card Bandwidth	960 Gbps full-duplex per slot
Max Power Consumption	315W (SUP-2) / 315W (SUP-1)
MTBF	543,000 hours
Dimensions	1.7 × 15.0 × 13.41 in (4.32 × 38.1 × 34.06 cm)

Key Features

48 Multigigabit RJ45 Ports

Provides 48 non-blocking RJ45 copper ports, each supporting 10G, 5G, 2.5G, 1G, 100M, and 10M speeds, perfect for both high-speed and legacy device aggregation in modern campus networks.

960 Gbps Full-Duplex Bandwidth per Slot

Delivers up to 960Gbps per slot, ensuring wire-speed forwarding for all ports even under full load, and eliminating network bottlenecks.

Supervisor Compatibility & Investment Protection

Compatible with both C9600-SUP-1 and C9600X-SUP-2 supervisors, supporting easy upgrades and mixed deployments in Catalyst 9606R chassis.

Robust Security & Policy Support

Hardware-based access controls, advanced QoS, and traffic segmentation deliver secure, reliable performance for enterprise and education environments.

Operational Excellence & Automation Ready

Hot-swappable design, tool-free installation/removal, and advanced Cisco programmability (NETCONF, RESTCONF, YANG) for streamlined operations and rapid provisioning.

High Reliability, Energy Efficient, and Global Compliance

MTBF up to 543,000 hours, typical power efficiency of 94%, and compliance with CE, UL, FCC, RoHS, VCCI, CCC, BSMI for global deployments and sustainable IT.
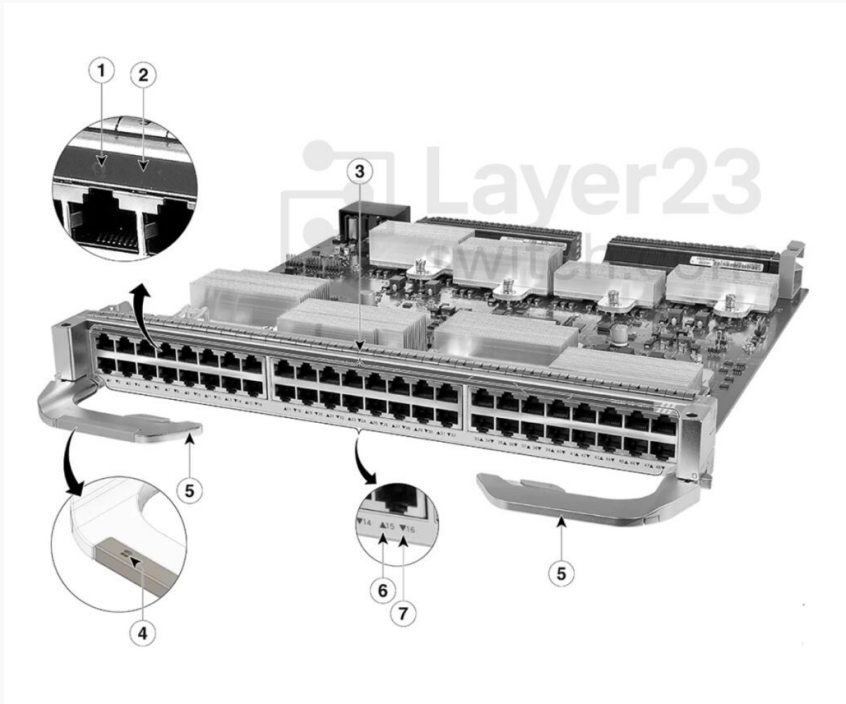
Product Comparison

Parameter	C9600-LC-48TX	C9600-LC-48YL	C9600-LC-24C
Port Types	48x RJ45 (10G/5G/2.5G/1G/100M/10M)	48x SFP56 (50/25/10/1G)	24x QSFP28 (100G/40G)
Supervisor Support	SUP-1, SUP-2	SUP-1, SUP-2	SUP-1, SUP-2
Max 10G Ports	48	48	N/A
Max 5G/2.5G/1G Ports	48	48	N/A
Max 100G Ports	N/A	N/A	24
Slot Bandwidth	960 Gbps full-duplex	4.8 Tbps (SUP-2)	4.8 Tbps (SUP-2)
Power Consumption	315W (SUP-2)	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	543,000 hrs	640,750 hrs	710,750 hrs
MACsec Support	UADP ASIC only (not on SUP-2)	UADP ASIC only (not on SUP-2)	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	10G/5G/2.5G/1G/100 Mbps/10 Mbps RJ45 copper ports	7	Port Link LED for the port in the bottom row
4	RFID embedded on the left ejector lever	–	–

Specification

Parameter	Value	Parameter	Value
Product ID	C9600-LC-48TX	Line Card Type	48-port Multigigabit RJ45
Compatible Chassis	C9606R	Supervisor Compatibility	C9600X-SUP-2, C9600-SUP-1
Fan Tray Compatibility	C9606-FAN	Power Supply Support	C9600-PWR-3KWAC, C9600-PWR-2KWAC, C9600-PWR-2KWDC
Port Types	48x RJ45 (10G/5G/2.5G/1G/100M/10M)	Supported Speeds	10G, 5G, 2.5G, 1G, 100M, 10M
Non-blocking Architecture	Yes	Slot Bandwidth	960 Gbps full-duplex per slot

Parameter	Value	Parameter	Value
Maximum Port Density per Chassis	192 (4 cards in C9606R)	**Hot Swappable**	Yes
MACsec Support	Supported (UADP ASIC only, not on SUP-2)	**Max Power Consumption**	315W (SUP-2), 315W (SUP-1)
Dimensions (H × W × D)	1.7 × 15.0 × 13.41 in (4.32 × 38.1 × 34.06 cm)	**Weight**	4.03 kg (8.88 lbs)
MTBF	543,000 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, 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**	543,000 hours

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