

Cisco ISR4351/K9

ISR 4000 SERIES HIGH-DENSITY MODULAR ENTERPRISE ROUTER

Cisco IOS XE
2RU Modular Architecture

The **Cisco ISR4351/K9** is a high-density 2RU enterprise branch router built for large regional branch offices and enterprise WAN edges. Delivering 200 Mbps default aggregate throughput (upgradable to 400 Mbps via licensing), 3 onboard Gigabit WAN/LAN interfaces, 3 NIM slots, 2 Enhanced Service Module (SM-X) slots, and DSP voice acceleration, it provides enterprise routing, SD-WAN, unified communications, and application compute services.

BASE THROUGHPUT

200 Mbps

Upgradable to 400 Mbps

ONBOARD WAN/LAN

3x GE

3x RJ-45 + 3x SFP Combo

EXPANSION SLOTS

3x NIM + 2x SM

1x ISC (PVDM4) Slot

SYSTEM MEMORY

4 GB DRAM

Upgradable to 16 GB

KEY PLATFORM ARCHITECTURAL FEATURES

Scalable Performance Licensing

Provides 200 Mbps aggregate forwarding rate out of the box, software-upgradable to 400 Mbps with a performance/boost license upgrade without hardware replacement.

High-Density Module Expansion

Includes 3 Network Interface Module (NIM) slots and 2 Enhanced Service Module (SM-X) slots supporting T1/E1, 4G LTE/5G WAN, high-density PoE switches, and compute modules.

Unified Voice & DSP Integration

Features 1 onboard Internal Services Card (ISC) slot supporting high-density PVDM4 modules for analog voice gateways, IP telephony, and Cisco Unified Border Element (CUBE).

Cisco Catalyst SD-WAN Architecture

Full support for Cisco SD-WAN with zero-touch provisioning (ZTP), centralized management via vManage, application-aware routing, and dynamic multi-path transport.

SYSTEM HARDWARE & INTERFACE SPECIFICATIONS

Component	Specification Details
Onboard WAN/LAN Ports	3x Gigabit Ethernet Ports (3x RJ-45 + 3x SFP combo ports for copper/optical flexibility)
NIM Expansion Slots	3x Network Interface Module (NIM) slots (Supports single-wide or dual-wide modules)
SM-X Expansion Slots	2x Enhanced Service Module (SM-X) slots (Supports single-wide or double-wide service modules)
Internal Services Card (ISC)	1x Onboard ISC slot supporting PVDM4 Voice DSP Modules
System Memory (RAM)	4 GB default (DDR3 ECC) – Upgradable to 16 GB maximum
Flash Memory Storage	4 GB default – Upgradable to 16 GB maximum
Console & Auxiliary	1x USB Micro-B Console + 1x RJ-45 Serial Console + 1x RJ-45 Auxiliary Port
USB Storage Slots	2x USB 2.0 Type-A high-speed host ports for logs, software updates, and USB tokens

PERFORMANCE & LICENSING METRICS

Performance Tier	Throughput	License / Software Requirement
Base Default Performance	200 Mbps Aggregate	Standard IP Base / SEC License out-of-the-box
Performance License Tier	400 Mbps Aggregate	Software Performance License Upgrade (FL-4350-PERF-DEF)
Boost License Tier	Uncapped / Multi-Gbps	Boost License Upgrade (FL-4350-BOOST-DEF)
IPsec VPN Throughput	Up to 500 Mbps	Hardware IPsec crypto engine with Security (SEC) License
Concurrent IPsec Tunnels	Up to 2,000 Tunnels	Scalable site-to-site encrypted tunnel termination

NETWORKING, SECURITY & VOICE PROTOCOL MATRIX

Supported Cisco IOS XE Architecture Features						
Cisco IOS XE	BGP4 / MP-BGP	OSPFv3	EIGRP	VRF-Lite	DMVPN	GETVPN
IPsec AES-256	Zone-Based Firewall	Snort IPS	Cisco Umbrella	Cisco CUBE (Unified Border Element)	SRST / Voice Gateway	
HQoS / NBAR2						

PHYSICAL, ENVIRONMENTAL & POWER SPECIFICATIONS

Parameter	Specification Details
Form Factor	2RU Rack-Mountable Metal Chassis (19-inch standard rack mounts included)
Dimensions (H x W x D)	3.5 x 17.25 x 18.5 in. (88.9 x 438.15 x 470 mm)
Unit Weight	28.8 lbs (13.1 kg) without additional modules
Power Supply Options	Internal AC Power Supply (100 to 240 VAC auto-ranging) / Optional PoE Power Supply
Power Consumption	Typical: 48W Max AC Power: 430W Max with PoE Power: 990W
Operating Temperature	32°F to 104°F (0°C to 40°C) at sea level
Operating Relative Humidity	5% to 85% non-condensing relative humidity
Acoustic Noise	52.2 dBA sound pressure level
Safety & Compliance	UL 60950-1, CAN/CSA C22.2 No. 60950-1, EN 60950-1, FCC Part 15 Class A, CE Mark

TARGET DEPLOYMENT SCENARIOS & ORDERING INFO

Target Deployment Scenarios	Ordering Information
Designed for large enterprise regional offices, university campuses, financial regional hubs, and data center edges requiring dense module slot capacity, voice gateway processing, high VPN throughput, and SD-WAN transport.	Base Part Number: ISR4351/K9 Performance Upgrade: FL-4350-PERF-DEF= Boost License: FL-4350-BOOST-DEF= Power Supply: PWR-4350-AC / PWR-4350-POE-AC