

The **Cisco Catalyst C9600-LC-24C** is a high-density, multi-rate Ethernet line card designed for the Cisco Catalyst 9606R chassis. Powered by Cisco UADP 3.0 ASIC technology, it offers 24 QSFP28 ports capable of supporting both 40 Gigabit and 100 Gigabit Ethernet configurations for core and aggregation layers.

TECHNICAL SPECIFICATIONS

Specification	Details / Performance
Line Card Model	Cisco Catalyst C9600-LC-24C
Compatible Chassis	Cisco Catalyst 9606R Chassis
Supervisor Compatibility	C9600-SUP-1
Port Density	24 Ports QSFP28 / QSFP+
Supported Port Speeds	100G (QSFP28) and 40G (QSFP+) Ethernet
Breakout Port Support	4x 25G and 4x 10G breakout configurations (via breakout cables)
ASIC Architecture	Cisco UADP 3.0 ASIC
Security Encryption	Hardware-ready MACsec-256-bit encryption on all ports
Serviceability	Hot-swappable line card module

KEY ARCHITECTURE HIGHLIGHTS

High-Density 100G Core Links

Provides up to 24 native 100G ports per slot, delivering massive bandwidth aggregation for enterprise campus core and data center interconnects.

Flexible Multi-Rate Speeds

Seamlessly switch between 100G QSFP28 and 40G QSFP+ optics, with optional breakout capabilities to 25G and 10G for migration flexibility.

Hardware Security (MACsec-256)

Ensures robust layer-2 network protection with full 256-bit line-rate MACsec encryption across every port without sacrificing throughput performance.

UADP ASIC Integration

Leverages UADP 3.0 technology for programmable packet pipelines, deep buffers, and granular QoS enforcement across high-speed connections.