

Product Highlights

Port Configuration

- 48 x 1G/2.5G RJ45
- Uplinks: 4 x 100G/40G + 4 x 25G/10G
- 48 x 1G/2.5G RJ45
- Uplinks: 6 x 25G/10G
- 24 x 1G/2.5G RJ45
- Uplinks: 6 x 25G/10G
- Up to 60W PoE++

Hardware

- Compact 1RU
- Redundant fans
- Redundant 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 CX204P-M-H and CX206Y-M-H series enterprise access switches combine wire-speed connectivity, PoE power delivery, and redundant PSUs and fans for demanding campus deployments. Based on Marvell AlleyCat5P and 5X ASICs, the CX204P/CX206Y Series is available in multiple port configurations, with PoE and non-PoE variants supporting wireless access points, cameras, printers, IP phones, and other IoT endpoints. PoE models provide up to 60W per RJ45 port in compliance with IEEE 802.3af/at/bt, supporting access speeds from 10Mbps to 2.5Gbps. With 1G, 10G, and 25G optical uplink options, the series provides flexible connectivity for a range of enterprise campus network architectures.



CX-M Series Enterprise Access Switch 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/40G/100G
- 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

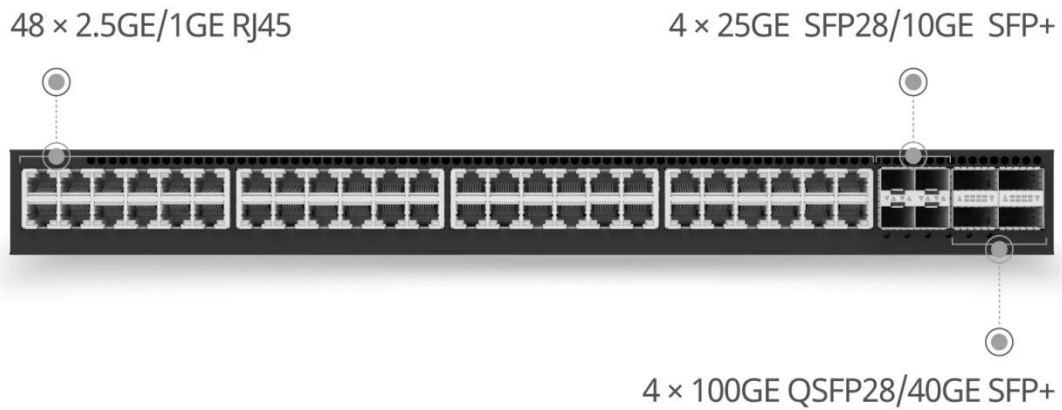
- Asteria Campus Controller
- Console, SSH, Telnet, REST API, NETCONF
- Industry Standard CLI (Klish)
- ZTP
- Syslog
- sFlow
- SNMPv1/v2/v3
- SPAN/ERSPAN
- PTP Profile: IEEE 1588v2, ITU-T G.8275.1/2, SMPTE-2059-2, AES67
- PTP Clock Type: GrandMaster, BC, OC, T-GM, T-BC, T-BC-P, T-TSC, T-TSC-P
- SyncE

Specifications

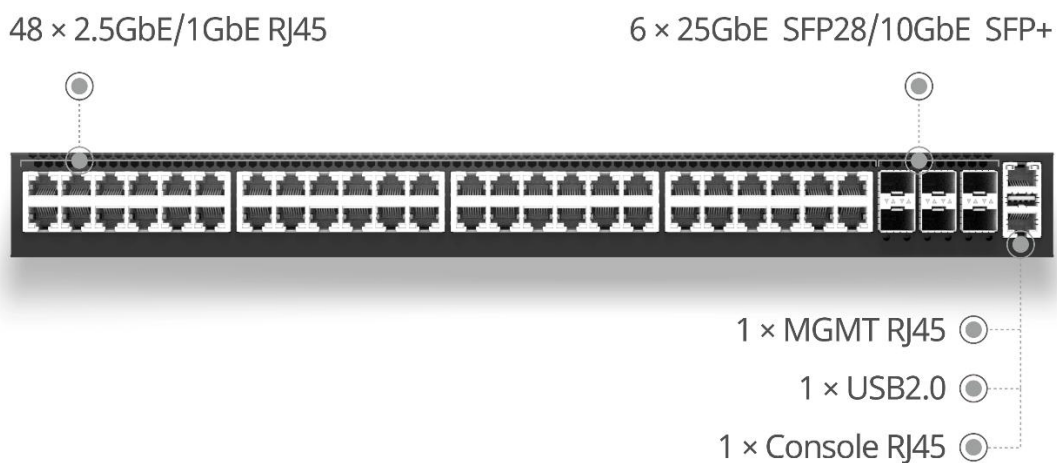
Product Model	CX204P-4Y48MT-M-H	CX206Y-48GT-M-H	CX206Y-48MT-M-H
Port Configuration	4 × 100GE/40GE QSFP28 4 × 25GE/10GE SFP28 48 × 2.5GE RJ45	6 × 25GE/10GE SFP28 48 × 1GE RJ45	6 × 25GE/10GE SFP28 48 × 2.5GE RJ45
PoE++ / PoE+ Port	8 × PoE++ (Ports 1-8) 40 × PoE+ (Ports 9-48)	8 × PoE++ (Ports 1-8) 40 × PoE+ (Ports 9-48)	8 × PoE++ (Ports 1-8) 40 × PoE+ (Ports 9-48)
PoE budget	740W or 1440W	740W or 1440W	740W or 1440W
Management Interface	1× RJ45 Console Port, 1× RJ45 MGMT Port, 1× USB 2.0 Port		
CPU	OCTEON CN9130	Cortex-A55	Cortex-A55
Memory	4GB DDR4	4GB DDR4	4GB DDR4
Flash	32GB EMMC	32GB EMMC	32GB EMMC
Switching Chip Model	Marvell Prestera (AlleyCat 5P)	Marvell Prestera (AlleyCat 5X)	Marvell Prestera (AlleyCat 5X)
Switching Capacity	800Gbps	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	246W (Without PoE)	70W (Without PoE)	70W (Without PoE)
Dimensions (WxHxD)	440mm × 44mm × 470mm	440mm × 44mm × 470mm	440mm × 44mm × 470mm
Weight	9kg	8.3kg	8.3kg
Power Supplies	1+1 Hot Pluggable PSUs	1+1 Hot Pluggable PSUs	1+1 Hot Pluggable PSUs
Fans	2+1 Hot Pluggable Fans	2+1 Hot Pluggable Fans	2+1 Hot Pluggable Fans
Air Flow	Front-to-Rear	Front-to-Rear	Front-to-Rear
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, 740W, 1440W)	PTP: (non-PTP, PTP) PoE: (non-PoE, 740W, 1440W)	PTP: (non-PTP, PTP) PoE: (non-PoE, 740W, 1440W)

Product Model	CX206Y-24GT-M-H	CX206Y-24MT-M-H
Port Configuration	6 × 25GE/10GE SFP28 24 × 1GE RJ45	6 × 25GE/10GE SFP28 24 × 2.5GE RJ45
PoE++ / PoE+ Port	8 × PoE++ (Ports 1-8) 16 × PoE+ (Ports 9-24)	8 × PoE++ (Ports 1-8) 16 × PoE+ (Ports 9-24)
PoE budget	740W	740W
Management Interface	1× RJ45 Console Port, 1× RJ45 MGMT Port, 1× USB 2.0 Port	
CPU	OCTEON CN9130	Cortex-A55
Memory	4GB DDR4	4GB DDR4
Flash	32GB EMMC	32GB EMMC
Switching Chip Model	Marvell Prestera (AlleyCat 5X)	Marvell Prestera (AlleyCat 5X)
Switching Capacity	210Gbps	210Gbps
Input Voltage	100-240V AC / 36-72V DC	100-240V AC / 36-72V DC
Maximum Power Consumption	70W (Without PoE)	70W (Without PoE)
Dimensions (WxHxD)	440mm × 44mm × 470mm	440mm × 44mm × 470mm
Weight	8.3kg (18.30 lbs)	8.3kg (18.30 lbs)
Power Supplies	1+1 Hot Pluggable PSUs	1+1 Hot Pluggable PSUs
Fans	2+1 Hot Pluggable Fans	2+1 Hot Pluggable Fans
Air Flow	Front-to-Rear	Front-to-Rear
Operating Temperature	0 – 45°C (32 – 113°F)	0 – 45°C (32 – 113°F)
Relative Humidity	5% - 90% (non-condensing)	5% - 90% (non-condensing)
Variants	PTP: (non-PTP, PTP, GNSS) PoE: (non-PoE, 740W)	PTP: (non-PTP, PTP, GNSS) PoE: (non-PoE, 740W)

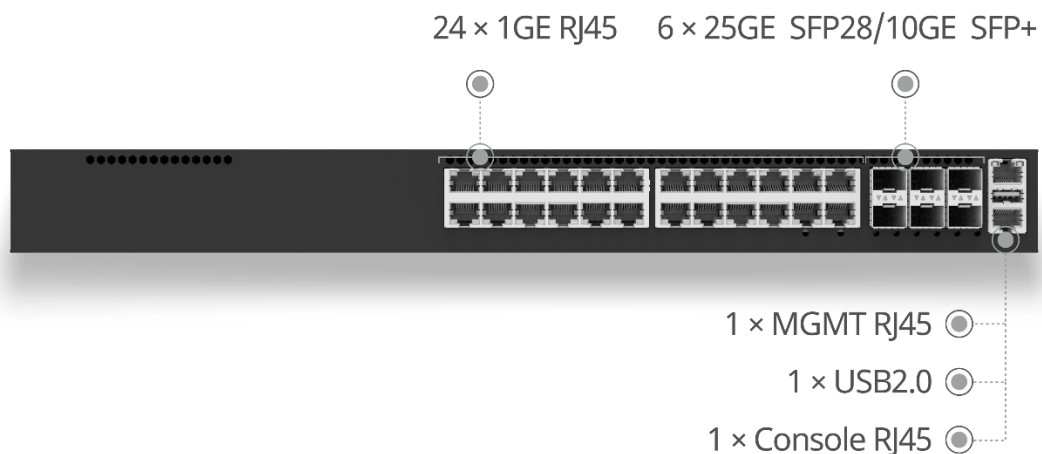
Panel Illustration



Front panel of CX204P-4Y48MT-M-H



Front panel of CX206Y-48GT/MT-M-H



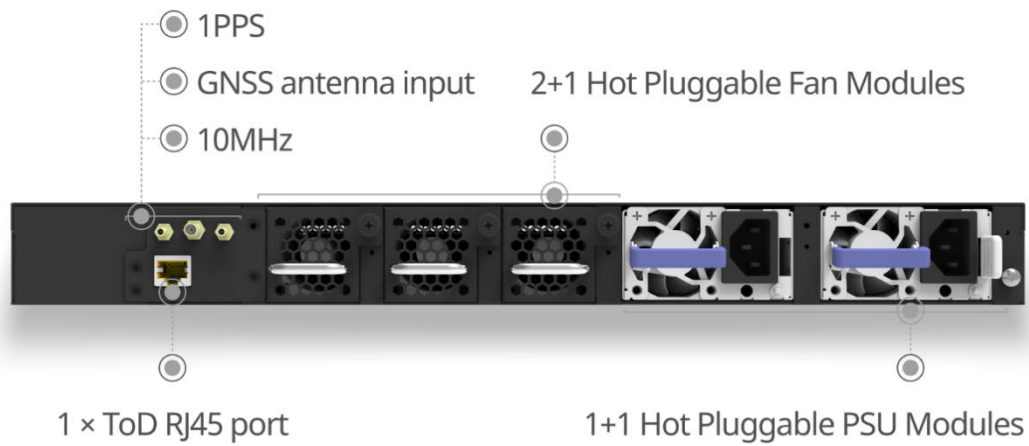
Front panel of CX206Y-24GT/MT-M-H

2+1 Hot Pluggable Fan Modules



1+1 Hot Pluggable PSU Modules

Rear panel of CX204P-4Y48MT-M-H and CX206Y-48GT/MT-M-H



Rear panel of CX206Y-24GT/MT-M-H (GNSS module is optional)

Ordering Information

Part Number	Description
CX204P-4Y48MT-M-H	Enterprise access/leaf switch, 48x2.5G RJ45, 4x25G/10G SFP28, 4x100G/40G QSFP28, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX204P-4Y48MT-M-HWP4	Enterprise access/leaf switch, 48x2.5G RJ45 with PoE+, 4x25G/10G SFP28, 4x100G/40G QSFP28, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX204P-4Y48MT-M-HWP8	Enterprise access/leaf switch, 48x2.5G RJ45 with PoE+, 4x25G/10G SFP28, 4x100G/40G QSFP28, 1440w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX204P-4Y48MT-PTP-M-H	Enterprise access/leaf switch, 48x2.5G RJ45, 4x25G/10G SFP28, 4x100G/40G QSFP28 with PTP module, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX204P-4Y48MT-PTP-M-HWP4	Enterprise access/leaf switch, 48x2.5G RJ45 with PoE+, 4x25G/10G SFP28, 4x100G/40G QSFP28 with PTP module, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX204P-4Y48MT-PTP-M-HWP8	Enterprise access/leaf switch, 48x2.5G RJ45 with PoE+, 4x25G/10G SFP28, 4x100G/40G QSFP28 with PTP module, 1440w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48GT-M-H	Enterprise access/leaf switch, 48x1G RJ45, 6x25G/10G SFP28, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48GT-M-HWP4	Enterprise access/leaf switch, 48x1G RJ45 with PoE+, 6x25G/10G SFP28, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48GT-M-HWP8	Enterprise access/leaf switch, 48x1G RJ45 with PoE+, 6x25G/10G SFP28, 1440w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48GT-PTP-M-H	Enterprise access/leaf switch, 48x1G RJ45, 6x25G/10G SFP28 with PTP module, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48GT-PTP-M-HWP4	Enterprise access/leaf switch, 48x1G RJ45 with PoE+, 6x25G/10G SFP28 with PTP module, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48GT-PTP-M-HWP8	Enterprise access/leaf switch, 48x1G RJ45 with PoE+, 6x25G/10G SFP28 with PTP module, 1440w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48MT-M-H	Enterprise access/leaf switch, 48x2.5G RJ45, 6x25G/10G SFP28, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48MT-M-HWP4	Enterprise access/leaf switch, 48x2.5G RJ45 with PoE+, 6x25G/10G SFP28, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48MT-M-HWP8	Enterprise access/leaf switch, 48x2.5G RJ45 with PoE+, 6x25G/10G SFP28, 1440w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow

CX206Y-48MT-PTP-M-H	Enterprise access/leaf switch, 48x2.5G RJ45, 6x25G/10G SFP28 with PTP module, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48MT-PTP-M-HWP4	Enterprise access/leaf switch, 48x2.5G RJ45 with PoE+, 6x25G/10G SFP28 with PTP module, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-48MT-PTP-M-HWP8	Enterprise access/leaf switch, 48x2.5G RJ45 with PoE+, 6x25G/10G SFP28 with PTP module, 1440w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24GT-M-H	Enterprise access/leaf switch, 24x1G RJ45, 6x25G/10G SFP28, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24GT-M-HWP4	Enterprise access/leaf switch, 24x1G RJ45 with PoE+, 6x25G/10G SFP28, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24GT-PTP-M-H	Enterprise access/leaf switch, 24x1G RJ45, 6x25G/10G SFP28 with PTP module, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24GT-PTP-M-HWP4	Enterprise access/leaf switch, 24x1G RJ45 with PoE+, 6x25G/10G SFP28 with PTP module, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24GT-GNSS-M-H	Enterprise access/leaf switch, 24x1G RJ45, 6x25G/10G SFP28 with GNSS module, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24GT-GNSS-M-HWP4	Enterprise access/leaf switch, 24x1G RJ45 with PoE+, 6x25G/10G SFP28 with GNSS module, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24MT-M-H	Enterprise access/leaf switch, 24x2.5G RJ45, 6x25G/10G SFP28, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24MT-M-HWP4	Enterprise access/leaf switch, 24x2.5G RJ45 with PoE+, 6x25G/10G SFP28, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24MT-PTP-M-H	Enterprise access/leaf switch, 24x2.5G RJ45, 6x25G/10G SFP28 with PTP module, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24MT-PTP-M-HWP4	Enterprise access/leaf switch, 24x2.5G RJ45 with PoE+, 6x25G/10G SFP28 with PTP module, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24MT-GNSS-M-H	Enterprise access/leaf switch, 24x2.5G RJ45, 6x25G/10G SFP28 with GNSS module, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow
CX206Y-24MT-GNSS-M-HWP4	Enterprise access/leaf switch, 24x2.5G RJ45 with PoE+, 6x25G/10G SFP28 with GNSS module, 740w power budget, hot pluggable 2xPSU, 3xFANs, front-to-rear airflow

Optional Components

HW-WNT-1Y-CX204P-M	Hardware platform warranty for CX204P-M series, 1 Year
AsterNOS-UG-1Y-CX204P-M	Major version upgrade of AsterNOS for CX204P-M series, 1 Year
HW-WNT-1Y-CX206Y-M	Hardware platform warranty for CX206Y-M series, 1 Year
AsterNOS-UG-1Y-CX206Y-M	Major version upgrade of AsterNOS for CX206Y-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.