

Product Highlights

Port Configuration

- 24 x 1G RJ45
- Uplinks: 4 x 25G/10G
- 24 x 2.5G RJ45
- Uplinks: 4 x 25G/10G
- 48 x 1G RJ45
- Uplinks: 4 x 25G/10G
- Up to 60W PoE++

Hardware

- Compact 1RU
- Fixed fans
- Fixed power supplies
- PTP IEEE 1588v2 support

AsterNOS

- SONiC based enterprise distribution
- Single binary for all models
- Standard L2/L3 features
- Extensible custom tools
- OpenLAN Switching compatible
- ITU-T 8275.x, ST2059-2, AES67 PTP profiles

Overview

Asterfusion CX204Y-M-S Series is designed for enterprise campus access, combining wire-speed connectivity with PoE power delivery for a wide range of edge devices. Powered by the Marvell AlleyCat5X ASIC and equipped with fixed PSUs and fans, the series offers multiple port configurations in both PoE and non-PoE variants, supporting wireless access points, cameras, printers, IP phones, and IoT devices. PoE models deliver up to 60W per RJ45 port in compliance with IEEE 802.3af/at/bt, with access speeds ranging from 10Mbps to 2.5Gbps. Flexible uplink options support 1G, 10G, and 25G optical modules, enabling the switches to fit a variety of campus network architectures.



CX-M Campus Access Switches Portfolio

The CX-M series switches run AsterNOS, which is enterprise-ready SONiC distribution enhanced by Asterfusion. AsterNOS is a common binary for all series of Asterfusion switches including data center and campus network products, it provides comprehensive and standardized Layer-2 and Layer-3 features including VXLAN virtualization, QoS and security functionalities. In campus network, AsterNOS supports standard 802.1x and RADIUS authentication for access control. Along with security features such as Dynamic ARP Inspection (DAI) and IP Source Guard (IPSG), it protects campus network security in different dimensions.

Asterfusion switches and Wi-Fi products are managed by Asteria Campus Controller, which is based on OpenWiFi and OpenLAN Switching standards, providing unified provisioning and maintenance experience for both wired and wireless networks.

AsterNOS

AsterNOS is a common software for all Asterfusion products. It is an enterprise distribution of SONiC which is based on Linux kernel and Switch Abstract Interface (SAI) for multi-vendor merchant silicon adaptability. AsterNOS provides rich, standard Layer-2 and Layer-3 functionalities, including VXLAN virtualization across all products, which makes it possible that customers can also choose data center products (25G or even 100G models) as spine or super spine layer within campus networks to expand the throughput and scalability. For details of the latest AsterNOS version, visit:

<https://asternos.com/community/space/enterprise-network/home>

Asteria Campus Controller

Asteria Campus Controller is Asterfusion management plane solution for entire campus network including wired and wireless components. The Controller is lightweight designed that can be deployed on-premises or on cloud, even directly deployed in specific switches. It offers topology pre-design, Zero Touch Provisioning (ZTP), configuration batch modification, network monitoring and health check for campus network. By using OpenWiFi and OpenLAN Switching architecture and standards, it is also possible to manage any standard 3rd party hardware to achieve unified management plane of entire network.

High-precision Time Synchronization and Multicast Support

CX-M switches provide full support for IEEE 1588v2 Precision Time Protocol (PTP) with Class C-level timing accuracy, enabling precise time synchronization for time-sensitive networking applications. In addition, the switches support comprehensive multicast protocols, including IGMP Snooping, IGMP Querier, and PIM, ensuring efficient and reliable multicast traffic delivery in AVoIP or industrial network deployments.

Asterfusion Optics and Cables

Asterfusion switches support a wide range of 10G, 25G, 100G, 200G, 400G and 800G ports. For details about the different optical modules compatible with Asterfusion switches, visit:

<https://asteraix.com/products/optical-transceivers/>

Interface

- 1G/2.5G/10G/25G
- Interface Statistics
- Jumbo Frame (10218 Bytes)
- Digital Optical Monitoring (DOM)
- Virtual Interfaces

Layer2 & Layer3

- 4096 VLANs
- Voice VLAN
- STP, RSTP, MSTP
- QinQ
- LLDP
- LACP
- IPv4/v6 Dual Stack
- ARP, NDP
- SVI
- Routing Protocols: Static, OSPF v2/v3, BGP, MP-BGP
- Policy Based Routing (PBR)
- Route Map
- ECMP
- DHCPv4/v6

Virtualization

- GRE
- VRF
- Static/Dynamic VXLAN
- VXLAN Centralized/Distributed Gateway
- EVPN Type 1/2/3/4/5
- VXLAN Cross-connect
- VXLAN Multicast Underlay
- Inter-VRF Route Leaking
- Anycast Gateway
- Symmetric IRB

Multicast

- Multicast Route
- IGMP v1/v2/v3
- IGMP Querier
- IGMP Snooping
- PIMv4, PIM-SM

QoS

- 8 Queues per Port
- 802.1p Based Classification
- DSCP Based Classification
- Strict Priority/DWRR Queue Scheduling
- Policing/Shaping
- Rate Limiting

Security

- ACL for IPv4/v6, Ingress/Egress ACL
- Storm Suppression
- TACACS+
- RADIUS
- CoPP
- DAI
- IPSGv4/v6
- 802.1x Authentication
- MAC Authentication Bypass (MAB)
- Portal Authentication
- Dynamic VLAN Assignment
- MACSec

Reliability

- MC-LAG
- VRRPv2/v3
- EVPN MultiHoming
- Monitor Link
- BFD

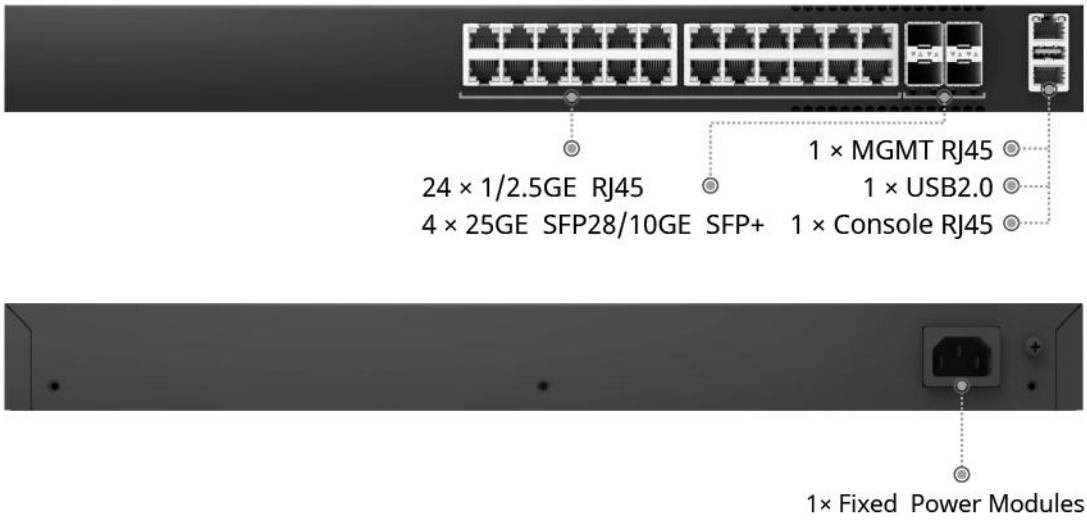
Management

- Asteria Campus Controller
- Console, SSH, Telnet, REST API, NETCONF
- Industry Standard CLI (Klish)
- ZTP
- Syslog
- sFlow
- SNMPv1/v2/v3
- SPAN/ERSPAN
- PTP Profile: IEEE 1588v2, ITU-T G.8275.1/2, SMPTE-2059-2, AES67
- PTP Clock Type: GrandMaster, BC, OC, T-GM, T-BC, T-BC-P, T-TSC, T-TSC-P
- SyncE

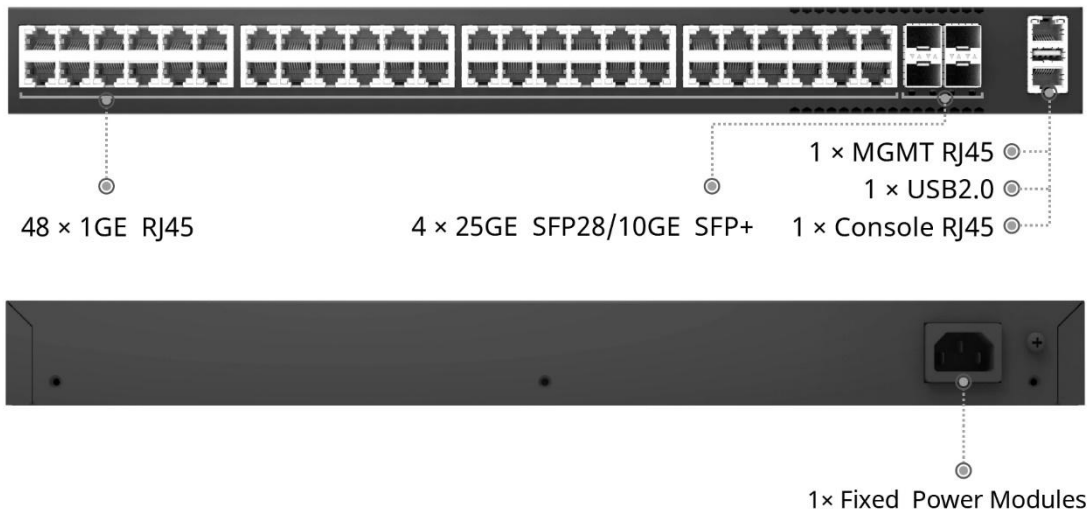
Specifications

Product Model	CX204Y-24GT-M-S	CX204Y-24MT-M-S	CX206Y-48GT-M-S
Port Configuration	4 × 25GE/10GE SFP28 24 × 1GE RJ45	4 × 25GE/10GE SFP28 24 × 2.5GE RJ45	4 × 25GE/10GE SFP28 48 × 1GE RJ45
PoE++ / PoE+ Port	8 × PoE++ (Ports 1-8) 16 × PoE+ (Ports 9-24)	8 × PoE++ (Ports 1-8) 16 × PoE+ (Ports 9-24)	8 × PoE++ (Ports 1-8) 40 × PoE+ (Ports 9-48)
PoE budget	370W or 740W	740W	740W
Management Interface	1× RJ45 Console Port, 1× RJ45 MGMT Port, 1× USB 2.0 Port		
CPU	Cortex-A55	Cortex-A55	Cortex-A55
Memory	4GB DDR4	4GB DDR4	4GB DDR4
Flash	32GB EMMC	32GB EMMC	32GB EMMC
Switching Chip Model	Marvell Prestera (AlleyCat5X)	Marvell Prestera (AlleyCat5X)	Marvell Prestera (AlleyCat5X)
Switching Capacity	180Gbps	210Gbps	210Gbps
Input Voltage	100-240V AC / 36-72V DC	100-240V AC / 36-72V DC	100-240V AC / 36-72V DC
Maximum Power Consumption	40W (Without PoE)	66W (Without PoE)	50 W (Without PoE)
Dimensions (WxHxD)	440mm × 44mm × 290mm	440mm × 44mm × 290mm	440mm × 44mm × 290mm
Weight	3.6kg	3.6kg	3.8kg
Power Supplies	1 Fixed Power Module	1 Fixed Power Module	1 Fixed Power Module
Fans	2 Fixed Fan Modules (3 in PoE models)	2 Fixed Fan Modules (3 in PoE models)	2 Fixed Fan Modules (3 in PoE models)
Air Flow	Right-to-Left	Right-to-Left	Right-to-Left
Operating Temperature	0 – 45°C (32 – 113°F)	0 – 45°C (32 – 113°F)	0 – 45°C (32 – 113°F)
Relative Humidity	5% - 90% (non-condensing)	5% - 90% (non-condensing)	5% - 90% (non-condensing)
Variants	PTP: (non-PTP, PTP) PoE: (non-PoE, 370W, 740W)	PTP: (non-PTP, PTP) PoE: (non-PoE, 740W)	PoE: (non-PoE, 740W)

Panel Illustration



CX204Y-24GT/MT-M-S



CX204Y-48GT-M-S

Ordering Information

Part Number	Description
CX204Y-24GT-M-S	Standard access/leaf switch, 24x1GBase-T, 4x25G/10G SFP28, fixed 1xPSU, fixed 2xFANs, side-to-side airflow
CX204Y-24GT-PTP-M-S	Standard access/leaf switch, 24x1GBase-T, 4x25G/10G SFP28 with PTP module, fixed 1xPSU, fixed 2xFANs, side-to-side airflow
CX204Y-24GT-M-SWP2	Standard access/leaf switch, 24x1GBase-T with 16xPoE+ (30w) and 8xPoE++(60w), 4x25G/10G SFP28, fixed 1xPSU, 370w PoE budget, fixed 3xFANs, side-to-side airflow
CX204Y-24GT-PTP-M-SWP2	Standard access/leaf switch, 24x1GBase-T with 16xPoE+ (30w) and 8xPoE++(60w), 4x25G/10G SFP28 with PTP module, fixed 1xPSU, 370w PoE budget, fixed 3xFANs, side-to-side airflow
CX204Y-24GT-M-SWP4	Standard access/leaf switch, 24x1GBase-T with 16xPoE+ (30w) and 8xPoE++(60w), 4x25G/10G SFP28, fixed 1xPSU, 740w PoE budget, fixed 3xFANs, side-to-side airflow
CX204Y-24GT-PTP-M-SWP4	Standard access/leaf switch, 24x1GBase-T with 16xPoE+ (30w) and 8xPoE++(60w), 4x25G/10G SFP28 with PTP module, fixed 1xPSU, 740w PoE budget, fixed 3xFANs, side-to-side airflow
CX204Y-24MT-M-S	Standard access/leaf switch, 24x2.5GBase-T, 4x25G/10G SFP28, fixed 1xPSU, fixed 2xFANs, side-to-side airflow
CX204Y-24MT-PTP-M-S	Standard access/leaf switch, 24x2.5GBase-T, 4x25G/10G SFP28 with PTP module, fixed 1xPSU, fixed 2xFANs, side-to-side airflow
CX204Y-24MT-M-SWP4	Standard access/leaf switch, 24x2.5GBase-T with 16xPoE+ (30w) and 8xPoE++(60w), 4x25G/10G SFP28, fixed 1xPSU, 740w PoE budget, fixed 3xFANs, side-to-side airflow
CX204Y-24MT-PTP-M-SWP4	Standard access/leaf switch, 24x2.5GBase-T with 16xPoE+ (30w) and 8xPoE++(60w), 4x25G/10G SFP28 with PTP module, fixed 1xPSU, 740w PoE budget, fixed 3xFANs, side-to-side airflow
CX204Y-48GT-M-S	Standard access/leaf switch, 48x1GBase-T, 4x25G/10G SFP28, fixed 1xPSU, fixed 2xFANs, side-to-side airflow
CX204Y-48GT-PTP-M-S	Standard access/leaf switch, 48x1GBase-T, 4x25G/10G SFP28 with PTP module, fixed 1xPSU, fixed 2xFANs, side-to-side airflow
CX204Y-48GT-M-SWP4	Standard access/leaf switch, 48x1GBase-T with 40xPoE+ (30w) and 8xPoE++(60w), 4x25G/10G SFP28, fixed 1xPSU, 740w PoE budget, fixed 3xFANs, side-to-side airflow
CX204Y-48GT-PTP-M-SWP4	Standard access/leaf switch, 48x1GBase-T with 40xPoE+ (30w) and 8xPoE++(60w), 4x25G/10G SFP28 with PTP module, fixed 1xPSU, 740w PoE budget, fixed 3xFANs, side-to-side airflow

Optional Components

HW-WNT-1Y-CX204Y-M	Hardware platform warranty for CX204Y-M series, 1 Year
AsterNOS-UG-1Y-CX204Y-M	Major version upgrade of AsterNOS for CX204Y-M series, 1 Year

Warranty and Service Support

Asterfusion CX-M series switches come with 2-year Basic H/W service and warranty, preloaded perpetual licensed AsterNOS and 1-year AsterNOS upgrade subscription.

