

# Cisco Nexus 5596UP - Switch - Managed

48 x SFP+ - rack-mountable

Group	Network Equipment
Manufacturer	Cisco
Manufacturer item no.	N5K-C5596UP-FA
EAN/UPC	0882658390890



## Description

Today's data centers are increasingly filled with dense rack-mount and blade servers that host powerful multicore processors. The rapid increase in in-rack computing density and the increasing use of virtualization software combine to accelerate the demand for 10 Gigabit Ethernet and consolidated I/O: applications for which the Cisco Nexus 5000 series switches are an excellent match. With low latency, front-to-back cooling, and rear-facing data ports, the Cisco Nexus 5000 series is designed for a broad range of physical, virtual, storage access, and high-performance computing environments, thus giving customers the flexibility to meet and scale their data center requirements in a gradual manner and at a pace that aligns with their business objectives.

The switch series, using cut-through architecture, supports line-rate 10 Gigabit Ethernet on all ports while maintaining consistently low latency independent of packet size and services enabled. It supports a set of network technologies known collectively as Data Center Bridging (DCB) that increases the reliability, efficiency, and scalability of Ethernet networks. These features allow the switches to support multiple traffic classes over a lossless Ethernet fabric, thus enabling consolidation of LAN, SAN, and cluster environments. Its ability to connect Fiber Channel over Ethernet (FCoE) to native Fiber Channel protects existing storage system investments while dramatically simplifying in-rack cabling.

In addition to supporting standard 10 Gigabit Ethernet network interface cards (NICs) on servers, the Cisco Nexus 5000 series integrates with multifunction adapters called converged network adapters (CNAs) that combine the functions of Ethernet NICs and Fiber Channel host bus adapters (HBAs), making the transition to a single, unified network fabric transparent and consistent with existing practices, management software, and OS drivers. The Cisco Nexus 5000 series is designed for data center environments with cut-through technology that enables consistent low-latency Ethernet solutions, with front-to-back cooling, and with data ports in the rear, bringing switching into close proximity with servers and making cable runs short and simple. The switch series is highly serviceable, with redundant, hot-pluggable power supply and fan module.

## Main features

Product Description	Cisco Nexus 5596UP - switch - 48 ports - Managed - rack-mountable
Device Type	Switch - 48 ports - Managed
Enclosure Type	Rack-mountable 2U
Subtype	10 Gigabit Ethernet
Ports	48 x SFP+
Performance	Forwarding performance: 1920 Gbps
MAC Address Table Size	32K entries
Jumbo Frame Support	9216 bytes
Routing Protocol	RIP-2, BGP, EIGRP, IGMPv2, HSRP, VRRP, OSPFv2, static IP routing, IGMPv3, PIM-SSM, ECMP
Remote Management Protocol	SNMP 1, SNMP 2, RMON, Telnet, SNMP 3, SSH-2, CLI

Features	Layer 2 switching, ARP support, VLAN support, Syslog support, Weighted Round Robin (WRR) queuing, Broadcast Storm Control, Multicast Storm Control, Unicast Storm Control, Multiple Spanning Tree Protocol (MSTP) support, DHCP snooping, Access Control List (ACL) support, Quality of Service (QoS), Jumbo Frames support, Rapid Per-VLAN Spanning Tree Plus (PVRST+), Link Aggregation Control Protocol (LACP)
Compliant Standards	IEEE 802.3, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.3ae, IEEE 802.1s, IEEE 801.1p
Power	AC 120/230 V (50/60 Hz)
Power Redundancy	Yes
Dimensions (WxDxH)	43.9 cm x 74.9 cm x 8.8 cm
Weight	21.6 kg

## Extended details

General	
Device Type	Switch - 48 ports - Managed
Enclosure Type	Rack-mountable 2U
Subtype	10 Gigabit Ethernet
Ports	48 x SFP+
Performance	Forwarding performance: 1920 Gbps
MAC Address Table Size	32K entries
Jumbo Frame Support	9216 bytes
Routing Protocol	RIP-2, BGP, EIGRP, IGMPv2, HSRP, VRRP, OSPFv2, static IP routing, IGMPv3, PIM-SSM, ECMP
Remote Management Protocol	SNMP 1, SNMP 2, RMON, Telnet, SNMP 3, SSH-2, CLI
Encryption Algorithm	AES
Authentication Method	RADIUS, TACACS+, MS-CHAP
Features	Layer 2 switching, ARP support, VLAN support, Syslog support, Weighted Round Robin (WRR) queuing, Broadcast Storm Control, Multicast Storm Control, Unicast Storm Control, Multiple Spanning Tree Protocol (MSTP) support, DHCP snooping, Access Control List (ACL) support, Quality of Service (QoS), Jumbo Frames support, Rapid Per-VLAN Spanning Tree Plus (PVRST+), Link Aggregation Control Protocol (LACP)
Compliant Standards	IEEE 802.3, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.3ae, IEEE 802.1s, IEEE 801.1p
Expansion / Connectivity	
Interfaces	48 x SFP+   1 x 1000Base-T RJ-45 management   1 x console management
Expansion Slots	3 (total) / 3 (free) x Expansion Slot
Power	
Power Device	Internal power supply - hot-plug
Installed Qty	2
Power Redundancy	Yes
Power Redundancy Scheme	1+1

Power Consumption Operational	660 Watt
	<b>Miscellaneous</b>
Compliant Standards	CISPR 22 Class A, BSMI CNS 13438 Class A, CISPR 24, EN 61000-3-2, VCCI Class A ITE, EN 61000-3-3, EN55024, EN55022 Class A, AS/NZS 60950-1, ICES-003 Class A, RoHS, FCC CFR47 Part 15, IEC 60950-1, EN 60950-1, UL 60950-1 Second Edition, GB 4943, EN 300 386, CAN/CSA-C22.2 No. 60950-1
	<b>Dimensions &amp; Weight</b>
Width	43.9 cm
Depth	74.9 cm
Height	8.8 cm
Weight	21.6 kg
	<b>Manufacturer Warranty</b>
Service & Support	Limited warranty - replacement - 1 year - response time: 10 days
	<b>Environmental Parameters</b>
Min Operating Temperature	0 °C
Max Operating Temperature	40 °C
Humidity Range Operating	5 - 95% (non-condensing)
Max Storage Temperature	70 °C

Technical data © 1WorldSync. Subject to technical modifications and errors.