CISCO CATALYST C9300L-48P-4G

DATA SHEET

Enterprise-Grade 48-Port PoE+ Fixed Uplink Switch Architecture

Product Overview: The Cisco Catalyst C9300L-48P-4G is a high-performance, fixed-uplink access switch designed for secure, resilient enterprise network access. Featuring 48 Gigabit PoE+ Ethernet ports and 4 dedicated 1G SFP fixed uplinks, it provides scalable bandwidth, robust security, and advanced stackability via Cisco StackWise-320 technology.

1. KEY TECHNICAL SPECIFICATIONS

Hardware Architecture & Performance	
Downlink Ports	48x 10/100/1000 Ethernet Ports with PoE+ (IEEE 802.3at)
Uplink Architecture	4x 1 Gigabit SFP Fixed Uplink Ports
Switching Capacity	104 Gbps (Standalone) / 424 Gbps (With Stacking)
Forwarding Rate	77.38 Mpps (Million Packets Per Second)
Stacking Bandwidth	StackWise-320 (Up to 320 Gbps stacking bandwidth, up to 8 units)
DRAM / Flash Memory	8 GB DRAM / 16 GB Flash Memory
Packet Buffer	16 MB On-Chip Packet Buffer

2. POWER OVER ETHERNET (POE) & POWER SUPPLY

Power Supply Model	Total Power Output	Available PoE Budget	PoE+ Support (30W per port)
PWR-C1-715WAC (Default)	715W	505W	Up to 16 ports simultaneously
PWR-C1-1100WAC (Optional)	1100W	880W	Full PoE+ support across all 48 ports

3. SYSTEM SCALABILITY & LIMITS

L2 & L3 Capacity	
MAC Address Table	Up to 32,000 entries
IPv4 Routes	32,000 (Direct + Indirect)
IPv6 Routes	16,000 entries
Multicast Scale	8,000 routes

VLAN & Quality of Service	
Active VLAN IDs	4,094 VLANs supported
Switched Virtual Interfaces	Up to 1,000 SVIs
Jumbo Frame Size	Up to 9,198 Bytes
QoS Queues	8 queues per port

4. PHYSICAL & ENVIRONMENTAL SPECIFICATIONS

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) — 1U Rack Unit
Unit Weight	15.46 lbs (7.03 kg)
Cooling System	3x Field-Replaceable Variable-Speed Redundant Fans
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)
MTBF (Mean Time Between Failures)	380,080 Hours

5. SOFTWARE LICENSE TIERS & MERAKI VARIANT

- **Network Essentials (-E):** Includes Layer 2 features, basic routed access (OSPF stub, EIGRP stub), static routing, network segmentation, and telemetry.
- **Network Advantage (-A):** Adds advanced Layer 3 routing (full OSPF, BGP, EIGRP, IS-IS), VRF, VXLAN, BGP EVPN, and advanced security capabilities.
- **Meraki Managed Mode (-M / Cloud):** Allows native management via the Cisco Meraki Cloud Dashboard, providing cloud monitoring, zero-touch provisioning, and simplified administration.

Ordering Note: Ensure proper license designation (-E, -A, or -M) and secondary power supply requirements are specified at the time of procurement.