

Cisco ISR C1121X-8P

HIGH-PERFORMANCE X-SERIES 8-PORT GE DUAL WAN ROUTER

Cisco IOS XE
8GB RAM / High-Crypto X-Series

The **Cisco C1121X-8P** is a premium, high-density X-Series Integrated Services Router engineered for demanding enterprise branch offices. Featuring doubled system memory (8 GB DRAM / 8 GB Flash) and enhanced multi-core crypto processing power, the C1121X-8P integrates 8 Gigabit Ethernet LAN switch ports (4x PoE or 2x PoE+), dual GE/SFP WAN links, and native Cisco SD-WAN capability in a silent, fanless architecture.

SYSTEM MEMORY

8 GB RAM

8 GB eMMC Flash

SWITCH DENSITY

8x GE

4x PoE / 2x PoE+ Ports

CRYPTO BANDWIDTH

Up to 1 Gbps

Enhanced X-Series Hardware

THERMAL NOISE

0 dBA

Fanless Passive Cooling

X-SERIES ARCHITECTURAL FEATURES

Expanded Memory Profile

Equipped with 8 GB DRAM and 8 GB Flash memory as standard, allowing advanced security services, containerized app hosting (IOx), and complex Cisco SD-WAN configurations.

High-Density LAN + PoE Integration

Includes 8 managed Gigabit Ethernet ports supporting up to 4x 802.3af PoE or 2x 802.3at PoE+ outputs to power IP phones, surveillance cameras, and wireless APs.

Cisco Catalyst SD-WAN Native

Seamless cloud-delivered network orchestration via vManage, real-time application-aware routing, automated SaaS optimization, and dynamic WAN traffic steering.

Advanced Hardware Security

Integrated Trust Anchor Module (TAM), hardware Secure Boot, Encrypted Traffic Analytics (ETA), IPSec AES-256 encryption, and Cisco Umbrella DNS security integration.

SYSTEM HARDWARE & INTERFACE SPECIFICATIONS

Component	Specification Details
WAN Interfaces	1x Dedicated 10/100/1000 RJ-45 + 1x Combo Port (10/100/1000 RJ-45 or SFP Optical Transceiver)
LAN Switch Ports	8x 10/100/1000 Managed Gigabit Ethernet ports (Layer 2 switching, 802.1Q VLAN support)
Inline Power (PoE)	Integrated PoE power module supporting 4x PoE (802.3af) or 2x PoE+ (802.3at) ports
Default Memory (RAM)	8 GB DRAM (DDR4)
Flash Storage	8 GB eMMC Flash memory
Console Ports	1x Micro-USB Console (Type-B) + 1x Standard RJ-45 Aux/Console Port
USB Expansion	1x USB 3.0 Type-A host port for external storage, logs, and security tokens

PERFORMANCE & SCALABILITY BENCHMARKS

Performance Metric	Capacity	Deployment Context
Unencrypted CEF Routing	Up to 1 Gbps	Maximum IPv4/IPv6 packet forwarding speed
IPsec VPN Throughput	Up to 1 Gbps	Enhanced X-Series hardware crypto engine (1400-byte packets)
SD-WAN IPsec Throughput	Up to 800 Mbps	With active Cisco SD-WAN overlay and application steering
Concurrent IPsec Tunnels	Up to 800 Tunnels	High-density encrypted tunnel scaling for enterprise networks
Stateful Sessions / NAT	100,000 Sessions	Concurrent stateful firewall and NAT sessions

NETWORKING, SECURITY & PROTOCOL SUPPORT

Cisco IOS XE Advanced Enterprise Feature Set							
Cisco IOS XE 16.8.1+	BGP4 / MP-BGP	OSPFv3	EIGRP	VRF-Lite	DMVPN / GETVPN	FlexVPN	IPsec AES-256
Zone-Based Firewall	Encrypted Traffic Analytics (ETA)	HQoS	Cisco Umbrella	Cisco IOx Container Application Hosting			
NetFlow / IPFIX							

PHYSICAL, POWER & ENVIRONMENTAL SPECIFICATIONS

Parameter	Value / Specification
Dimensions (H x W x D)	1.65 x 12.7 x 8.9 in. (41.9 x 322 x 226 mm) - 1RU Desktop Form Factor
Unit Weight	3.5 lbs (1.6 kg)
Input Power Requirements	Universal AC External Power Adapter: 100 to 240 VAC (50 to 60 Hz)
Power Supply Capacity	115W External AC Power Adapter (Supports full PoE/PoE+ load)
Power Consumption	Nominal: 26W Maximum with full PoE load: 115W
Operating Temperature	32°F to 104°F (0°C to 40°C) at sea level
Acoustic Level	0 dBA (Fanless silent operating architecture)
MTBF	640,000+ Hours
Compliance Standards	UL 60950-1, CAN/CSA C22.2 No. 60950-1, EN 60950-1, FCC Part 15 Class A, CE Mark

TARGET DEPLOYMENT SCENARIOS

- High-Density Enterprise Branch Offices:** Ideal for branch locations requiring higher crypto throughput, 8 Gigabit LAN ports, direct PoE powering, and container application hosting.
- SD-WAN Branch Edges:** Serves as a high-capacity SD-WAN CPE endpoint managed via Cisco vManage, offering application-aware routing and SaaS acceleration.
- Noise-Sensitive Environments:** Compact, fanless 0dB passive cooling architecture allows placement in medical clinics, open-plan workspaces, retail counters, and executive suites.
- Secure Regional Hub / Satellite Connection:** Supports hundreds of concurrent IPsec/DMVPN tunnels back to central data centers or cloud VPCs.