# N3K-C34180YC Datasheet

Get a Quote

# Overview

N3K-C34180YC is the Nexus 34180YC programmable switch, providing 48 10/25G SFP and 6 40/100G QSFP28 ports. The Cisco Nexus 34180YC programmable switch is a high-speed, low-power, high-density fixed data center switch. Joining the industry's widely deployed Cisco Nexus 3000 Series portfolio, it supports enterprise applications, service provider hosting, financial networks applications, and secured cloud computing environments. This switch supports a wide range of port speeds, with flexible combinations of 10-, 25-, 40-, and 100-Gigabit Ethernet connectivity and improved scalability and configurability because of the switch's capacity to modify and customize packet-forwarding behavior.

## Quick Specs

**Table 1 shows the Quick Specs.**

| **Product Code** | **N3K-C34180YC** |
|---|---|
| **Ports** | 48 x SFP+/SFP28 and 6 x QSFP+/QSFP28 ports |
| **Port speeds** | 10 and 25 Gb on SFP ports<br>40, 4x10, 100, and 4x25 Gb on QSFP ports |
| **CPU** | 4 cores |
| **System memory** | 16 GB |
| **SSD drive** | 128 GB |
| **Physical dimensions (H x W x D)** | 1.72 x 17.3 x 22.5 in.<br>(4.4 x 43.9 x 57.1 cm) |
| **Weight** | 18.4 lb. (8.4 kg) |

## Product Details

**The Cisco Nexus 34180YC provides the following benefits:**

1. Wire-rate Layer 2 and 3 switching on all ports, with up to 3.6 Terabits per second (Tbps) and up to 1.4 billion packets per second (bpps).

2.NXOS programmability, with support for Cisco NX-API, Linux containers, Extensible Markup Language (XML), and JavaScript Object Notation (JSON) Application Programming Interfaces (APIs), the OpenStack plug-in, Python, and Puppet and Chef configuration and automation tools.

3.Forwarding pipeline programmability allows customers to implement a breadth of packet-forwarding and filtering use cases with the same hardware. These implementations are made possible by the switch's capacity to flexibly allocate hardware resources and define custom match-action logic. They take shape in the form of profiles selectable through Cisco NX-OS software. In addition, chipset programmability provides customers with investment protection as it extends the product's lifecycle with the possible support of all existing and future packet encapsulation and decapsulation formats. It allows customers to innovate at the speed of software development.

4.Inband Network Telemetry (INT) is a framework that enables the collection and reporting of network states at wire-rate, by the data plane, without requiring the intervention of the control plane. Telemetry is the foundation of network automation; combined with pipeline reprogramming, it is used to close the loop on correcting anomalies and rebalancing workloads across network resources. Telemetry data for a given packet is cumulated at every node and inserted into the packet header. It is then collected by a destination switch and exported to an analytics engine. Telemetry information includes, but is not limited to, aggregate buffer usage and latency data across the network, microburst tracking and aggressor flow detection, and packet path tracing and drop history.

5.Deep header and packet parsing beyond the traditional 128B allows for monitoring application transactions and may be used to define new metadata, which in turn enables customers to fine-tune the match-action logic to a desired forwarding or filtering behavior.

6.Precision Time Protocol (PTP) as per IEEE 1588 provides accurate clock synchronization and improved data correlation with network captures and system events.

7.High-availability, provisioning, and advanced maintenance capabilities: This switch supports hot and cold patching and Graceful Insertion and Removal (GIR) mode. Virtual-Port-Channel (vPC) technology provides Layer 2 multipathing through the elimination of Spanning Tree Protocol. It also enables fully utilized bisectional bandwidth and simplified Layer 2 logical topologies without the need to change the existing management and deployment models. Power-on Auto Provisioning (POAP) enables touchless bootup and configuration of the switch, drastically reducing provisioning time. The switch uses hot-swappable power supply units (PSUs) and fans.

## The Accessories

**Table 2 shows the supported accessories.**

| Model | Description |
|---|---|
| NXA-FAN-30CFM-F | Nexus 2K/3K single fan, forward airflow (port-side exhaust) |
| NXA-FAN-30CFM-B | Nexus 2K/3K single fan, reversed airflow (port-side intake) |
| NXA-PAC-500W-PE | Nexus 9000 500W AC PS, port-side exhaust |
| NXA-PAC-500W-PI | Nexus 9000 650W AC PS, port-side intake |
| NXA-PDC-930W-PE | Nexus 9000 930W DC PS, port-side exhaust |
| NXA-PDC-930W-PI | Nexus 9000 930W AC PS, port-side intake |
| N9K-PUV-1200W | Nexus 9300 1200W Universal Power Supply, bidirectional air flow and supports HVAC/HVDC |

## Compare to Similar Items

**Table 3 shows the comparison.**

| Product Code | N3K-C34180YC | N3K-C3524P-10GX |
|---|---|---|
| **Ports** | 48 x SFP+/SFP28 and 6 x QSFP+/QSFP28 ports | 24 fixed SFP+ ports (1 or 10 Gbps); expandable to 48 ports |
| **Physical dimensions (H x W x D)** | 1.72 x 17.3 x 22.5 in.<br>(4.4 x 43.9 x 57.1 cm) | 1.72 x 17.3 x 18.38 in. (4.36 x 43.9 x 46.7 cm) |
| **Weight** | 18.4 lb. (8.4 kg) | 17.4 lb (7.9 kg) |

## Get more information

Do you have any question about the Cisco C9410R?

Contact us now via **Live Chat** or sales@gntme.com

# Specification

| N3K-C34180YC Specification | |
|---|---|
| **Ports** | 48 x SFP+/SFP28 and 6 x QSFP+/QSFP28 ports |
| **Port speeds** | 10 and 25 Gb on SFP ports<br>40, 4x10, 100, and 4x25 Gb on QSFP ports |
| **CPU** | 4 cores |
| **System memory** | 16 GB |
| **SSD drive** | 128 GB |
| **System buffer** | 20 MB |
| **Management ports** | 2 ports: 1 RJ-45 and 1 SFP |
| **USB ports** | 1 |
| **RS-232 serial ports** | 1 |
| **Power supplies (up to 2)** | 500W AC, 930W DC, or 1200W HVAC/HVDC |
| **Typical power (AC/DC)** | 190W |
| **Maximum power (AC/DC)** | 350W |

| | |
|---|---|
| **Input voltage AC** | 100 to 240V |
| **Input voltage (high-voltage AC [HVAC])** | 200 to 277V |
| **Input voltage DC** | –48 to –60V |
| **Input voltage (high-voltage DC [HVDC])** | –240 to –380V |
| **Frequency (AC)** | 50 to 60Hz |
| **Fans** | 4 |
| **Airflow** | Port-side intake and exhaust |
| **Physical dimensions (H x W x D)** | 1.72 x 17.3 x 22.5 in.<br>(4.4 x 43.9 x 57.1 cm) |
| **Weight** | 18.4 lb. (8.4 kg) |
| **Acoustics** | 63.9 dBA at 50% fan speed, 68.9 dBA at 70% fan speed, and 77.4 dBA at 100% fan speed |
| **RoHS compliance** | Yes |
| **MTBF** | 347,890 hours |
| **LAN Enterprise license (N3K-LAN1K9)** | · Layer 3 features, including full OSPF, EIGRP, BGP, and VXLAN |
| **Cisco Nexus Data Broker license (NDB-FX-SWT-K9)** | · License for using the TAP and SPAN aggregation functions with Cisco Nexus Data Broker |
| **Cisco ONE™ Foundation for Networking** | Cisco ONE Foundation for Networking includes the following integrated products to help you deploy an architecturally flexible data center network:<br>· Cisco Enterprise Layer 3 Services (LAN)<br>·Cisco Prime® Infrastructure, Cisco Prime Data Center Network Manager (DCNM), and Cisco Energy Management (JouleX)<br>· Cisco Intelligent Traffic Director (ITD)<br>· Cisco Remote Integrated Services Engine (RISE) |
| **Operating temperature** | 32 to 104°F (0 to 40°C) |
| **Non-operating (storage) temperature** | –40 to 158°F (–40 to 70°C) |
| **Humidity** | 5 to 95% (noncondensing) |
| **Altitude** | 0 to 13,123 ft (0 to 4000 m) |

# Download Resource

### Support and Resources

**Cisco Nexus 34180YC Programmable Switch Data Sheet**

### Transition Guide

**Select and Upgrade Cisco Data Center Switch**

# Want to Buy

Order Now  Get a Quote

## Why Gntme.com

As a leading network hardware supplier, gntme.com focuses on original new ICT equipment of Cisco, Huawei, HPE, Dell, Hikvision, Juniper, Fortinet, etc.

| 200+ | 18,000+ | $20,000,000 | 50%-98% | 100% |
|---|---|---|---|---|
| Countries we Sold | Customers Trusted | Inventory Available | Off Global List Price | Safe Online Shopping |

## Contact Us


- Tel: +971 503823786 /+971 42409998
- Email:sales@gntme.com