



Cisco Catalyst C9300L-48U-4X-E

Catalyst 9300L 48-Port UPOE, 4x 10G Fixed Uplinks, Network Essentials Data Sheet

Product Overview: The Cisco Catalyst C9300L-48U-4X-E is an enterprise-class, fixed-uplink access switch with 48 high-density UPOE ports (delivering up to 60W per port) and 4 dedicated 10G SFP+ uplinks. Designed for modern workplaces, smart buildings, IoT deployments, and hybrid IT infrastructures.

48 Ports 1G UPOE ETHERNET	4x 10G SFP+ FIXED UPLINKS	176 Gbps SWITCHING CAPACITY	320 Gbps STACKWISE STACKING
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1. SYSTEM ARCHITECTURE & KEY FEATURES

The Cisco Catalyst 9300L Series switches are Cisco's lead fixed-uplink stackable enterprise access platform. Built on the Unified Access Data Plane (UADP) ASIC architecture and running Cisco IOS XE, they provide high performance, open APIs, and comprehensive security capabilities.

- **High-Density Cisco UPOE (60W):** Supports up to 60W per port for high-power endpoints such as Wi-Fi 6/6E access points, digital signage, PTZ cameras, and compact switches.
- **StackWise-320 Stacking:** Enables stacking up to 8 units with a maximum stacking bandwidth of 320 Gbps for unified single-IP management and system redundancy.
- **Fixed Uplink Architecture:** Integrated 4 x 10G SFP+ optical uplink ports ensure high-bandwidth aggregation without needing extra expansion modules.
- **Resilient Hardware Architecture:** Supports dual field-replaceable redundant AC power supplies and hot-swappable fan modules.
- **Advanced Security:** Includes hardware-based MACsec-128, Trust Anchor module, Secure Boot, Dynamic ARP Inspection (DAI), and DHCP Snooping.

2. TECHNICAL SPECIFICATIONS

FEATURE / PARAMETER	SPECIFICATION DETAILS
Product Model	Cisco Catalyst C9300L-48U-4X-E
Downlink Interfaces	48 x 10/100/1000 Mbps RJ-45 Cisco UPOE (Up to 60W per port)
Uplink Interfaces	4 x 10G/1G SFP+ Fixed Uplinks
Software License	Cisco Network Essentials (Layer 3 Routing & Core Switching)
Switching Capacity	176 Gbps (Standalone) / Up to 496 Gbps (With StackWise-320)
Forwarding Rate	130.95 Mpps (Standalone) / 369.05 Mpps (Stacked)
Processor / CPU Complex	x86 Multicore CPU Complex
DRAM / Flash Memory	8 GB DRAM / 16 GB Flash
MAC Address Table	32,000 entries
IPv4 Routing Scale	32,000 entries (24,000 direct, 8,000 indirect)

FEATURE / PARAMETER	SPECIFICATION DETAILS
IPv6 Routing Scale	16,000 entries
VLAN IDs & SVIs	4,094 VLAN IDs / 1,000 Switched Virtual Interfaces (SVIs)
Jumbo Frame Support	Up to 9,198 bytes

3. POWER, POE & POWER SUPPLY OPTIONS

POWER PARAMETER	SPECIFICATION
PoE Standards	IEEE 802.3af (PoE), IEEE 802.3at (PoE+), Cisco UPOE (60W)
Default Power Supply	1100W AC Power Supply (PWR-C1-1100WAC-P)
Available PoE Budget	822W with default 1100W AC power supply (Up to 1440W with dual PS)
Power Supply Slots	2 Field-replaceable dual hot-swappable power supply slots
Input Voltage Range	100V AC to 240V AC Auto-ranging (115V to 240V for 1100WAC)
Cooling / Fans	3 Field-replaceable redundant hot-swappable fan modules

4. SOFTWARE FEATURES & NETWORK SERVICES

Layer 2 & Layer 3 Services

- L2 Switching, VLAN trunking (802.1Q), STP, RSTP, MSTP.
- Layer 3 Routed Access: Static Routing, RIP, OSPF (Up to 1,000 routes).
- Policy-Based Routing (PBR) & VRF-Lite.
- Multicast Routing: PIM-SM, PIM-SSM, IGMP v1/v2/v3.

Management & Automation

- Cisco DNA Center & Meraki Dashboard Cloud Management options.
- Model-Driven Programmability: NETCONF, RESTCONF, YANG models.
- On-box Python scripting & Streaming Telemetry.
- SNMP v1/v2c/v3, Web UI, and standard CLI.

5. PHYSICAL & ENVIRONMENTAL SPECIFICATIONS

PARAMETER	VALUE
Form Factor	1RU Rack-Mountable (19-inch standard rack)
Dimensions (H x W x D)	1.73 in x 17.5 in x 17.7 in (4.4 cm x 44.5 cm x 44.9 cm)
Unit Weight	Approx. 15.4 lbs (7.0 kg) with default power supply
Operating Temperature	-5°C to 45°C (23°F to 113°F) at sea level
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Relative Humidity	5% to 95% non-condensing
MTBF (Hours)	309,020 Hours

6. ORDERING INFORMATION & ACCESSORIES

PART NUMBER	ITEM DESCRIPTION
C9300L-48U-4X-E	Catalyst 9300L 48-port UPOE, 4x 10G Uplinks, Network Essentials
PWR-C1-1100WAC-P	1100W AC Platinum Config 1 Power Supply
C9300L-STACK-KIT	Stacking Kit for C9300L SKUs (2x Stacking Adapters & 1x 50cm Cable)
STACK-T3-1M	50cm / 1m / 3m Cisco StackWise-320 Stacking Cable
ACC-KIT-T1	Standard Accessory Kit & 19-inch Rack Mount Brackets