



Cisco Catalyst 2960-L Series

Entry-level, Fixed-Configuration, Layer 2 Gigabit Ethernet Switches
Powering Small Networks with Quietness & Ease



WS-C2960L-16PS-LL

IOS Enhanced LAN Lite	Static Routing	RIP	Virtual Stacking	Web UI CCP Express	Over-the-Air via Bluetooth
16-port GE PoE+ Up to 120 W	Perpetual PoE	2-port SFP	Fanless	Desktop	
Optional Magnetic Mount	Optional DIN Rail Mount				

WS-C2960L-48PS-AP

IOS Enhanced LAN Lite	Static Routing	RIP	Virtual Stacking	Web UI CCP Express	Over-the-Air via Bluetooth
48-port GE PoE+ Up to 370 W	Perpetual PoE	4-port SFP	1 RU Rack Mount		

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Featured Products

Portfolio

Transceiver Modules

Multigigabit

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect
Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X





3650/3850

Meraki MS

Wireless

Routers

Services

	Access, Distribution, and Core Switches			Data Center Switches
	On-Premises Managed		Cloud Managed	
Overview	 SF/SG Switches	 Catalyst Switches	 Meraki MS Switches	 Nexus Switches
Highlights	<ul style="list-style-type: none"> ● Ideal for small and medium businesses ● Easy network management with Cisco FindIT Network Management 	<ul style="list-style-type: none"> ● Ideal for small and medium businesses, and organizations seeking to implement digital transformation ● Cisco Digital Network Architecture (DNA)-ready 	<ul style="list-style-type: none"> ● Provides unified visibility and control of the entire network via a single dashboard: not only switching, but also wireless, and security appliances 	<ul style="list-style-type: none"> ● Ideal for both traditional and fully automated software-defined data center deployments
Cisco Start Products	<ul style="list-style-type: none"> ● Cisco 95 Series Unmanaged Switches ● Cisco Small Business 110 Series Unmanaged Switches ● Cisco 220 Series Smart Switches ● Cisco 250 Series Smart Switches ● Cisco 350 Series Managed Switches ● Cisco 350X Series Stackable Managed Switches ● Cisco 550X Series Stackable Managed Switches 	<ul style="list-style-type: none"> ● Cisco Catalyst 2960-CX Series ● Cisco Catalyst 3560-CX Series ● Cisco Catalyst 2960-L Series ● Cisco Catalyst 2960-X Series ● Cisco Catalyst 3650 Series ● Cisco Catalyst 3850 Series 	<ul style="list-style-type: none"> ● Cisco Meraki MS120 Series ● Cisco Meraki MS210 Series ● Cisco Meraki MS220 Series ● Cisco Meraki MS225 Series 	<ul style="list-style-type: none"> ● Cisco Nexus 9348GC-FXP

Featured Products

Portfolio

Transceiver Modules

Multigigabit

Cisco 100BASE Small Form-Factor Pluggable (SFP) Modules

SKU	Description	Max Distance	Compatible Series									
			SF/SG			Catalyst						Nexus
			350	350X	550X	2960-CX	3560-CX	2960-L	2960-X	3650	3850	
GLC-GE-100FX	100BASE-FX SFP Module	2 km	-	-	-	●	●	-	●	●	●	-

Cisco 1000BASE Small Form-Factor Pluggable (SFP) Modules

SKU	Description	Max Distance	Compatible Series									
			SF/SG			Catalyst						Nexus
			350	350X	550X	2960-CX	3560-CX	2960-L	2960-X	3650	3850	
MGBT1	1000BASE-T SFP Module	100 m	●	●	●	-	-	-	-	-	-	-
MGBSX1	1000BASE-SX SFP Module	500 m	●	●	●	-	-	-	-	-	-	-
MGBLH1	1000BASE-LHSFP Module	40 km	●	●	●	-	-	-	-	-	-	-
GLC-TE	1000BASE-T SFP Module	100 m	-	-	-	●	●	●	●	●	●	●
GLC-SX-MMD	1000BASE-SX SFP Module	1 km	-	-	-	●	●	●	●	●	●	●
GLC-LH-SMD	1000BASE-LX SFP Module	10 km	●	●	●	●	●	●	●	●	●	●
GLC-BX-D	1000BASE-BX SFP Module	10 km	-	-	-	●	●	●	●	●	●	-
GLC-BX-U	1000BASE-BX SFP Module	10 km	●	●	●	●	●	●	●	●	●	-
GLC-EX-SMD	1000BASE-EX SFP Module	40 km	-	-	-	●	●	●	●	●	●	-
GLC-ZX-SMD	1000BASE-ZX SFP Module	70 km	-	-	-	●	●	●	●	●	●	-

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Featured Products

Portfolio

Transceiver Modules

Multigigabit

Cisco 10GBASE Small Form-Factor Pluggable Plus (SFP+) Modules

SKU	Description	Max Distance	Compatible Series									
			SF/SG			Catalyst						Nexus
			350	350X	550X	2960-CX	3560-CX	2960-L	2960-X	3650	3850	
SFP-10G-SR-S	S-class 10GBASE-SR SFP+ Module	400 m	-	●	●	-	-	-	●	●	●	●
SFP-10G-SR	10GBASE-SR SFP+ Module	400 m	-	●	●	-	●	-	●	●	●	●
SFP-10G-LRM	10GBASE-LRM SFP+ Module	300 m	-	●	●	-	●	-	●	●	●	-
SFP-10G-LR-S	S-class 10GBASE-LR SFP+ Module	10 km	-	●	●	-	-	-	●	●	●	●
SFP-10G-LR	10GBASE-LR SFP+ Module	10 km	-	●	●	-	●	-	●	●	●	●
SFP-10G-BXD-I	10GBASE-BX SFP+ Module	10 km	-	-	-	-	-	-	-	●	●	-
SFP-10G-BXU-I	10GBASE-BX SFP+ Module	10 km	-	-	-	-	-	-	-	●	●	-
SFP-10G-BX40D-I	10GBASE-BX SFP+ Module	40 km	-	-	-	-	-	-	-	●	●	-
SFP-10G-BX40U-I	10GBASE-BX SFP+ Module	40 km	-	-	-	-	-	-	-	●	●	-
SFP-10G-ER-S	S-class 10GBASE-ER SFP+ Module	40 km	-	-	-	-	-	-	●	●	●	●
SFP-10G-ER	10GBASE-ER SFP+ Module	40 km	-	-	-	-	●	-	●	●	●	●
SFP-10G-ZR-S	S-class 10GBASE-ZR SFP+ Module	80 km	-	-	-	-	-	-	●	●	●	●
SFP-10G-ZR	10GBASE-ZR SFP+ Module	80 km	-	-	-	-	●	-	●	●	●	●
SFP-H10GB-CU1M	10GBASE-CU SFP+ Module	1 m	-	●	●	-	●	-	●	●	●	●
SFP-H10GB-CU1-5M	10GBASE-CU SFP+ Module	1.5 m	-	-	-	-	●	-	●	●	●	-
SFP-H10GB-CU2M	10GBASE-CU SFP+ Module	2 m	-	-	-	-	●	-	●	●	●	●
SFP-H10GB-CU2-5M	10GBASE-CU SFP+ Module	2.5 m	-	-	-	-	●	-	●	●	●	-
SFP-H10GB-CU3M	10GBASE-CU SFP+ Module	3 m	-	●	●	-	●	-	●	●	●	●
SFP-H10GB-CU5M	10GBASE-CU SFP+ Module	5 m	-	●	●	-	●	-	●	●	●	●
SFP-H10GB-ACU7M	10GBASE-ACU SFP+ Module	7 m	-	-	-	-	●	-	●	●	●	●
SFP-H10GB-ACU10M	10GBASE-ACU SFP+ Module	10 m	-	-	-	-	●	-	●	●	●	-
SFP-10G-AOC1M	10GBASE-AOC SFP+ Module	1 m	-	-	-	-	●	-	●	●	●	●
SFP-10G-AOC2M	10GBASE-AOC SFP+ Module	2 m	-	-	-	-	●	-	●	●	●	●
SFP-10G-AOC3M	10GBASE-AOC SFP+ Module	3 m	-	-	-	-	●	-	●	●	●	●
SFP-10G-AOC5M	10GBASE-AOC SFP+ Module	5 m	-	-	-	-	●	-	●	●	●	●
SFP-10G-AOC7M	10GBASE-AOC SFP+ Module	7 m	-	-	-	-	●	-	●	●	●	●
SFP-10G-AOC10M	10GBASE-AOC SFP+ Module	10 m	-	-	-	-	●	-	●	●	●	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Featured Products

Portfolio

Transceiver Modules

Multigigabit

Cisco 40GBASE Quad Small Form-Factor Pluggable (QSFP+) Modules

SKU	Description	Max Distance	Compatible Series									
			SF/SG			Catalyst						Nexus
			350	350X	550X	2960-CX	3560-CX	2960-L	2960-X	3650	3850	
QSFP-40G-SR-BD	40GBASE-SR QSFP+ Module	150 m	-	-	-	-	-	-	-	-	●	●
QSFP-40G-SR4-S	S-class 40GBASE-SR4 QSFP+ Module	150 m	-	-	-	-	-	-	-	-	●	●
QSFP-40G-SR4	40GBASE-SR4 QSFP+ Module	150 m	-	-	-	-	-	-	-	-	●	●
QSFP-40G-CSR4	40GBASE-CSR4 QSFP+ Module	400 m	-	-	-	-	-	-	-	-	●	●
WSP-Q40GLR4L	40GBASE-LR4L QSFP+ Module	2 km	-	-	-	-	-	-	-	-	●	●
QSFP-40G-LR4-S	S-class 40GBASE-LR4 QSFP+ Module	10 km	-	-	-	-	-	-	-	-	●	●
QSFP-40G-LR4	40GBASE-LR4 QSFP+ Module	10 km	-	-	-	-	-	-	-	-	●	●
QSFP-40G-ER4	40GBASE-ER4 QSFP+ Module	40 km	-	-	-	-	-	-	-	-	●	●
QSFP-H40G-CU1M	40GBASE-CU QSFP+ Module	1 m	-	-	-	-	-	-	-	-	●	●
QSFP-H40G-CU3M	40GBASE-CU QSFP+ Module	3 m	-	-	-	-	-	-	-	-	●	●
QSFP-H40G-CU5M	40GBASE-CU QSFP+ Module	5 m	-	-	-	-	-	-	-	-	●	●
QSFP-H40G-ACU7M	40GBASE-ACU QSFP+ Module	7 m	-	-	-	-	-	-	-	-	●	●
QSFP-H40G-ACU10M	40GBASE-ACU QSFP+ Module	10 m	-	-	-	-	-	-	-	-	●	●
QSFP-H40G-AOC1M	40GBASE-AOC QSFP+ Module	1 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC2M	40GBASE-AOC QSFP+ Module	2 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC3M	40GBASE-AOC QSFP+ Module	3 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC5M	40GBASE-AOC QSFP+ Module	5 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC7M	40GBASE-AOC QSFP+ Module	7 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC10M	40GBASE-AOC QSFP+ Module	10 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC15M	40GBASE-AOC QSFP+ Module	15 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC20M	40GBASE-AOC QSFP+ Module	20 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC25M	40GBASE-AOC QSFP+ Module	25 m	-	-	-	-	-	-	-	-	-	●
QSFP-H40G-AOC30M	40GBASE-AOC QSFP+ Module	30 m	-	-	-	-	-	-	-	-	-	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Featured Products

Portfolio

Transceiver Modules

Multigigabit

Cisco 100GBASE Quad Small Form-Factor Pluggable (QSFP+) Modules

SKU	Description	Max Distance	Compatible Series									
			SF/SG			Catalyst						Nexus
			350	350X	550X	2960-CX	3560-CX	2960-L	2960-X	3650	3850	
QSFP-100G-SR4-S	100GBASE-SR4 QSFP+ Module	100 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-PSM4-S	100GBASE-PSM4 QSFP+ Module	500 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-CWDM4-S	100GBASE-CWDM4 QSFP+ Module	2 km	-	-	-	-	-	-	-	-	-	●
QSFP-100G-LR4-S	100GBASE-LR4 QSFP+ Module	10 km	-	-	-	-	-	-	-	-	-	●
QSFP-100G-CU1M	100GBASE-CU QSFP+ Module	1 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-CU2M	100GBASE-CU QSFP+ Module	2 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-CU3M	100GBASE-CU QSFP+ Module	3 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC1M	100GBASE-AOC QSFP+ Module	1 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC2M	100GBASE-AOC QSFP+ Module	2 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC3M	100GBASE-AOC QSFP+ Module	3 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC5M	100GBASE-AOC QSFP+ Module	5 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC7M	100GBASE-AOC QSFP+ Module	7 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC10M	100GBASE-AOC QSFP+ Module	10 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC15M	100GBASE-AOC QSFP+ Module	15 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC20M	100GBASE-AOC QSFP+ Module	20 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC25M	100GBASE-AOC QSFP+ Module	25 m	-	-	-	-	-	-	-	-	-	●
QSFP-100G-AOC30M	100GBASE-AOC QSFP+ Module	30 m	-	-	-	-	-	-	-	-	-	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Connect
Switches

Featured Products

Portfolio

Transceiver Modules

Multigigabit

Cisco Meraki 1000BASE Small Form-Factor Pluggable (SFP) Modules

SKU	Description	Max Distance	Compatible Series			
			MS120	MS210	MS220	MS225
MA-SFP-1GB-TX	1000BASE-T SFP Module	100 m	●	●	●	●
MA-SFP-1GB-SX	1000BASE-SX SFP Module	550 m	●	●	●	●
MA-SFP-1GB-LX10	1000BASE-LX10 Module	10 km	●	●	●	●

Cisco Meraki 10GBASE Small Form-Factor Pluggable Plus (SFP+) Modules

SKU	Description	Max Distance	Compatible Series			
			MS120	MS210	MS220	MS225
MA-SFP-10GB-SR	10GBASE-SR SFP+ Module	400 m	-	-	-	●
MA-SFP-10GB-LRM	10GBASE-LRM SFP Module	220 m	-	-	-	●
MA-SFP-10GB-LR	10GBASE-LR Module	10 km	-	-	-	●



- Getting Started
- What's New
- Feature Story
- Collaborate
- Compute
- Secure
- Connect
 - Switches
 - SF/SG
 - Catalyst
 - 2960-CX/3560-CX
 - 2960-L
 - 2960-X
 - 3650/3850
 - Meraki MS
 - Wireless
 - Routers
- Services

Connect
Switches

Featured Products Portfolio Transceiver Modules **Multigigabit**

Challenges for Wired LAN Posed by 11ac “Gigabit Wireless LAN”

IEEE 802.11ac is a super high-speed wireless standard that delivers a theoretical maximum throughput of up to 6.9 Gbps. Wireless LAN is literally entering the “Gigabit era”, but the migration to 11ac is presenting wired LAN with “old and new” challenges. In other words, these are the same old challenges that were experienced during the migration from 11a/g to 11n. During the migration from 11a/g to 11n, it was obvious that Fast Ethernet switches (max 100 Mbps) had insufficient capacity to server as access switches for accommodating the access points. Similarly today, it is obvious that 1-Gigabit Ethernet switches (1 GE, max 1000 Mbps) have insufficient capacity when migrating from 11n to 11ac. Specifically:

- A bottleneck will occur if the uplink port of the access switches accommodating multiple 11ac compatible access points is 1 GE.
- A bottleneck will occur if the downlink port of the access switches accommodating 11ac Wave compatible access points is 1 GE.

Therefore, as was during the migration from 11a/g to 11n, replacement of access switches is therefore indispensable in order to unleash the full potential of 11ac. The only current IEEE standard that is faster than 1 GE is 10 Gigabit Ethernet (10 GE) with copper or optical fiber cables. However, there are some difficulties associated with the deployment of 10 GE-compatible switches.

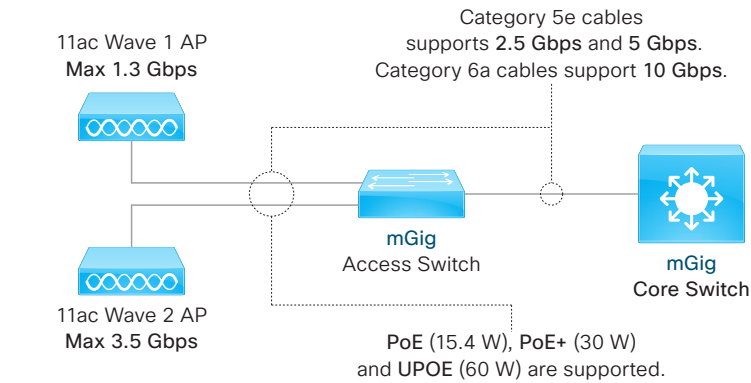
- Cable re-installation is required in many cases: Category 5e accounts for 46 % and Category 6 accounts for 28 % of the copper cables currently installed in corporations around the world, respectively. 10 GE via copper is not supported for Category 5e cables and is limited to a length of 55 meters for Category 6 cables. Installations of optical fiber cables and copper wire cables both require huge costs.
- Current 10 GE does not support PoE: Power supply units and power cables would be required for the access points.

Cisco Catalyst Multigigabit Technology (mGig)

Cisco’s innovative [Cisco Catalyst Multigigabit Technology \(mGig\)](#) has been developed to address all of these challenges posed by the deployment of 11ac. Largely, mGig offers the following three advantages:

- **Multi-Speed:** Category 5e cables support 100 Mbps, 1 Gbps, 2.5 Gbps and 5 Gbps; and category 6a cables support 10 Gbps, respectively.
- **Cable Type:** A wide variety of cable types are supported including Category 5e, Category 6, and Category 6a.
- **PoE:** PoE (15.4 W), PoE+ (30 W), and UPOE (60 W) are supported unlike the current 10 GE.

mGig is based on the technology of the NBASE-T Alliance established by Cisco in October 2014. A large number of vendors are participating in the NBASE-T Alliance; and IEEE standardization is currently being promoted for 2.5GBASE-T for 5GBASE-T.



Cisco Catalyst Multigigabit Technology (mGig): Speeds and Cables

Cable Type	1 Gbps	2.5 Gbps	5 Gbps	10 Gbps
Cat 5e	●	●	●	-
Cat 6	●	●	●	● (55m)
Cat 6a	●	●	●	●

Overview

Positioning Map

Platform Spec

FindIT

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

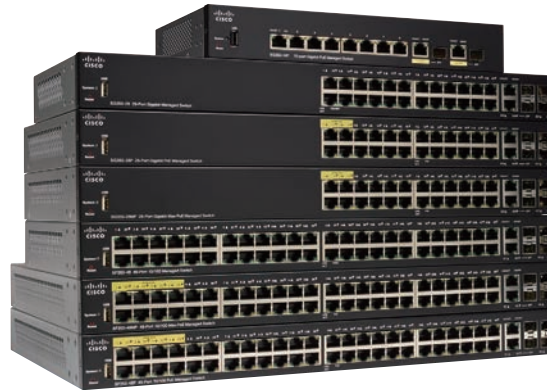
Routers

Services

Easy-to-Use Switches that Provide the Ideal Combination of Features and Affordability

The [Cisco SF/SG Switches](#) provide nonblocking, wire-speed switching for 10-, 100-, and 1000-Mbps network clients. These switches can be used to replace the current workgroup hub or switch and to deliver full 1- and 10-Gbps speeds to high-requirement workstations as necessary while continuing to serve other clients at their current speeds.

The switches can also be used to create a local area network within the business, with appropriate link speeds for each user's requirements. Either way, they're perfect for graphics, videos, and other applications that have to move large files across the network quickly.



Lineup

● Cisco 95/110 Series Unmanaged Switches

Get highly affordable Gigabit, Fast Ethernet, and PoE. No setup is required for QoS, network diagnostics, power-saving mode, and loop detection.

● Cisco 220 Series Smart Switches

Get the powerful features, security, and performance of a managed switch with the affordability that's closer to smart switches.

● Cisco 200/250 Series Smart Switches

Entry-level managed switch features and easy management at a great price. Build a business-class network with the features you need.

● Cisco 300/350 Series Managed Switches

The ideal combination of affordability and advanced network features for small business, these easy to use fully managed switches are the cornerstone of your network.

● Cisco 350X Series Stackable Managed Switches

Our managed switches deliver an ideal combination of affordability and advanced features with 10-Gigabit Ethernet and stacking.

● Cisco 550X Series Stackable Managed Switches

These next-generation stackable managed switches offer 10-Gigabit Ethernet and advanced capabilities to accelerate your business growth.

Overview

Positioning Map

Platform Spec

FindIT

Managed



350 Series
Managed Switches

- SNA, PnP client
- IPv6 static routing
- sFlow, RSPAN
- 2R3C policing
- PoE+ and 60 W PoE
- PSE/PD models



350X Series Stackable
Managed Switches

- 10 GE uplink
- all 10G models
- 4 units true stacking
- PoE+ and 60 W PoE



550X Series Stackable
Managed Switches

- Redundant power and fan
- 10 GE uplink
- all 10 GE models
- 8 unit true stacking
- PoE+ and 60 W PoE

Smart



220 Series
Smart Switches

- Enhanced smart features
- All ports PoE+



250 Series
Smart Switches

- Advanced smart features
- Static routing, ACL, CLI
- All ports PoE+

Unmanaged



95/110 Series
Unmanaged Switches

- Basic connectivity
- 1/2 ports PoE

Function, Flexibility, Scalability

→ More

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Positioning Map

Platform Spec

FindIT

Cisco 95 Series Unmanaged Switches

Product SKU	Service (CSE) SKU	Ports							PoE						AC Power	Fan less	Stack able	Rack Mount
		FE	GE	SFP	GE/SFP	10 GB-T	SFP+	10GB-T/SFP+	Ports	60 W Ports	Power Budget	IEEE 802.3	Input Ports	Pass through				
SF95D-05-xx	CON-SMBS-F95D05xx	5	-	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SF95D-08-xx	CON-SMBS-F95D08xx	8	-	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SF95D-16-xx	CON-SMBS-F95D16xx	16	-	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SF95-24-xx	CON-SMBS-SF9524xx	24	-	-	-	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SG95D-05-xx	CON-SMBS-G95D05xx	-	5	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SG95D-08-xx	CON-SMBS-G95D08xx	-	8	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SG95-16-xx	CON-SMBS-SG9516xx	-	16	-	-	-	-	-	-	-	-	-	-	-	Internal	●	-	-
SG95-24-xx	CON-SMBS-SG9524xx	-	22	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU

Cisco 110 Series Unmanaged Switches

Product SKU	Service (CSE) SKU	Ports							PoE						AC Power	Fan less	Stack able	Rack Mount
		FE	GE	SFP	GE/SFP	10 GB-T	SFP+	10GB-T/SFP+	Ports	60 W Ports	Power Budget	IEEE 802.3	Input Ports	Pass through				
SF110D-05-xx ^{*1}	CON-SMBS-SF0D05xx	5	-	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SF110D-08-xx	CON-SMBS-SF0D08xx	8	-	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SF110D-08HP-xx	CON-SMBS-0D08HPxx	8	-	-	-	-	-	-	4	-	32 W	af	-	-	External	●	-	-
SF110D-16-xx ^{*1}	CON-SMBS-SF0D16xx	16	-	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SF110D-16HP-xx ^{*1}	CON-SMBS-0D16HPxx	16	-	-	-	-	-	-	8	-	64 W	af	-	-	External	●	-	-
SF110-16-xx ^{*1}	CON-SMBS-S1F016xx	16	-	-	-	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SF110-24-xx	CON-SMBS-S1F024xx	24	-	-	-	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SF112-24-xx	CON-SMBS-S1F224xx	-	22	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SG110D-05-xx	CON-SMBS-SG0D05xx	-	5	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SG110D-08-xx	CON-SMBS-SG0D08xx	-	8	-	-	-	-	-	-	-	-	-	-	-	External	●	-	-
SG110D-08HP-xx	CON-SMBS-0D08PHxx CON-SMBS-SG110Dxx	-	8	-	-	-	-	-	4	-	32 W	af	-	-	External	●	-	-
SG110-16-xx	CON-SMBS-S1G016xx	-	16	-	-	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SG110-16HP-xx	-	-	16	-	-	-	-	-	8	-	64 W	af	-	-	Internal	●	-	1 RU
SG110-24-xx	CON-SMBS-S1G024xx	-	22	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SG110-24HP-xx	-	-	22	-	2	-	-	-	12	-	100 W	af	-	-	Internal	-	-	1 RU
SG112-24-xx	CON-SMBS-S1G224xx	-	22	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU

*1 The "-AU" SKUs have reached end-of-life status.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Positioning Map

Platform Spec

FindIT

Cisco 220 Series Smart Switches

Product SKU	Service (CSE) SKU	Ports							PoE						AC Power	Fan less	Stack able	Rack Mount
		FE	GE	SFP	GE/SFP	10 GB-T	SFP+	10GB-T/SFP+	Ports	60 W Ports	Power Budget	IEEE 802.3	Input Ports	Pass through				
SF220-24-K9-xx*1	CON-SMBS-F2029xx1	24	-	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SF220-24P-K9-xx*1	CON-SMBS-F2029xx2	24	-	-	2	-	-	-	24	-	180 W	af/at	-	-	Internal	-	-	1 RU
SF220-48-K9-xx*1	CON-SMBS-F2049xx1	48	-	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SF220-48P-K9-xx*1	CON-SMBS-F2049xx2	48	-	-	2	-	-	-	48	-	375 W	af/at	-	-	Internal	-	-	1 RU
SG220-26-K9-xx	CON-SMBS-G2029xx1	-	24	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SG220-26P-K9-xx	CON-SMBS-G2029xx2	-	24	-	2	-	-	-	24	-	180 W	af/at	-	-	Internal	-	-	1 RU
SG220-50-K9-xx	CON-SMBS-G2059xx1	-	48	-	2	-	-	-	-	-	-	-	-	-	Internal	-	-	1 RU
SG220-50P-K9-xx	CON-SMBS-G2059xx2	-	48	-	2	-	-	-	48	-	375 W	af/at	-	-	Internal	-	-	1 RU

*1 The “-AU” SKUs have reached end-of-life status.

Cisco 250 Series Smart Switches

Product SKU	Service (CSE) SKU	Ports							PoE						AC Power	Fan less	Stack able	Rack Mount
		FE	GE	SFP	GE/SFP	10 GB-T	SFP+	10GB-T/SFP+	Ports	60 W Ports	Power Budget	IEEE 802.3	Input Ports	Pass through				
SF250-48-K9-xx	-	48	-	2	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SF250-48HP-K9-xx	-	48	-	2	2	-	-	-	48	-	195 W	af/at	-	-	Internal	-	-	1 RU
SG250-10P-K9-xx	-	-	8	-	2	-	-	-	8	-	62 W	af/at	2	●	External	●	-	1 RU
SG250-26-K9-xx	-	-	24	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SG250-26HP-K9-xx	-	-	24	-	2	-	-	-	24	-	100 W	af/at	-	-	Internal	-	-	1 RU
SG250-26P-K9-xx	-	-	24	-	2	-	-	-	24	-	195 W	af/at	-	-	Internal	-	-	1 RU
SF250-48-K9-xx	-	48	-	2	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SF250-48HP-K9-xx	-	48	-	2	2	-	-	-	48	-	195 W	af/at	-	-	Internal	-	-	1 RU
SG250-10P-K9-xx	-	-	8	-	2	-	-	-	8	-	62 W	af/at	2	●	External	●	-	1 RU
SG250-26-K9-xx	-	-	24	-	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SG250-26HP-K9-xx	-	-	24	-	2	-	-	-	24	-	100 W	af/at	-	-	Internal	-	-	1 RU
SG250-26P-K9-xx	-	-	24	-	2	-	-	-	24	-	195 W	af/at	-	-	Internal	-	-	1 RU

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Overview

Positioning Map

Platform Spec

FindIT

Cisco 350 Series Managed Switches

Product SKU	Service (CSE) SKU	Ports							PoE						AC Power	Fan less	Stack able	Rack Mount
		FE	GE	SFP	GE/SFP	10 GB-T	SFP+	10GB-T /SFP+	Ports	60 W Ports	Power Budget	IEEE 802.3	Input Ports	Pass through				
SF350-48-K9-xx	-	48	-	2	2	-	-	-	-	-	-	-	-	-	Internal	-	-	1 RU
SF350-48P-K9-xx	-	48	-	2	2	-	-	-	48	8	382 W	af/at	-	-	Internal	-	-	1 RU
SF350-48MP-K9-xx	-	48	-	2	2	-	-	-	48	8	740 W	af/at	-	-	Internal	-	-	1 RU
SG350-10-K9-xx	-	-	8	-	2	-	-	-	-	-	-	-	2	●	External	●	-	1 RU
SG350-10P-K9-xx	-	-	8	-	2	-	-	-	8	-	62 W	af/at	2	●	External	●	-	1 RU
SG350-10MP-K9-xx	-	-	8	-	2	-	-	-	8	-	124 W	af/at	2	●	External	●	-	1 RU
SG355-10P-K9-xx	-	-	8	-	2	-	-	-	8	-	62 W	af/at	2	●	Internal	●	-	1 RU
SG350-28-K9-xx	-	-	24	2	2	-	-	-	-	-	-	-	-	-	Internal	●	-	1 RU
SG350-28P-K9-xx	-	-	24	2	2	-	-	-	24	4	195 W	af/at	-	-	Internal	-	-	1 RU
SG350-28MP-K9-xx	-	-	24	2	2	-	-	-	24	4	382 W	af/at	-	-	Internal	-	-	1 RU

Cisco 350X Series Stackable Managed Switches

Product SKU	Service (CSE) SKU	Ports							PoE						AC Power	Fan less	Stack able	Rack Mount
		FE	GE	SFP	GE/SFP	10 GB-T	SFP+	10GB-T /SFP+	Ports	60 W Ports	Power Budget	IEEE 802.3	Input Ports	Pass through				
SG350X-24-K9-xx	-	-	24	-	-	-	2	2	-	-	-	-	-	-	Internal	-	●	1 RU
SG350X-24P-K9-xx	-	-	24	-	-	-	2	2	24	4	195 W	af/at	-	-	Internal	-	●	1 RU
SG350X-24MP-K9-xx	-	-	24	-	-	-	2	2	24	4	382 W	af/at	-	-	Internal	-	●	1 RU
SG350X-48-K9-xx	-	-	48	-	-	-	2	2	-	-	-	-	-	-	Internal	-	●	1 RU
SG350X-48P-K9-xx	-	-	48	-	-	-	2	2	48	8	382 W	af/at	-	-	Internal	-	●	1 RU
SG350X-48MP-K9-xx	-	-	48	-	-	-	2	2	48	8	740 W	af/at	-	-	Internal	-	●	1 RU
SG350XG-2F10-K9-xx	CON-SMBS-SGxxxxxx	-	-	-	-	10	2	-	-	-	-	-	-	-	Internal	-	●	1 RU
SG350XG-24T-K9-xx	CON-SMBS-SGxxxxxx	-	-	-	-	22	-	2	-	-	-	-	-	-	Internal	-	●	1 RU
SG350XG-24F-K9-xx	CON-SMBS-SGxxxxxx	-	-	-	-	-	22	2	-	-	-	-	-	-	Internal	-	●	1 RU
SG350XG-48T-K9-xx	CON-SMBS-SGxxxxxx	-	-	-	-	46	-	2	-	-	-	-	-	-	Internal	-	●	1 RU

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Positioning Map

Platform Spec

FindIT

Cisco 550X Series Stackable Managed Switches

Product SKU	Service (CSE) SKU	Ports							PoE						AC Power	Fan less	Stack able	Rack Mount
		FE	GE	SFP	GE/SFP	10 GB-T	SFP+	10GB-T/SFP+	Ports	60 W Ports	Power Budget	IEEE 802.3	Input Ports	Pass through				
SF550X-24-K9-xx	-	24	-	-	-	-	2	2	-	-	-	-	-	-	Internal	-	●	1 RU
SF550X-24P-K9-xx	-	24	-	-	-	-	2	2	24	8	195 W	af/at	-	-	Internal	-	●	1 RU
SF550X-24MP-K9-xx	-	24	-	-	-	-	2	2	24	8	382 W	af/at	-	-	Internal	-	●	1 RU
SF550X-48-K9-xx	-	48	-	-	-	-	2	2	-	-	-	-	-	-	Internal	-	●	1 RU
SF550X-48P-K9-xx	-	48	-	-	-	-	2	2	48	16	382 W	af/at	-	-	Internal	-	●	1 RU
SF550X-48MP-K9-xx	-	48	-	-	-	-	2	2	48	16	740 W	af/at	-	-	Internal	-	●	1 RU
SG550X-24-K9-xx	-	-	24	-	-	-	2	2	-	-	-	-	-	-	Internal	-	●	1 RU
SG550X-24P-K9-xx	-	-	24	-	-	-	2	2	24	8	195 W	af/at	-	-	Internal	-	●	1 RU
SG550X-24MP-K9-xx	-	-	24	-	-	-	2	2	24	8	382 W	af/at	-	-	Internal	-	●	1 RU
SG550X-24MPP-K9-xx	-	-	24	-	-	-	2	2	24	8	740 W	af/at	-	-	Internal	-	●	1 RU
SG550X-48-K9-xx	-	-	48	-	-	-	2	2	-	-	-	-	-	-	Internal	-	●	1 RU
SG550X-48P-K9-xx	-	-	48	-	-	-	2	2	48	16	382 W	af/at	-	-	Internal	-	●	1 RU
SG550X-48MP-K9-xx	-	-	48	-	-	-	2	2	48	16	740 W	af/at	-	-	Internal	-	●	1 RU
SG550XG-8F8T-K9-xx	CON-SMBS-SGxxxxxx	-	-	-	-	8	8	-	-	-	-	-	-	-	Internal	-	●	1 RU
SG550XG-24T-K9-xx	CON-SMBS-SGxxxxxx	-	-	-	-	22	-	2	-	-	-	-	-	-	Internal	-	●	1 RU
SG550XG-24F-K9-xx	CON-SMBS-SGxxxxxx	-	-	-	-	-	22	2	-	-	-	-	-	-	Internal	-	●	1 RU
SG550XG-48T-K9-xx	CON-SMBS-SGxxxxxx	-	-	-	-	46	-	2	-	-	-	-	-	-	Internal	-	●	1 RU

- Getting Started
- What's New
- Feature Story
- Collaborate
- Compute
- Secure
- Connect
 - Switches
 - SF/SG
 - Catalyst
 - 2960-CX/3560-CX
 - 2960-L
 - 2960-X
 - 3650/3850
 - Meraki MS
 - Wireless
 - Routers
 - Services



Overview

Positioning Map

Platform Spec

FindIT

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Cisco FindIT Network Management: Manage a Network, Not a Collection of Devices

Maintaining a business network is difficult without the right tools. The **Cisco FindIT Network Management** is purpose-built for managing networks of Cisco SF/SG Switches. It lets you proactively manage the network instead of just reacting to events. Cisco FindIT Network Management is the perfect addition to your business's network.

Cisco FindIT Network Management supports two deployment models: full-time network management with the **Cisco FindIT Network Manager and Probe**, and discovering and managing the network on the go with the **Cisco FindIT Network Discovery Utility**.

Cisco FindIT Network Manager and Probe: Easy Network Management

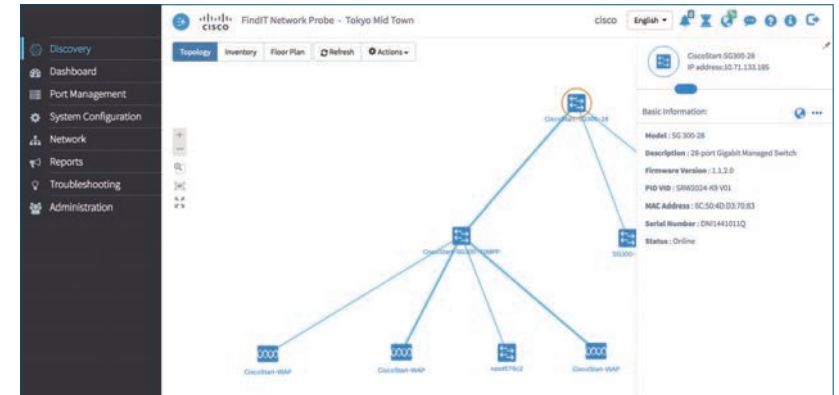
The **Cisco FindIT Network Manager and Probe** are designed to manage Cisco SF/SG Switches, Cisco Wireless Access Points (WAP), and Cisco RV Series routers. You can configure system information, wireless networks, virtual LANs, and Ethernet switching in a single interface. And you can monitor network performance with a customizable dashboard. Automatic network discovery comes with a topology diagram and an inventory report.

In addition, you get:

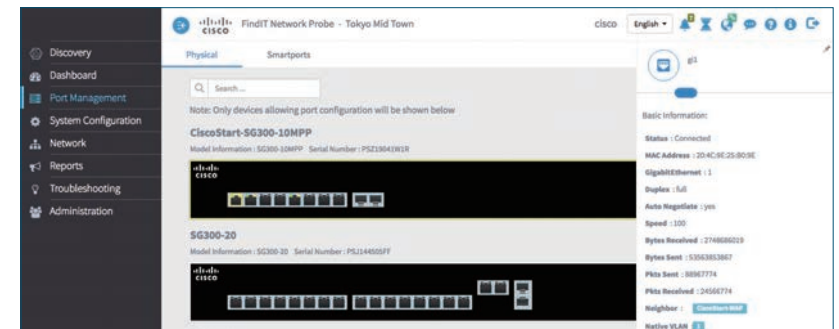
- Automatic firmware updates for network devices
- Detailed lifecycle reports showing maintenance status and end-of-life bulletins
- Integration with the Cisco Active Advisor
- Remote access to sites without requiring a VPN
- One-click collection of diagnostic data for technical support

Cisco FindIT Network Manager and Probe Device Licenses

Product SKU	Description
LS-FINDITNM-15-1Y=	15-device license - 1 year
LS-FINDITNM-25-1Y=	25-device license - 1 year
LS-FINDITNM-50-1Y=	50-device license - 1 year



Discovery



Port Management

Try It for Free

Cisco FindIT Network Manager and Probe are implemented as a software product on Oracle VirtualBox, VMware ESXi, and so on. **Up to 10 Cisco SF/SG Switches** may be managed in Evaluation Mode without a license.

To download the software, visit the following web site:

 <http://www.cisco.com/go/findit>



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Cisco FindIT Network Discovery Utility: Handy Plug-In

The **Cisco FindIT Network Discovery Utility** can be used by network administrators on the go. It integrates with your web browser and allows you to easily discover Cisco SF/SG Switches and Cisco Wireless Access Points (WAP), display detailed information about devices, and click to download firmware updates.

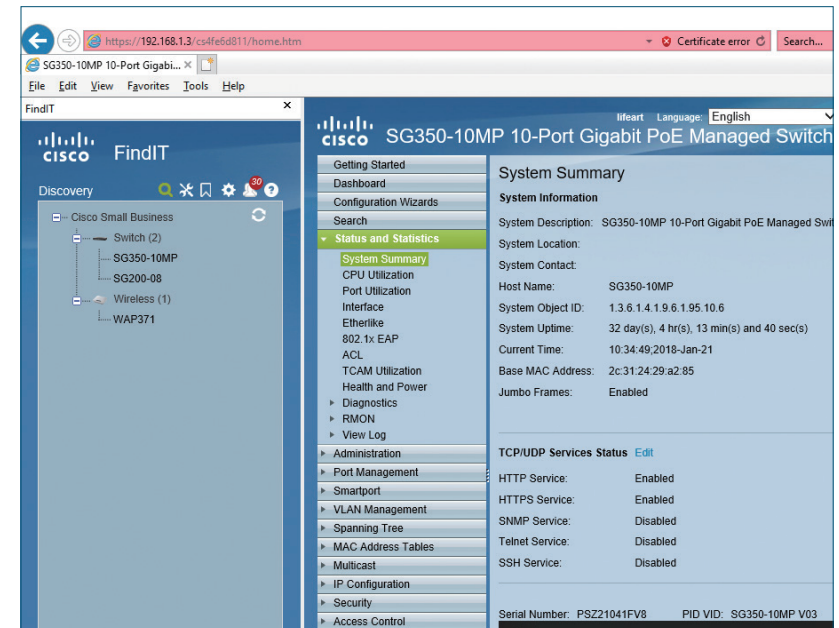
The Cisco FindIT Network Discovery Utility runs on Apple Safari, Google Chrome, Microsoft Internet Explorer, and Mozilla Firefox browsers on Microsoft Windows and Apple OS X. It provides:

- Automatic discovery and information display for **Cisco SF/SG Switches** and **Cisco Wireless Access Points (WAP)**
- Automatic discovery and one-click downloads for firmware updates
- Support and maintenance information for discovered devices
- Integration with the Cisco Active Advisor
- Direct access to the Small Business Support Center

To download the software, visit the following web site:



<http://www.cisco.com/go/findit>



Overview

Positioning Map

Cisco IOS

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

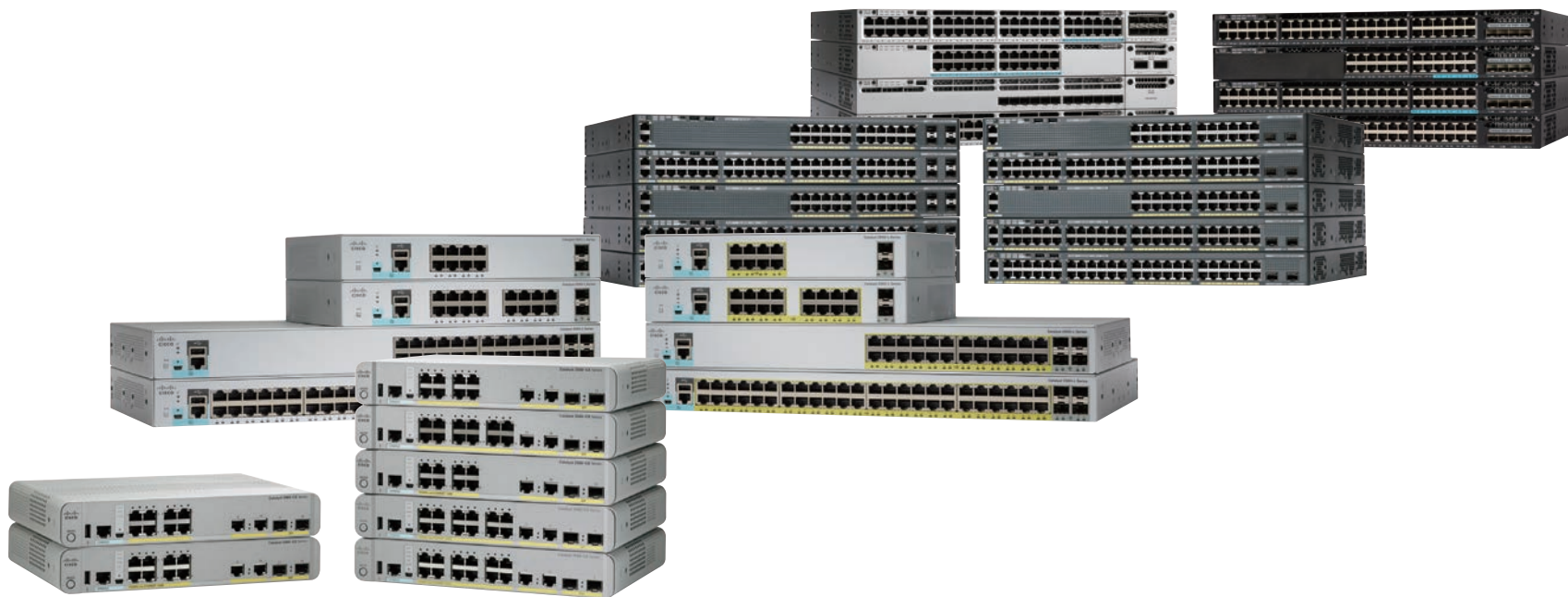
Routers

Services

Enterprise Networks Switching

The **Cisco Catalyst Switches** provide the performance and features required for nearly any deployment, from traditional small workgroups, wiring closets, and network cores, to highly virtualized and converged corporate data

centers. Working together, they are the building blocks of an integrated network that delivers scalable and intelligent services protecting, optimizing, and growing your network as your business needs evolve.



Lineup (in this catalog)

● Cisco Catalyst 2960-CX/3560-CX Series

Compact layer 2 and layer 3 access switches that provide enterprise features of a larger Cisco switch without using a lot of physical space.

● Cisco Catalyst 2960-L Series

High value layer 2 access switches that provide enhanced network security, network reliability, and operational efficiency.

● Cisco Catalyst 2960-X Series

Stackable layer 2 and layer 3 access switches that provide smart, simple, scalable, and secure services for enterprise-class networks.

● Cisco Catalyst 3650/3850 Series

Stackable layer 2 and layer 3 access switches that provide the foundation for full wired and wireless convergence on a single platform.

Cisco Catalyst Switches



Overview

Positioning Map

Cisco IOS

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X















3650/3850

Meraki MS

Wireless

Routers

Services

Modular Core	 Catalyst 6500/6800
Fixed Core	 Catalyst 3850 Fiber  Catalyst 4500-X  Catalyst 9500
DNA Access	 Catalyst 3850  Catalyst 4500E  Catalyst 9400  Catalyst 3650  Catalyst 9300
Access	 Catalyst 2960-Plus  Catalyst 2960-X
Access/ Compact	 Catalyst 2960-L
Compact	 Catalyst 2960-CX  Catalyst 3560-CX

Performance & Scalability

→ High

Overview

Positioning Map

Cisco IOS

The Cisco Catalyst Switches incorporate the **Cisco IOS (Internetwork Operating System)**, which is a high-performance network infrastructure software. **LAN Lite** and **LAN Base** feature sets provide the L2 level features, **IP Lite**, **IP Base**, and **IP Services** feature sets provide the L3 level features, respectively.

Cisco IOS provided with the **Cisco Catalyst 3560-CX/3650/3850 Series** is delivered in a single universal image. The universal image contains the entire Cisco IOS feature sets that can be activated via the **Cisco IOS Upgrade License**.

Cisco IOS Compatibility

Supported Series Name	LAN Lite (LL)	LAN Base (LB)	IP Lite (IPL)	IP Base (IPB)	IP Services (IPS)
Catalyst 2960-CX	-	●	-	-	-
Catalyst 3560-CX	-	-	-	●	●
Catalyst 2960-L	●	-	-	-	-
Catalyst 2960-X	●	●	● ^{*1}	-	-
Catalyst 3650	-	●	-	●	●
Catalyst 3850	-	●	-	●	●

^{*1} Catalyst 2960-XR Series only.

Cisco IOS L2 Features

Feature	LL	LB	IPL	IPB	IPS
IEEE 802.1Q Trunking	●	●	●	●	●
DTP	●	●	●	●	●
UDLD	●	●	●	●	●
VTP	●	●	●	●	●
CDP	●	●	●	●	●
LLDP	●	●	●	●	●
LLDP-MED	● ^{*1}	●	●	●	●
STP (Spanning Tree Protocol)	●	●	●	●	●
Flex Link	-	●	●	●	●
EtherChannel	●	●	●	●	●
LACP	●	●	●	●	●
Link State Tracking	● ^{*2}	●	●	●	●
Resilient Ethernet Protocol (REP)	-	-	-	● ^{*3}	● ^{*3}
Per-Port Storm Control	●	●	●	●	●

^{*1} Catalyst 2960-L Series only.

^{*2} Catalyst 2960-L Series are to be supported in future software release.

^{*3} Catalyst 3650/3850 Series are to be supported in future software release.

Cisco IOS L3 Features

Feature	LL	LB	IPL	IPB	IPS
Static Routing	● ^{*1}	●	●	●	●
RIP	● ^{*1}	-	●	●	●
EIGRP Stub	-	-	●	●	●
EIGRP	-	-	-	-	●
OSPF for Routed Access	-	-	●	●	●
OSPF v2/v3	-	-	-	-	●
BGP	-	-	-	-	●
IS-IS	-	-	-	-	●
Policy Based Routing (PBR)	-	-	●	●	●
VRF-Lite	-	-	-	-	●
PIM Stub	-	-	●	●	●
PIM	-	-	-	-	●
WCCP	-	-	●	●	●
SSO	-	● ^{*2}	-	● ^{*3}	● ^{*3}
NSF	-	-	-	●	●
MPLS	-	-	-	-	● ^{*3}

^{*1} Catalyst 2960-L Series only. ^{*2} Catalyst 3560-CX Series are not supported.

^{*3} Catalyst 3650/3850 Series are not supported.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Positioning Map

Cisco IOS

Cisco IOS Managability Features

Feature	LL	LB	IPL	IPB	IPS
SNMP	●	●	●	●	●
RMON	●	●	●	●	●
SPAN	●	●	●	●	●
RSPAN	-	●	●	●	●
TDR	●	●	●	●	●
Smart Ports	●	●	●	●	●
Smart Install (client)	●	●	●	●	●
Smart Install (director)	-	● ^{*1}	-	●	●
Cisco IOS IP SLA (responder)	-	●	●	●	●
Cisco IOS IP SLA (initiator)	-	-	-	●	●
Cisco IOS EEM	-	-	-	●	●
Wireshark	-	-	-	● ^{*2}	● ^{*2}
Netflow-Lite	-	●	●	●	●
Flexible Netflow	-	-	-	●	●
EnergyWise	●	●	●	●	●
GOLD (GOLD-Lite)	●	●	●	●	●
OBFL	●	●	●	●	●

*1 Catalyst 2960-CX/2960-X Series are not supported.

*2 Catalyst 3560-CX Series are not supported.

Cisco IOS QoS Features

Feature	LL	LB	IPL	IPB	IPS
SRR	●	●	●	●	●
Priority Queue	●	●	●	●	●
Auto QoS	● ^{*1}	●	●	●	●
DSCP	● ^{*1}	●	●	●	●
Weighted Tail Drop (WTD)	● ^{*2}	● ^{*3}	-	● ^{*3}	●
Dynamic Buffer Limiting (DBL)	-	-	-	-	-
Control Plane Policing (CoPP)	-	● ^{*4}	-	● ^{*5}	● ^{*5}
Per VLAN Policy	-	-	●	●	●

*1 Cisco Catalyst 2960-L Series are to be supported in future software release.

*2 Catalyst 2960-L Series only. *3 Catalyst 3560/3850 Series only.

*4 Catalyst 2960-CX/2960-X Series are not supported.

*5 Catalyst 3560-CX Series are not supported.

Cisco IOS Security Features

Feature	LL	LB	IPL	IPB	IPS
SSH	●	●	●	●	●
SSL	●	●	●	●	●
SCP	●	●	●	●	●
HTTPS	●	●	●	●	●
TACACS+	●	●	●	●	●
RADIUS	●	●	●	●	●
Port Security	●	●	●	●	●
DHCP Snooping	● ^{*1}	●	●	●	●
Dynamic ARP Inspection (DAI)	● ^{*1}	●	●	●	●
IP Source Guard	-	●	●	●	●
MAC Authentication Bypass for Voice	●	●	●	●	●
Private VLAN Edge	●	●	●	●	●
Private VLAN	-	-	●	●	●
Layer 2 - 4 ACL	-	●	●	●	●
Router ACL	-	● ^{*2}	●	●	●
VLAN ACL	● ^{*1}	-	●	●	●
Time Range ACL	-	●	●	●	●
Web Authentication	● ^{*1}	●	●	●	●
TrustSec SXP	-	●	●	●	●
TrustSec SGT/SGACL	-	● ^{*2}	●	●	●
MACsec	-	-	-	●	●
NEAT	-	●	●	●	●

*1 Catalyst 2960-L Series only.

*2 Catalyst 3560/3850 Series are not supported.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Overview

Platform Spec

License

Compact Switches You Can Use Anywhere

The [Cisco Catalyst 2960-CX and 3560-CX Series](#) compact switches easily extend your Cisco Catalyst switching infrastructure outside the wiring closet to enable new workspaces, extend wireless LANs, and connect Power over Ethernet (PoE) devices. These fanless, small form-factor switches are ideal for space-constrained deployments where multiple cable runs would be challenging.

With increased bandwidth, double the PoE capacity, faster CPU, and more memory, Cisco Catalyst 2960-CX and 3560-CX bring a multifold improvement in performance to the Cisco Catalyst Compact Switch product line. They offer many smart and innovative features for management, simplicity, and scale.

Highlights

- Cisco IOS [LAN Base](#) Image (Catalyst 2960-CX), Cisco IOS universal image ([IP Base](#), upgradable to IP services, Catalyst 3560-CX)
- Multigigabit downlinks (Catalyst 3560-CX-8XPD)
- 10 GB SFP+ uplinks (Catalyst 3560-CX-8XPD/12PD)
- PoE+ output (PSE models)
- PoE pass-through (60 W PoE Input, Catalyst 3560CX-8PT)
- New DC powering option for deployment in subways, buses, and trains to power access points
- Perpetual PoE for powering a powered device even when the device is booting
- Stylish, fan-less design and silent operation
- [Cisco Digital Network Architecture \(DNA\)](#)-ready: Supports [Cisco NetFlow Lite](#) for application visibility at the access network, and so on



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Cisco Catalyst 2960-CX/3560-CX Series



Overview

Platform Spec

License

Cisco Catalyst 2960-CX Series

Product SKU	Service (CSE) SKU	Cisco IOS	Downlinks		Uplinks			PoE					AC Power	Rack Mount
			GE	mGig	GE	SFP	SFP/SFP+	Ports	Power Budget	IEEE 802.3	Input Ports	Pass through		
WS-C2960CX-8TC-L	CON-SMBS-WSC28TCL	LAN Base	8	-	2	2	-	-	-	-	-	-	Internal	- ^{*1}
WS-C2960CX-8PC-L	CON-SMBS-WSC28PCL	LAN Base	8	-	2	2	-	8	124 W	af/at	-	-	Internal	- ^{*1}

^{*1} Rack Mounting Brackets (RCKMNT-19-CMPCT=/RCKMNT-23-CMPCT=) are required.

Cisco Catalyst 3560-CX Series

Product SKU	Service (CSE) SKU	Cisco IOS	Downlinks		Uplinks			PoE					AC Power	Rack Mount
			GE	mGig	GE	SFP	SFP/SFP+	Ports	Power Budget	IEEE 802.3	Input Ports	Pass through		
WS-C3560CX-8TC-S	CON-SMBS-WSC38TCS	IP Base	8	-	2	2	-	-	-	-	-	-	Internal	- ^{*2}
WS-C3560CX-8PT-S	CON-SMBS-WSC356CT	IP Base	8	-	2	-	-	8	146 W	af/at	2	●	External ^{*1}	- ^{*2}
WS-C3560CX-8PC-S	CON-SMBS-WSC38PCS	IP Base	8	-	2	2	-	8	240 W	af/at	-	-	Internal	- ^{*2}
WS-C3560CX-8XPD-S	CON-SMBS-WSC356CD	IP Base	6	2	-	-	2	8	240 W	af/at	-	-	Internal	- ^{*2}
WS-C3560CX-12TC-S	CON-SMBS-WSC312TC	IP Base	12	-	2	2	-	-	-	-	-	-	Internal	- ^{*2}
WS-C3560CX-12PC-S	CON-SMBS-WSC312PC	IP Base	12	-	2	2	-	12	240 W	af/at	-	-	Internal	- ^{*2}
WS-C3560CX-12PD-S	CON-SMBS-WSC312PD	IP Base	12	-	2	-	2	12	240 W	af/at	-	-	Internal	- ^{*2}

^{*1} Power Adapter (PWR-ADPT=/PWR-ADPT-DC=) is required when not using PoE receiving.

^{*2} Rack Mounting Brackets (RCKMNT-19-CMPCT=/RCKMNT-23-CMPCT=) are required. Optional Magnet and Mounting Tray (CMPCT-MGNT-TRAY=) is available.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

- Getting Started
- What's New
- Feature Story
- Collaborate
- Compute
- Secure
- Connect
 - Switches
 - SF/SG
 - Catalyst
 - 2960-CX/3560-CX
 - 2960-L
 - 2960-X
 - 3650/3850
 - Meraki MS
 - Wireless
 - Routers
- Services

Connect - Switches - Cisco Catalyst Switches

Cisco Catalyst 2960-CX/3560-CX Series



OverviewPlatform SpecLicense

Cisco IOS Upgrade License for Cisco Catalyst 3560-CX Series*1

Product SKU	Description
L-C3560CX-12-S-E	IP Base to IP Services RTU License

*1 L-C3560CX-RTU= is required.

TIP Cisco Catalyst Compact Switches Comparison

Cisco Catalyst 2960-CG & 2960-CX Series Compact Switches

Parameter	Feature	2960-CG	2960-CX
Ports	Uplinks	2 x GE/SFP	2 x GE & 2 x SFP
	Downlinks	8 x GE	8 x GE
PoE	PoE	-	124 W PoE+
	Perpetual PoE	-	●
Hardware	DRAM, Flash	128 MB, 64 MB	512 MB, 128 MB

Cisco Catalyst 3560-CG & 3560-CX Series Compact Switches

Parameter	Feature	3560-CG	3560-CX
Ports	Uplinks	2 x GE, 2 x SFP	2 x GE & 2 x SFP, 2 x GE & 2 x SFP+
	Downlinks	8 x GE	8 x GE, 12 x GE, 6 xGE & 2 x mGig
PoE	PoE	124 W PoE+	240 W PoE+
	Perpetual PoE	-	●
	PoE Pass-Through	1 x UPOE, 23.8 W	2 x UPOE, 144.8 W
Software	Cisco IOS	IP Base Only	IP Base, IP Services
Hardware	DRAM, Flash	128 MB, 64 MB	512 MB, 128 MB
Other	Security	802.1X, MACsec	802.1X, MACsec
	AVC	NO	NetFlow Lite
	IPv6	Basic	Enhanced

Overview

Platform Spec

Why 2960-L?

Build Your Enterprise-Class Network with Simplicity and Value

The [Cisco Catalyst 2960-L Series](#) switches are fixed-configuration, Gigabit Ethernet switches that provide enterprise-class access switching for branch offices, out-of-the-wiring-closet applications, and critical Internet of Things (IoT) deployments, as well as small and medium-sized businesses. They operate on Cisco IOS Software and support simple device management as well as network management.

The Catalyst 2960-L Series provides easy device onboarding, configuration, monitoring, and troubleshooting. These fully managed switches offer advanced Layer 2 and basic Layer 3 features as well as Power over Ethernet Plus (PoE+) power. Catalyst 2960-L Series delivers enhanced network security, network reliability, and operational efficiency.

Highlights

- Cisco IOS Enhanced [LAN Lite](#) Image: Supports basic layer 3 features with static routing and Routing Information Protocol (RIP), and security with 802.1X support for connected devices, Switched Port Analyzer (SPAN), and Bridge Protocol Data Unit (BPDU) Guard
- PoE+ output (PSE models)
- Perpetual PoE for powering a powered device even when the device is booting
- Fanless operation with operating temperature up to 45 °C (select models)
- Compact design with a depth of less than 11.5 inches
- Device management support with: Intuitive web UI via [Cisco Configuration Professional for Catalyst](#), over-the-air access via Bluetooth, Command-Line Interface (CLI), Simple Network Management Protocol (SNMP), RJ-45 or USB console access, and virtual stacking



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Platform Spec

Why 2960-L?

Product SKU ^{*1}	Service (CSE) SKU	Cisco IOS	Downlinks	Uplinks			PoE			AC Power	Fanless	Rack Mount
			GE	GE	SFP	SFP/SFP+	Ports	Power Budget	IEEE 802.3			
WS-C2960L-8TS-LL	CON-SMBS-WSC296TW	LAN Lite	8	-	2	-	-	-	-	Internal	●	- ^{*2}
WS-C2960L-8PS-LL	CON-SMBS-WSC29606	LAN Lite	8	-	2	-	8	67 W	af/at	Internal	●	- ^{*2}
WS-C2960L-16TS-LL	CON-SMBS-WSC2966L	LAN Lite	16	-	2	-	-	-	-	Internal	●	- ^{*2}
WS-C2960L-16PS-LL	CON-SMBS-WSC2969S	LAN Lite	16	-	2	-	16	120 W	af/at	Internal	●	- ^{*2}
WS-C2960L-24TS-AP	CON-SMBS-WSC296LT	LAN Lite	24	-	4	-	-	-	-	Internal	●	1 RU
WS-C2960L-24PS-AP	CON-SMBS-WSC296LA	LAN Lite	24	-	4	-	24	195 W	af/at	Internal	●	1 RU
WS-C2960L-48TS-AP	CON-SMBS-WSC298LS	LAN Lite	48	-	4	-	-	-	-	Internal	●	1 RU
WS-C2960L-48PS-AP	CON-SMBS-WSC2P6LA	LAN Lite	48	-	4	-	48	370 W	af/at	Internal	-	1 RU

^{*1} Not orderable in Australia and New Zealand.

^{*2} Optional Magnet and Mounting Tray (CMPCT-MGNT-TRAY=) is available.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Platform Spec

Why 2960-L?

Why Catalyst 2960-L?

The [Cisco Catalyst 2960-L Series](#) leads the competition with:

- **Noiseless, flexible deployment** in a “fanless” design of not only the 8-port model, but also the 16-, 24- and 48-port models, with the only exception being the 48-port PoE unit, the Catalyst 2960-L can be installed in meeting rooms, classrooms, retail stores, and office spaces, which are no-go areas for a traditional switch relying on one or more noisy fans to keep it cool. Additionally, because there are no fans to suck in dust and lint, it can be tucked away in a cupboard or ceiling space, without the need for periodic cleaning, making it even more flexible to deploy.
- **Persistent PoE** reduces the wait time and improves network availability by providing PoE power to IP phones, cameras, and wireless access points, even while the switch is booting up with a new software image.
- **Runs Cisco IOS Software** and supports a rich set of Cisco IOS Software networking features in IPv6, security, and manageability. It also offers unsurpassed energy efficiency and Cisco enhanced limited lifetime warranty, offering lower TCO.

	Catalyst 2960-L	Competitor A	Competitor B	Why Cisco?
No Fans	More deployment flexibility, less cleaning and preventive maintenance, and higher reliability and uptime.	The switch has fans that suck in dust, resulting in limited deployment options and more cleaning and maintenance.	Some of the models have 3 fans.	The Cisco Catalyst switch can be housed in cupboards and cavities with no risk of fans sucking in failure-causing dust.
	People-friendly operation.	Not designed to coexist with people: the warmer it gets, the faster and noisier the fans get.		Allows the switch to share office space with people without being intrusive; ideal for small retail, classrooms, offices.
Persistent PoE/PoE+	Maintains PoE power to attached devices when the switch is rebooted after a software upgrade or other reason.	Ethernet switches can reboot quickly after a software upgrade, in an effort to minimize downtime, but what about the attached IP phone, camera, or access point? Without persistent PoE, they will reboot as well, and only after the switch has finished.		More network uptime: IP phones, cameras, and access points stay powered on when the switch is rebooted after a software upgrade.
Bluetooth and USB	Innovations such as Bluetooth console access and USB type-A slot supporting memory cards for software and configuration transfer.	While offering a USB console port, these switches still require a PC to physically connect. This is not always practical in branch locations, where the switch might be installed in a difficult-to-reach location.		Innovations that provide out-of-band management without requiring a traditional PC to be physically connected; improve uptime and problem resolution time.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

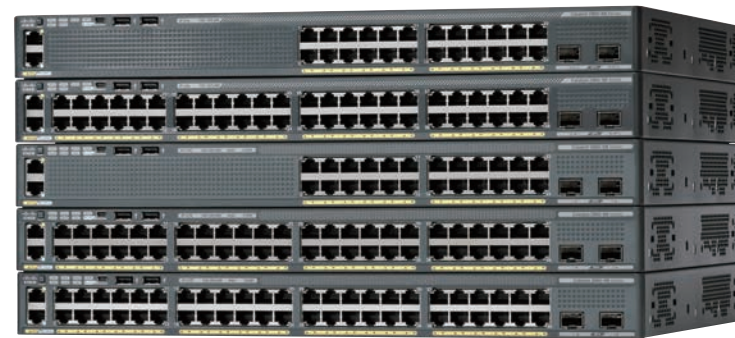
Platform Spec

Modules & Accessories

Enterprise Ready: Cost-Effective Access Switches that Scale

The [Cisco Catalyst 2960-X Series](#) switches are stackable fixed configuration Gigabit Ethernet switches offering network connectivity for enterprise, mid-market, and branch locations.

They enable reliable and secure business operations with lower total cost of ownership through a range of innovative features, including Cisco FlexStack-Plus and FlexStack-Extended, application visibility and control, Power over Ethernet Plus (PoE+), innovative power management, and Smart Operations.



Highlights

- Cisco IOS [LAN Lite/LAN Base](#) Image (Catalyst 2960-X)
- Cisco IOS [IP Lite](#) Image (Catalyst 2960-XR): Supports layer 3 features including Open Shortest Path First OSPF and Virtual Router Redundancy Protocol (VRRP)
- 10 GB SFP+ uplinks (select models)
- PoE+ output (PSE models)
- Perpetual PoE for powering a powered device even when the device is booting
- Resiliency with optional an external redundant power supply (LAN Base models) and dual redundant power supplies (IP Lite models)
- Stacking with Cisco FlexStack-Plus and FlexStack-Extended (LAN Base/IP Lite models)
- Device management support with: Intuitive web UI via [Cisco Configuration Professional for Catalyst](#), over-the-air access via Bluetooth, Command-Line Interface (CLI), Simple Network Management Protocol (SNMP), RJ-45 or USB console access
- [Cisco Digital Network Architecture \(DNA\)](#)-ready: Supports [Cisco NetFlow Lite](#) and [Cisco Flexible NetFlow](#)*1 for application visibility at the access network, and so on (LAN Base/IP Lite models)

*1 Cisco ONE Foundation License or Cisco DNA Essentials License is required.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Platform Spec

Modules & Accessories

Product SKU ^{*1}	Service (CSE) SKU	Cisco IOS	Downlinks	Uplinks			PoE			Power Supply			Fanless	Flex Stack	Rack Mount
			GE	GE	SFP	SFP/SFP+	Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS			
WS-C2960X-24TS-LL	CON-SMBS-WSC296X2	LAN Lite	24	-	2	-	-	-	-	Fixed AC	-	-	-	-	1 RU
WS-C2960X-48TS-LL	CON-SMBS-WSC296X4	LAN Lite	48	-	2	-	-	-	-	Fixed AC	-	-	-	-	1 RU
WS-C2960X-24TS-L	CON-SMBS-WSC296XT	LAN Base	24	-	4	-	-	-	-	Fixed AC	●	-	-	•	1 RU
WS-C2960X-24TD-L	CON-SMBS-WSC24TDL	LAN Base	24	-	-	2	-	-	-	Fixed AC	●	-	-	•	1 RU
WS-C2960X-24PSQ-L	CON-SMBS-WSC224QL	LAN Base	24	2	2	-	8	110 W	af/at	Fixed AC	-	-	●	-	1 RU
WS-C2960X-24PS-L	CON-SMBS-WSC224SL	LAN Base	24	-	4	-	24	370 W	af/at	Fixed AC	●	-	-	•	1 RU
WS-C2960X-24PD-L	CON-SMBS-WSC604DL	LAN Base	24	-	-	2	24	370 W	af/at	Fixed AC	●	-	-	•	1 RU
WS-C2960X-48TS-L	CON-SMBS-WSC248TS	LAN Base	48	-	4	-	-	-	-	Fixed AC	●	-	-	•	1 RU
WS-C2960X-48TD-L	CON-SMBS-WSC298DL	LAN Base	48	-	-	2	-	-	-	Fixed AC	●	-	-	•	1 RU
WS-C2960X-48LPS-L	CON-SMBS-WSC248SL	LAN Base	48	-	4	-	48	370 W	af/at	Fixed AC	●	-	-	•	1 RU
WS-C2960X-48LPD-L	CON-SMBS-WSC48LPD	LAN Base	48	-	-	2	48	370 W	af/at	Fixed AC	●	-	-	•	1 RU
WS-C2960X-48FPS-L	CON-SMBS-WSC294SL	LAN Base	48	-	4	-	48	740 W	af/at	Fixed AC	●	-	-	•	1 RU
WS-C2960X-48FPD-L	CON-SMBS-WSC296XL	LAN Base	48	-	-	2	48	740 W	af/at	Fixed AC	●	-	-	•	1 RU
WS-C2960XR-24TS-I	CON-SMBS-WS296X24	IP Lite	24	-	4	-	-	-	-	250 W AC	-	●	-	•	1 RU
WS-C2960XR-24TD-I	CON-SMBS-WSC296TD	IP Lite	24	-	-	2	-	-	-	250 W AC	-	●	-	•	1 RU
WS-C2960XR-24PS-I	CON-SMBS-WSC296PS	IP Lite	24	-	4	-	24	370 W	af/at	640 W AC	-	●	-	•	1 RU
WS-C2960XR-24PD-I	CON-SMBS-WSC296PD	IP Lite	24	-	-	2	24	370 W	af/at	640 W AC	-	●	-	•	1 RU
WS-C2960XR-48TS-I	CON-SMBS-WS296X48	IP Lite	48	-	4	-	-	-	-	250 W AC	-	●	-	•	1 RU
WS-C2960XR-48TD-I	CON-SMBS-WSC2968T	IP Lite	48	-	-	2	-	-	-	250 W AC	-	●	-	•	1 RU
WS-C2960XR-48LPS-I	CON-SMBS-WSC29648	IP Lite	48	-	4	-	48	370 W	af/at	640 W AC	-	●	-	●	1 RU
WS-C2960XR-48LPD-I	CON-SMBS-W296X48L	IP Lite	48	-	-	2	48	370 W	af/at	640 W AC	-	●	-	●	1 RU
WS-C2960XR-48FPS-I	CON-SMBS-WSC296FP	IP Lite	48	-	4	-	48	740 W	af/at	1025 W AC	-	●	-	●	1 RU
WS-C2960XR-48FPD-I	CON-SMBS-W296X48F	IP Lite	48	-	-	2	48	740 W	af/at	1025 W AC	-	●	-	●	1 RU

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Platform Spec

Modules & Accessories

Cisco Redundant Power System (RPS) 2300

Product SKU	Description
PWR-RPS2300	Cisco RPS 2300 Chassis (No Power Supply)
C3K-PWR-750WAC	Cisco RPS 2300 750 W AC Power Supply
CAB-RPS2300-E=	Cisco RPS 2300 cable

Cisco FlexStack Modules

Product SKU	Description
C2960X-STACK	Cisco FlexStack-Plus Module
C2960X-FIBER-STK <small>NEW</small>	Cisco FlexStack-Extended Fiber Module
C2960X-HYBRID-STK <small>NEW</small>	Cisco FlexStack-Extended Hybrid Module

Power Supply Modules

Product SKU	Description
PWR-C2-250WAC	250 W AC Power Supply Module
PWR-C2-640WAC	640 W AC Power Supply Module
PWR-C2-1025WAC	1025 W AC Power Supply Module



Cisco FlexStack-Plus & FlexStack-Extended

The **Cisco FlexStack-Plus** provides stacking of **up to eight** Cisco Catalyst 2960-X or 2960-XR Series switches with the optional **Cisco FlexStack-Plus** module.

The **Cisco FlexStack-Extended** enables a **long-distance out-of-the wiring-closet** stack option (**floor to floor**). It provides stacking of **up to eight** Cisco Catalyst 2960-X or 2960-XR Series switches with the optional **Cisco FlexStack-Extended** module.

Cisco FlexStack-Plus Supported Combinations^{*1}

Stack Member	Catalyst 2960-X LAN Base	Catalyst 2960-XR IP Lite
Catalyst 2960-X LAN Base	●	-
Catalyst 2960-XR IP Lite	-	●

Cisco FlexStack-Plus Scalability & Performance^{*1}

Stack Member	Stack Bandwidth	Stack Limit
Catalyst 2960-X LAN Base	80 Gbps	8
Catalyst 2960-XR IP Lite	80 Gbps	8

Cisco FlexStack-Extended Supported Combinations

Stack Member	Catalyst 2960-X LAN Base	Catalyst 2960-XR IP Lite
Catalyst 2960-X LAN Base	●	-
Catalyst 2960-XR IP Lite	-	●

Cisco FlexStack-Extended Scalability & Performance

Stack Member	Stack Bandwidth	Stack Limit
Catalyst 2960-X LAN Base	40 Gbps	8
Catalyst 2960-XR IP Lite	40 Gbps	8

^{*1} FlexStack-Plus is backward compatible with FlexStack. Up to four Catalyst 2960-X LAN Base switches and Catalyst 2960-S/SF LAN Base switches can be stacked.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Platform Spec (3650)

Platform Spec (3850)

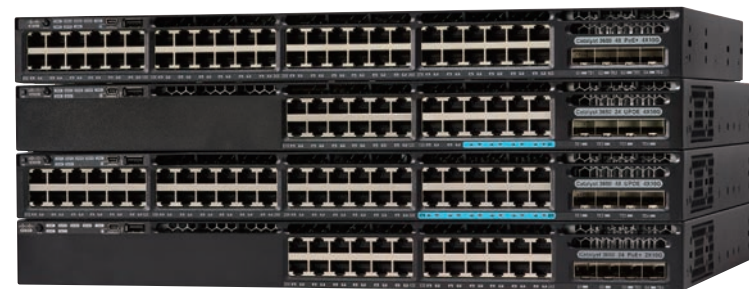
Licenses & Accessories

Bundles

Converged Wired and Wireless Access on A Single Platform

The **Cisco Catalyst 3650/3850 Series** switches are the next generation of enterprise-class stackable access and aggregation layer switches that provide the foundation for full convergence between wired and wireless on a single platform.

The new Cisco Unified Access Data Plane (UADP) Application-Specific Integrated Circuit (ASIC) powers the switch and enables uniform wired-wireless policy enforcement, application visibility, flexibility, and application optimization. This convergence is built on the resilience of the new and improved Cisco StackWise-160/480 technology.



Highlights

- Cisco IOS XE Universal Image (**LAN Base/IP Base/IP Services**)
- **Cisco Unified Access Data Plane (UADP)** Application-Specific Integrated Circuit (ASIC)
- Integrated wireless controller capability with: Up to 20 or 40 Gbps of wireless capacity per switch, support for up to 50 access points and 1,000 wireless clients (**Catalyst 3650**) or 100 access points and 2,000 wireless clients (**Catalyst 3850**) on each switching entity (switch or stack)
- Multigigabit downlinks (select models)
- Fixed uplinks with 4 x 1 GE, 2 x 10 GE SFP+, 4 x 10 GE SFP+, 8 x 10 GE SFP+, or 2 x 40 GE QSFP (**Catalyst 3650**)
- Optional uplink modules with 4 x 1 GE SFP, 2 x 10 GE SFP+, 4 x 10 GE SFP+, 8 x 10 GE SFP+, or 2 x 40 GE QSFP (**Catalyst 3850**, all copper models & most fiber models)
- Fixed uplinks with 40 GE QSFP (**Catalyst 3850**, select fiber models)
- PoE+ output (PSE models)
- 60 W PoE output (select PSE models)
- Resiliency with optional an external redundant power supply (**Catalyst 3850**, mini models) and dual redundant power supplies (**Catalyst 3650/3850**, except mini models)
- Cisco StackPower technology provides power stacking among stack members for power redundancy (**Catalyst 3850**)
- Stacking with Cisco StackWise-160 (**Catalyst 3650**) and Cisco StackWise-480 (**Catalyst 3850**)
- authenticating and encrypting packets between switches and endpoints: MACsec-128 (all models) and MACsec-256 (**Catalyst 3850**, Multigigabit and 10 GE fiber models)
- **Cisco Digital Network Architecture (DNA)**-ready: Cisco DNA services can be delivered through Cisco ONE or Cisco DNA Licenses

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Connect - Switches - Cisco Catalyst Switches
Cisco Catalyst 3650/3850 Series



Overview

Platform Spec (3650)

Platform Spec (3850)

Licenses & Accessories

Bundles

Product SKU	Service (CSE) SKU	Cisco IOS	Downlinks				Fixed Uplinks			PoE				Power Supply			Rack Mount
			GE	mGig	SFP	SFP/SFP+	SFP	SFP/SFP+	QSFP	Ports	60 W Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS	
WS-C3650-24TS-L	CON-SMBS-WSC3652TS	LAN Base	24	-	-	-	4	-	-	-	-	-	-	250 W AC	-	●	1 RU
WS-C3650-24TS-S	CON-SMBS-WS6524SS	IP Base	24	-	-	-	4	-	-	-	-	-	-	250 W AC	-	●	1 RU
WS-C3650-24TS-E	CON-SMBS-WS5024SE	IP Services	24	-	-	-	4	-	-	-	-	-	-	250 W AC	-	●	1 RU
WS-C3650-24TD-L	CON-SMBS-WSC3652L	LAN Base	24	-	-	-	2	2	-	-	-	-	-	250 W AC	-	●	1 RU
WS-C3650-24TD-S	CON-SMBS-WSC365BU	IP Base	24	-	-	-	2	2	-	-	-	-	-	250 W AC	-	●	1 RU
WS-C3650-24TD-E	CON-SMBS-WSC365TE	IP Services	24	-	-	-	2	2	-	-	-	-	-	250 W AC	-	●	1 RU
WS-C3650-24PS-L	CON-SMBS-WSC365SL	LAN Base	24	-	-	-	4	-	-	24	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-24PS-S	CON-SMBS-WSC3652S	IP Base	24	-	-	-	4	-	-	24	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-24PS-E	CON-SMBS-WS6524PS	IP Services	24	-	-	-	4	-	-	24	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-24PDM-L	CON-SMBS-WSC365ML	LAN Base	24	-	-	-	2	2	-	24	-	390 W	af/at	640 W AC	●	-	1 RU
WS-C3650-24PDM-S	CON-SMBS-WSC365PS	IP Base	24	-	-	-	2	2	-	24	-	390 W	af/at	640 W AC	●	-	1 RU
WS-C3650-24PDM-E	CON-SMBS-WSC365ME	IP Services	24	-	-	-	2	2	-	24	-	390 W	af/at	640 W AC	●	-	1 RU
WS-C3650-24PD-L	CON-SMBS-WSC364DL	LAN Base	24	-	-	-	2	2	-	24	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-24PD-S	CON-SMBS-WSC365PDS	IP Base	24	-	-	-	2	2	-	24	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-24PD-E	CON-SMBS-WSC3652DE	IP Services	24	-	-	-	2	2	-	24	-	390 W	af/at	640 W AC	-	●	1 RU

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Connect - Switches - Cisco Catalyst Switches
Cisco Catalyst 3650/3850 Series



Overview

Platform Spec (3650)

Platform Spec (3850)

Licenses & Accessories

Bundles

Product SKU	Service (CSE) SKU	Cisco IOS	Downlinks				Fixed Uplinks			PoE				Power Supply			Rack Mount
			GE	mGig	SFP	SFP/SFP+	SFP	SFP/SFP+	QSFP	Ports	60 W Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS	
WS-C3650-48TS-L	CON-SMBS-WSC36TSL	LAN Base	48	-	-	-	4	-	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48TS-S	CON-SMBS-WSC3654T	IP Base	48	-	-	-	4	-	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48TS-E	CON-SMBS-WS5048SE	IP Services	48	-	-	-	4	-	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48TD-L	CON-SMBS-WS6548DL	LAN Base	48	-	-	-	2	2	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48TD-S	CON-SMBS-WSC368TD	IP Base	48	-	-	-	2	2	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48TD-E	CON-SMBS-WC3654UA	IP Services	48	-	-	-	2	2	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48TQ-L	CON-SMBS-WC365T48	LAN Base	48	-	-	-	-	4	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48TQ-S	CON-SMBS-WS3654QS	IP Base	48	-	-	-	-	4	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48TQ-E	CON-SMBS-WSC36TQE	IP Services	48	-	-	-	-	4	-	-	-	-	af/at	250 W AC	-	●	1 RU
WS-C3650-48PS-L	CON-SMBS-WS6548SL	LAN Base	48	-	-	-	4	-	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48PS-S	CON-SMBS-WSC36PSS	IP Base	48	-	-	-	4	-	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48PS-E	CON-SMBS-WSC3654SE	IP Services	48	-	-	-	4	-	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48PD-L	CON-SMBS-WS365048	LAN Base	48	-	-	-	2	2	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48PD-S	CON-SMBS-WC3654PS	IP Base	48	-	-	-	2	2	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48PD-E	CON-SMBS-WSC365DE	IP Services	48	-	-	-	2	2	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48PQ-L	CON-SMBS-WSC365QL	LAN Base	48	-	-	-	-	4	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48PQ-S	CON-SMBS-WSC36PQS	IP Base	48	-	-	-	-	4	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48PQ-E	CON-SMBS-WSC365QE	IP Services	48	-	-	-	-	4	-	48	-	390 W	af/at	640 W AC	-	●	1 RU
WS-C3650-48FS-L	CON-SMBS-WSC3654	LAN Base	48	-	-	-	4	-	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU
WS-C3650-48FS-S	CON-SMBS-WSC654	IP Base	48	-	-	-	4	-	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU
WS-C3650-48FS-E	CON-SMBS-WS5048FS	IP Services	48	-	-	-	4	-	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU
WS-C3650-48FD-L	CON-SMBS-WS6548FD	LAN Base	48	-	-	-	2	2	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU
WS-C3650-48FD-S	CON-SMBS-WSC365FD	IP Base	48	-	-	-	2	2	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU
WS-C3650-48FD-E	CON-SMBS-WS3654UA	IP Services	48	-	-	-	2	2	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU
WS-C3650-48FQM-L	CON-SMBS-WSC365FQ	LAN Base	48	-	-	-	-	4	-	48	-	775 W	af/at	975 W AC	●	-	1 RU
WS-C3650-48FQM-S	CON-SMBS-WSC365QS	IP Base	48	-	-	-	-	4	-	48	-	775 W	af/at	975 W AC	●	-	1 RU
WS-C3650-48FQM-E	CON-SMBS-WSC3658Q	IP Services	48	-	-	-	-	4	-	48	-	775 W	af/at	975 W AC	●	-	1 RU
WS-C3650-48FQ-L	CON-SMBS-WS3654FQ	LAN Base	48	-	-	-	-	4	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU
WS-C3650-48FQ-S	CON-SMBS-WSC354QS	IP Base	48	-	-	-	-	4	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU
WS-C3650-48FQ-E	CON-SMBS-WC3654	IP Services	48	-	-	-	-	4	-	48	-	775 W	af/at	1025 W AC	-	●	1 RU

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Connect - Switches - Cisco Catalyst Switches
Cisco Catalyst 3650/3850 Series



Overview

Platform Spec (3650)

Platform Spec (3850)

Licenses & Accessories

Bundles

Product SKU	Service (CSE) SKU	Cisco IOS	Downlinks				Fixed Uplinks			PoE				Power Supply			Rack Mount
			GE	mGig	SFP	SFP/SFP+	SFP	SFP/SFP+	QSFP	Ports	60 W Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS	
WS-C3650-8X24PD-L	WS-C3650-8X24PD-L	LAN Base	24	8	-	-	-	2	-	24	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3650-8X24PD-S	CON-SMBS-SWC3DPX2	IP Base	24	8	-	-	-	2	-	24	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3650-8X24PD-E	CON-SMBS-WSEC3658	IP Services	24	8	-	-	-	2	-	24	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3650-8X24UQ-L	CON-SMBS-WSC365SU	LAN Base	24	8	-	-	-	4	-	24	24	820 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-8X24UQ-S	CON-SMBS-WSC3656Q	IP Base	24	8	-	-	-	4	-	24	24	820 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-8X24UQ-E	CON-SMBS-WSC3656U	IP Services	24	8	-	-	-	4	-	24	24	820 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48FD-L	CON-SMBS-WSLC3651	LAN Base	48	12	-	-	-	2	-	48	-	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48FD-S	CON-SMBS-WSC36FDX	IP Base	48	12	-	-	-	2	-	48	-	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48FD-E	CON-SMBS-WSFC3651	IP Services	48	12	-	-	-	2	-	48	-	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UQ-L	CON-SMBS-WSC3653W	LAN Base	48	12	-	-	-	4	-	48	48	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UQ-S	CON-SMBS-WS36513C	IP Base	48	12	-	-	-	4	-	48	48	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UQ-E	CON-SMBS-WSC3658E	IP Services	48	12	-	-	-	4	-	48	48	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UR-L	CON-SMBS-WSC3654X	LAN Base	48	12	-	-	-	8	-	48	48	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UR-S	CON-SMBS-WSC3653X	IP Base	48	12	-	-	-	8	-	48	48	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UR-E	CON-SMBS-WSC3653R	IP Services	48	12	-	-	-	8	-	48	48	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UZ-L	CON-SMBS-WSC3658W	LAN Base	48	12	-	-	-	-	2	48	48	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UZ-S	CON-SMBS-WSC3658U	IP Base	48	12	-	-	-	-	2	48	48	660 W	af/at	1100 W AC	-	●	1 RU
WS-C3650-12X48UZ-E	CON-SMBS-WSC3655X	IP Services	48	12	-	-	-	-	2	48	48	660 W	af/at	1100 W AC	-	●	1 RU

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Connect - Switches - Cisco Catalyst Switches
Cisco Catalyst 3650/3850 Series



Overview

Platform Spec (3650)

Platform Spec (3850)

Licenses & Accessories

Bundles

Product SKU	Service (CSE) SKU	Cisco IOS	Downlinks				Fixed Uplinks			PoE				Power Supply			Rack Mount
			GE	mGig	SFP	SFP/SFP+	SFP	SFP/SFP+	QSFP	Ports	60 W Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS	
WS-C3850-24T-L	CON-SMBS-WSC384TL	LAN Base	24	-	-	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-24T-S	CON-SMBS-WSC384TS	IP Base	24	-	-	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-24T-E	CON-SMBS-WSC384TE	IP Services	24	-	-	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-24P-L	CON-SMBS-WSC384PL	LAN Base	24	-	-	-	-	-	-	24	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-24P-S	CON-SMBS-WS-C384PS	IP Base	24	-	-	-	-	-	-	24	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-24P-E	CON-SMBS-WSC384PE	IP Services	24	-	-	-	-	-	-	24	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-24U-L	CON-SMBS-WSC8524U	LAN Base	24	-	-	-	-	-	-	24	24	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-24U-S	CON-SMBS-WS8524US	IP Base	24	-	-	-	-	-	-	24	24	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-24U-E	CON-SMBS-WS8524UE	IP Services	24	-	-	-	-	-	-	24	24	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-48T-L	CON-SMBS-WSC388TL	LAN Base	48	-	-	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-48T-S	CON-SMBS-WSC388TS	IP Base	48	-	-	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-48T-E	CON-SMBS-WSC388TE	IP Services	48	-	-	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-48P-L	CON-SMBS-WSC388PL	LAN Base	48	-	-	-	-	-	-	48	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-48P-S	CON-SMBS-WSC388PS	IP Base	48	-	-	-	-	-	-	48	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-48P-E	CON-SMBS-WSC388PE	IP Services	48	-	-	-	-	-	-	48	-	435 W	af/at	715 W AC	-	●	1 RU
WS-C3850-48F-L	CON-SMBS-WSC388FL	LAN Base	48	-	-	-	-	-	-	48	-	800 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-48F-S	CON-SMBS-WSC388FS	IP Base	48	-	-	-	-	-	-	48	-	800 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-48F-E	CON-SMBS-WSC388FE	IP Services	48	-	-	-	-	-	-	48	-	800 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-48U-L	CON-SMBS-WS5048UL	LAN Base	48	-	-	-	-	-	-	48	48	800 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-48U-S	CON-SMBS-WS3548US	IP Base	48	-	-	-	-	-	-	48	48	800 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-48U-E	CON-SMBS-WS3848UE	IP Services	48	-	-	-	-	-	-	48	48	800 W	af/at	1100 W AC	-	●	1 RU

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Connect - Switches - Cisco Catalyst Switches
Cisco Catalyst 3650/3850 Series



Overview

Platform Spec (3650)

Platform Spec (3850)

Licenses & Accessories

Bundles

Product SKU	Service (CSE) SKU	Cisco IOS	Downlinks				Fixed Uplinks			PoE				Power Supply			Rack Mount
			GE	mGig	SFP	SFP/SFP+	SFP	SFP/SFP+	QSFP	Ports	60 W Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS	
WS-C3850-24XU-L	CON-SMBS-WSC3852L	LAN Base	-	24	-	-	-	-	-	24	24	580 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-24XU-S	CON-SMBS-WSC3852X	IP Base	-	24	-	-	-	-	-	24	24	580 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-24XU-E	CON-SMBS-WSC385XE	IP Services	-	24	-	-	-	-	-	24	24	580 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-12X48U-L	CON-SMBS-WSC3851L	LAN Base	36	12	-	-	-	-	-	48	48	630 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-12X48U-S	CON-SMBS-WSC385US	IP Base	36	12	-	-	-	-	-	48	48	630 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-12X48U-E	CON-SMBS-WSC385UE	IP Services	36	12	-	-	-	-	-	48	48	630 W	af/at	1100 W AC	-	●	1 RU
WS-C3850-12S-S	CON-SMBS-WSC3851S	LAN Base	-	-	12	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-12S-E	CON-SMBS-WSC385SE	IP Base	-	-	12	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-24S-S	CON-SMBS-WSC3854S	IP Base	-	-	24	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-24S-E	CON-SMBS-WSC3852E	IP Services	-	-	24	-	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-12XS-S	CON-SMBS-WSC3851X	IP Services	-	-	-	12	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-12XS-E	CON-SMBS-WSC3851E	LAN Base	-	-	-	12	-	-	-	-	-	-	-	350 W AC	-	●	1 RU
WS-C3850-24XS-S	CON-SMBS-WSCX3852	IP Services	-	-	-	24	-	-	-	-	-	-	-	715 W AC	-	●	1 RU
WS-C3850-24XS-E	CON-SMBS-WS850XSE	LAN Base	-	-	-	24	-	-	-	-	-	-	-	715 W AC	-	●	1 RU
WS-C3850-48XS-S	CON-SMBS-WSC08XSS	IP Services	-	-	-	48	-	-	4	-	-	-	-	750 W AC	-	●	1 RU
WS-C3850-48XS-E	CON-SMBS-WS508XSE	LAN Base	-	-	-	48	-	-	4	-	-	-	-	750 W AC	-	●	1 RU
WS-C3850-48XS-F-S	CON-SMBS-WS50XSFS	IP Base	-	-	-	48	-	-	4	-	-	-	-	750 W AC	-	●	1 RU
WS-C3850-48XS-F-E	CON-SMBS-WSC3854E	IP Services	-	-	-	48	-	-	4	-	-	-	-	750 W AC	-	●	1 RU

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Cisco Catalyst 3650/3850 Series



Overview

Platform Spec (3650)

Platform Spec (3850)

Licenses & Accessories

Bundles

Cisco IOS XE Upgrade License for Cisco Catalyst 3650 Series*1

Product SKU	Description
L-C3650-24-L-S	LAN Base to IP Base RTU License for 24-port models
L-C3650-24-S-E	IP Base to IP Services RTU License for 24-port models
L-C3650-24-L-E	LAN Base to IP Services RTU License for 24-port models
L-C3650-48-L-S	LAN Base to IP Base RTU License for 48-port models
L-C3650-48-S-E	IP Base to IP Services RTU License for 48-port models
L-C3650-48-L-E	LAN Base to IP Services RTU License for 48-port models

*1 L-C3650-RTU= is required.

Cisco IOS XE Upgrade License for Cisco Catalyst 3850 Series*1

Product SKU	Description
L-C3850-24-L-S	LAN Base to IP Base RTU License for 24-port models
L-C3850-24-S-E	IP Base to IP Services RTU License for 24-port models
L-C3850-24-L-E	LAN Base to IP Services RTU License for 24-port models
L-C3850-48-L-S	LAN Base to IP Base RTU License for 48-port models
L-C3850-48-S-E	IP Base to IP Services RTU License for 48-port models
L-C3850-48-L-E	LAN Base to IP Services RTU License for 48-port models
L-C3850-12-S-E	IP Base to IP Services RTU License for 12-port models

*1 L-C3850-RTU= is required.

Access Point License for Cisco Catalyst 3650/3850 Series*1

Product SKU	Description
L-LIC-CTIOS-1A	1 Access Point Adder License

*1 L-LIC-CT3650-UPG is required for Catalyst 3650.
L-LIC-CT3850-UPG is required for Catalyst 3850.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Cisco Catalyst 3650/3850 Series



Overview

Platform Spec (3650)

Platform Spec (3850)

Licenses & Accessories

Bundles

Power Supply Modules for Cisco Catalyst 3650 Series

Product SKU	Description
PWR-C2-250WAC	250 W AC Power Supply Module
PWR-C2-640WAC	640 W AC Power Supply Module
PWR-C2-1025WAC	1025 W AC Power Supply Module
PWR-C2-640WDC	640 W DC Power Supply Module
PWR-C1-715WAC	715 W AC Power Supply Module
PWR-C1-1100WAC	1100 W AC Power Supply Module
PWR-C1-440WDC	440 W DC Power Supply Module

Cisco Redundant Power System (RPS) 2300

Product SKU	Description
PWR-RPS2300	Cisco RPS 2300 Chassis (No Power Supply)
C3K-PWR-750WAC	Cisco RPS 2300 750 W AC Power Supply
CAB-RPS2300-E=	Cisco RPS 2300 cable

Cisco StackWise-160 Module for Cisco Catalyst 3650 Series

Product SKU	Description
C3650-STACK-KIT	Cisco StackWise-160 Module

Power Supply Modules for Cisco Catalyst 3850 Series

Product SKU	Description
PWR-C1-350WAC	250 W AC Power Supply Module
PWR-C1-715WAC	640 W AC Power Supply Module
PWR-C1-1100WAC	1025 W AC Power Supply Module
PWR-C1-440WDC	640 W DC Power Supply Module
PWR-C3-750WAC-R	750 W AC Front-to-Back Airflow Power Supply Module for Catalyst 3850-48XS
PWR-C3-750WAC-F	750 W AC Back-to-Front Airflow Power Supply Module for Catalyst 3850-48XS
PWR-C3-750WDC-R	750 W DC Front-to-Back Airflow Power Supply Module for Catalyst 3850-48XS
PWR-C3-750WDC-F	750 W DC Back-to-Front Airflow Power Supply Module for Catalyst 3850-48XS

Network Modules for Cisco Catalyst 3850 Series

Product SKU	Description
C3850-NM-4-1G	4 x SFP Network Module for copper models, 1 GE fiber models
C3850-NM-2-10G	2 x SFP & 2 x SFP/SFP+ Network Module for copper models, 1 GE fiber models
C3850-NM-4-10G	4 x SFP/SFP+ Network Module for 48-port copper models, mGig models, 10 GE fiber models
C3850-NM-8-10G	8 x SFP/SFP+ Network Module for mGig models, 24-port 10 GE fiber models
C3850-NM-2-40G	2 x QSFP Network Module for mGig models, 24-port 10 G fiber models



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Connect - Switches - Cisco Catalyst Switches
Cisco Catalyst 3650/3850 Series



Overview

Platform Spec (3650)

Platform Spec (3850)

Licenses & Accessories

Bundles

Cisco Catalyst 3650 Series Bundles

Product SKU	Service (CSE) SKU	Bundle		
		Model	Access Point Licenses	Cisco IOS
WS-C3650-24PWS-S	CON-SMBS-WSC365WS	WS-C3650-24PS-S	5	IP Base
WS-C3650-24PWD-S	CON-SMBS-WSC3652WD	WS-C3650-24PD-S	5	IP Base
WS-C3650-48PWS-S	CON-SMBS-WSC36548	WS-C3650-48PS-S	5	IP Base
WS-C3650-48PWD-S	CON-SMBS-WS8W654S	WS-C3650-48PD-S	5	IP Base
WS-C3650-48PWQ-S	CON-SMBS-WSCQ3654	WS-C3650-48PQ-S	5	IP Base
WS-C3650-48FWS-S	CON-SMBS-WSC3654W	WS-C3650-48FS-S	5	IP Base
WS-C3650-48FWD-S	CON-SMBS-WSC3654D	WS-C3650-48FD-S	5	IP Base
WS-C3650-48FWQ-S	CON-SMBS-WSC3654Q	WS-C3650-48FQ-S	5	IP Base

Cisco Catalyst 3650 Series Bundles

Product SKU	Service (CSE) SKU	Bundle			
		Model	Network Module	Access Point Licenses	Cisco IOS
WS-C3850-24PW-S	CON-SMBS-WSC24PWS	WS-C3850-24P-S	-	5	IP Base
WS-C3850-24UW-S	CON-SMBS-WSC38524	WS-C3850-24U-S	-	5	IP Base
WS-C3850-24XUW-S	CON-SMBS-WSC382XS	WS-C3850-24XU-S	-	5	IP Base
WS-C3850-48W-S	CON-SMBS-WSC385WS	WS-C3850-48P-S	-	5	IP Base
WS-C3850-48PW-S	CON-SMBS-WSC48PWS	WS-C3850-48F-S	-	5	IP Base
WS-C3850-48UW-S	CON-SMBS-WSC38548	WS-C3850-48U-S	-	5	IP Base
WS-C3850-12X48UW-S	CON-SMBS-WSC3851W	WS-C3850-12X48U-S	-	5	IP Base
WS-C3850-16XS-S	CON-SMBS-WS3850XS	WS-C3850-12XS-S	C3850-NM-4-10G	5	IP Base
WS-C3850-16XS-E	CON-SMBS-WSC3858X	WS-C3850-12XS-E	C3850-NM-4-10G	5	IP Services
WS-C3850-32XS-S	CON-SMBS-WSC385X2	WS-C3850-24XS-S	C3850-NM-8-10G	5	IP Base
WS-C3850-32XS-E	CON-SMBS-WSC3853X	WS-C3850-24XS-E	C3850-NM-8-10G	5	IP Services

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Positioning Map

Platform Spec

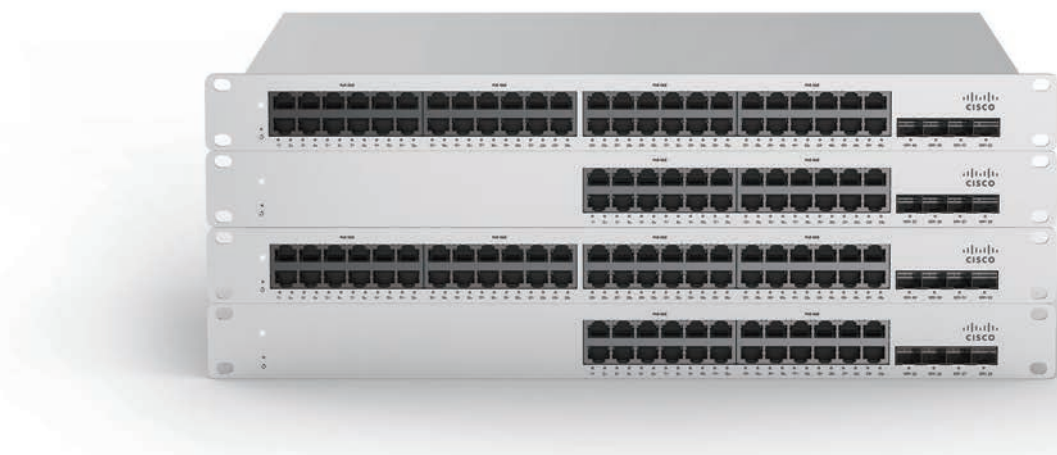
Licenses & Accessories

True Zero-Touch Cloud Provisioning, Network Visibility, and Remote Troubleshooting

The **Cisco Meraki MS Cloud Managed Switches** offer true zero-touch provisioning, can be pre-staged and configured entirely from a web browser. The Meraki management experience accelerates and simplifies the work of the network engineer.

Troubleshooting network issues, especially on remote locations, can significantly add to the cost of running this mission critical service. Meraki MS switches provide groundbreaking tools for remote troubleshooting, so that scaling a Meraki network need not mean scaling complexity.

The Meraki MS switches include features for streamlining the work of the network engineer, from deployment to security to troubleshooting.



Highlights

- **Multigigabit Ethernet:** Provide the higher performance demanded by the latest access points over existing cabling.
- **Flexible Stacking:** Simultaneously configure thousands of ports across standalone and physically stacked switches, regardless of location.
- **Layer 7 Visibility:** Meraki MS switches make it easy to understand how valuable network resources are being used.
- **Layer 3 Scalability:** Build large, resilient networks using dynamic routing protocols and warm spare technology.
- **Voice & Video QoS:** Give latency sensitive applications the priority and bandwidth they deserve with configurable QoS.
- **Network Topology:** View the network in real-time, showing devices and their connections and even monitor network-wide health.
- **Remote Live Tools:** Powerful tools for identifying and correcting issues, even from thousands of miles away.
- **Enterprise Security:** Protect the wired network from both external and internal threats.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X










3650/3850

Meraki MS

Wireless

Routers

Services

Core	  <p>MS410 Series MS425 Series</p>
Premium Access (Layer 3)	  <p>MS250 Series MS350 Series</p>
Access (Layer 2+)	  <p>MS210 Series MS225 Series</p>
Access (Layer 2)	 <p>MS120 Series</p>
Compact	  <p>MS120-8 MS220-8</p>
<p>Performance → High</p>	

Cisco Meraki MS Cloud Managed Switches



Overview

Positioning Map

Platform Spec

Licenses & Accessories

Cisco Meraki MS120 Compact Series

Product SKU	Switching Capacity	Downlinks	Uplinks		PoE			Power Supply			Fan less	Stackable		Rack Mount
		GE	SFP	SFP+	Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS		Virtual	Physical	
MS120-8-HW	20 Gbps	8	2	-	-	-	-	External	-	-	●	●	-	-*1
MS120-8LP-HW	20 Gbps	8	2	-	8	67 W	af/at	External	-	-	●	●	-	-*1
MS120-8FP-HW	20 Gbps	8	2	-	8	124 W	af/at	Internal	-	-	●	●	-	-*1

*1 Wall or utility board mountable with included mount hardware.

Cisco Meraki MS220 Compact Series

Product SKU	Switching Capacity	Downlinks	Uplinks		PoE			Power Supply			Fan less	Stackable		Rack Mount
		GE	SFP	SFP+	Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS		Virtual	Physical	
MS220-8-HW	20 Gbps	8	2	-	-	-	-	Internal	-	-	●	●	-	-*1
MS220-8P-HW	20 Gbps	8	2	-	8	124 W	af/at	Internal	-	-	●	●	-	-*1

*1 Wall or utility board mountable with included mount hardware.



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Overview

Positioning Map

Platform Spec

Licenses & Accessories

Cisco Meraki MS120 Series

Product SKU	Switching Capacity	Downlinks	Uplinks		PoE			Power Supply			Fan less	Stackable		Rack Mount
		GE	SFP	SFP+	Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS		Virtual	Physical	
MS120-24-HW	56 Gbps	24	4	-	-	-	-	Internal	-	-	●	●	-	●
MS120-24P-HW	56 Gbps	24	4	-	24	370 W	af/at	Internal	-	-	-	●	-	●
MS120-48-HW	104 Gbps	48	4	-	-	-	-	Internal	-	-	●	●	-	●
MS120-48LP-HW	104 Gbps	48	4	-	48	370 W	af/at	Internal	-	-	-	●	-	●
MS120-48FP-HW <small>NEW</small>	104 Gbps	48	4	-	48	740 W	af/at	Internal	-	-	-	●	-	●

Cisco Meraki MS210 Series

Product SKU	Switching Capacity	Downlinks	Uplinks		PoE			Power Supply			Fan less	Stackable		Rack Mount
		GE	SFP	SFP+	Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS		Virtual	Physical	
MS210-24-HW	128 Gbps	24	4	-	-	-	-	Internal	●	-	●	●	80 Gbps	●
MS210-24P-HW	128 Gbps	24	4	-	24	370 W	af/at	Internal	●	-	-	●	80 Gbps	●
MS210-48-HW	176 Gbps	48	4	-	-	-	-	Internal	●	-	●	●	80 Gbps	●
MS210-48LP-HW	176 Gbps	48	4	-	48	370 W	af/at	Internal	●	-	-	●	80 Gbps	●
MS210-48FP-HW	176 Gbps	48	4	-	48	740 W	af/at	Internal	●	-	-	●	80 Gbps	●

Cisco Meraki MS225 Series

Product SKU	Switching Capacity	Downlinks	Uplinks		PoE			Power Supply			Fan less	Stackable		Rack Mount
		GE	SFP	SFP+	Ports	Power Budget	IEEE 802.3	Default PS	Ext RPS	Dual PS		Virtual	Physical	
MS225-24-HW	128 Gbps	24	-	4	-	-	-	Internal	●	-	●	●	80 Gbps	●
MS225-24P-HW	128 Gbps	24	-	4	24	370 W	af/at	Internal	●	-	●	●	80 Gbps	●
MS225-48-HW	176 Gbps	48	-	4	-	-	-	Internal	●	-	●	●	80 Gbps	●
MS225-48LP-HW	176 Gbps	48	-	4	48	370 W	af/at	Internal	●	-	●	●	80 Gbps	●
MS225-48FP-HW	176 Gbps	48	-	4	48	740 W	af/at	Internal	●	-	●	●	80 Gbps	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services



Cisco Meraki MS Cloud Managed Switches



Overview

Positioning Map

Platform Spec

Licenses & Accessories

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Cisco Meraki Enterprise Licenses for Cisco Meraki MS120 Compact Series

Product SKU					Compatible Models
1-Year	3-Years	5-Years	7-Years	5-Years	
LIC-MS120-8-1YR	LIC-MS120-8-3YR	LIC-MS120-8-5YR	LIC-MS120-8-7YR	LIC-MS120-8-10YR	MS120-8
LIC-MS120-8LP-1YR	LIC-MS120-8LP-3YR	LIC-MS120-8LP-5YR	LIC-MS120-8LP-7YR	LIC-MS120-8LP-10YR	MS120-8LP
LIC-MS120-8FP-1YR	LIC-MS120-8FP-3YR	LIC-MS120-8FP-5YR	LIC-MS120-8FP-7YR	LIC-MS120-8FP-10YR	MS120-8FP

Cisco Meraki Enterprise Licenses for Cisco Meraki MS220 Compact Series

Product SKU					Compatible Models
1-Year	3-Years	5-Years	7-Years	5-Years	
LIC-MS220-8-1YR	LIC-MS220-8-3YR	LIC-MS220-8-5YR	LIC-MS220-8-7YR	LIC-MS220-8-10YR	MS220-8
LIC-MS220-8P-1YR	LIC-MS220-8P-3YR	LIC-MS220-8P-5YR	LIC-MS220-8P-7YR	LIC-MS220-8P-10YR	MS220-8P

Cisco Meraki Enterprise Licenses for Cisco Meraki MS120 Series

Product SKU					Compatible Models
1-Year	3-Years	5-Years	7-Years	5-Years	
LIC-MS120-24-1YR	LIC-MS120-24-3YR	LIC-MS120-24-5YR	LIC-MS120-24-7YR	LIC-MS120-24-10YR	MS120-24
LIC-MS120-24P-1YR	LIC-MS120-24P-3YR	LIC-MS120-24P-5YR	LIC-MS120-24P-7YR	LIC-MS120-24P-10YR	MS120-24P
LIC-MS120-48-1YR	LIC-MS120-48-3YR	LIC-MS120-48-5YR	LIC-MS120-48-7YR	LIC-MS120-48-10YR	MS120-48
LIC-MS120-48LP-1YR	LIC-MS120-48LP-3YR	LIC-MS120-48LP-5YR	LIC-MS120-48LP-7YR	LIC-MS120-48LP-10Y	MS120-48LP
LIC-MS120-48FP-1YR	LIC-MS120-48FP-3YR	LIC-MS120-48FP-5YR	LIC-MS120-48FP-7YR	LIC-MS120-48FP-10Y	MS120-48FP

Cisco Meraki MS Cloud Managed Switches



Overview

Positioning Map

Platform Spec

Licenses & Accessories

Cisco Meraki Enterprise Licenses for Cisco Meraki MS210 Series

Product SKU					Compatible Models
1-Year	3-Years	5-Years	7-Years	5-Years	
LIC-MS210-24-1YR	LIC-MS210-24-3YR	LIC-MS210-24-5YR	LIC-MS210-24-7YR	LIC-MS210-24-10YR	MS210-24
LIC-MS210-24P-1YR	LIC-MS210-24P-3YR	LIC-MS210-24P-5YR	LIC-MS210-24P-7YR	LIC-MS210-24P-10YR	MS210-24P
LIC-MS210-48-1YR	LIC-MS210-48-3YR	LIC-MS210-48-5YR	LIC-MS210-48-7YR	LIC-MS210-48-10YR	MS210-48
LIC-MS210-48FP-1YR	LIC-MS210-48FP-3YR	LIC-MS210-48FP-5YR	LIC-MS210-48FP-7YR	LIC-MS210-48FP-10Y	MS210-48LP
LIC-MS210-48LP-1YR	LIC-MS210-48LP-3YR	LIC-MS210-48LP-5YR	LIC-MS210-48LP-7YR	LIC-MS210-48LP-10Y	MS210-48FP

Cisco Meraki Enterprise Licenses for Cisco Meraki MS225 Series

Product SKU					Compatible Models
1-Year	3-Years	5-Years	7-Years	5-Years	
LIC-MS225-24-1YR	LIC-MS225-24-3YR	LIC-MS225-24-5YR	LIC-MS225-24-7YR	LIC-MS225-24-10YR	MS225-24
LIC-MS225-24P-1YR	LIC-MS225-24P-3YR	LIC-MS225-24P-5YR	LIC-MS225-24P-7YR	LIC-MS225-24P-10YR	MS225-24P
LIC-MS225-48-1YR	LIC-MS225-48-3YR	LIC-MS225-48-5YR	LIC-MS225-48-7YR	LIC-MS225-48-10YR	MS225-48
LIC-MS225-48FP-1YR	LIC-MS225-48FP-3YR	LIC-MS225-48FP-5YR	LIC-MS225-48FP-7YR	LIC-MS225-48FP-10Y	MS225-48LP
LIC-MS225-48LP-1YR	LIC-MS225-48LP-3YR	LIC-MS225-48LP-5YR	LIC-MS225-48LP-7YR	LIC-MS225-48LP-10Y	MS225-48FP

Cisco Redundant Power System (RPS) 2300

Product SKU	Description
PWR-RPS2300	Cisco RPS 2300 Chassis (No Power Supply)
C3K-PWR-750WAC	Cisco RPS 2300 750 W AC Power Supply
CAB-RPS2300-E=	Cisco RPS 2300 cable

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

SF/SG

Catalyst

2960-CX/3560-CX

2960-L

2960-X

3650/3850

Meraki MS

Wireless

Routers

Services

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services



Cisco 3504 Wireless Controller



AIR-CT3504-K9

Optimized for 11ac Wave 2	4 Gbps Max Throughput	150 Max APs	3,000 Max Clients	Central Mode	FlexConnect	Mesh	FlexConnect + Mesh	OfficeExtend
1-port mGig	2-port GE PoE+	2-port GE	Fanless	Desktop	Optional Side-by-Side Rack Mount			

Featured Products

Portfolio

Management Platform	Access Points		Switches	Controllers	Cloud
	Single Point Setup	Mobility Express			
Components	<p>Wireless Access Points (WAP)</p>	<p>Aironet Access Points</p>	<p>Catalyst Switches</p> <p>Aironet Access Points</p>	<p>Wireless Controllers</p> <p>Aironet Access Points</p>	<p>Meraki MR Cloud Managed Access Points</p>
Highlights	<ul style="list-style-type: none"> Supports 16 APs (500 Series WAP) No license requirement 	<ul style="list-style-type: none"> Supports 100 APs, 2,000 clients (Aironet 2800/3800) No license requirement 	<ul style="list-style-type: none"> Supports 100 APs, 2,000 clients (Catalyst 3850) Converged wired and wireless access for operational simplicity and scale 	<ul style="list-style-type: none"> Supports 150 APs, 3,000 clients (WC 3504) Supports various deployment modes: central, distributed, and mesh 	<ul style="list-style-type: none"> Provides unified visibility and control of the entire network via a single dashboard: not only wireless, but also switching, and security appliances
Cisco Start Products	<ul style="list-style-type: none"> Cisco 100 Series Wireless Access Points (WAP)*¹ Cisco 300 Series Wireless Access Points (WAP) Cisco 500 Series Wireless Access Points (WAP) 	<ul style="list-style-type: none"> Cisco Aironet 1800 Series*² Cisco Aironet 2800 Series Cisco Aironet 3800 Series 	<ul style="list-style-type: none"> Cisco Catalyst 3650 Series Cisco Catalyst 3850 Series 	<ul style="list-style-type: none"> Cisco 3504 Wireless Controller Cisco Aironet 1800 Series Cisco Aironet 2800 Series Cisco Aironet 3800 Series 	<ul style="list-style-type: none"> Cisco Meraki MR20 Cisco Meraki MR30H Cisco Meraki MR33 Cisco Meraki MR42 Cisco Meraki MR42E

*1 Cisco WAP125/131 do not support Single Point Setup.

*2 Cisco Aironet 1815t does not support Mobility Express.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Cisco Wireless Access Points (WAP)



Overview

Positioning Map

Platform Spec

High-Performance, Easy-to-Deploy, and Highly Secure Business-Class Wireless

Today Wi-Fi is the primary way for mobile access; small to medium-sized businesses are now looking for simple, yet easy-to-deploy Wi-Fi networks where they can provide the best experience to their employees and customers. To stay productive, they need dependable, business-class access to network applications throughout the office.

The [Cisco Wireless Access Points \(WAP\)](#) provide a simple, cost-effective way to extend highly secure, high-performance mobile networking to your employees and guests, so they can stay connected anywhere in the office, regardless of what mobile devices they use.



Highlights

- IEEE 802.11ac Wave 2-compatible (WAP581)
- IEEE 802.11ac Wave 1-compatible (most models)
- Multigigabit uplink (WAP581)
- Dual GE uplinks (WAP571/581)
- PoE/PoE+ input (all models)
- PoE output (WAP361)
- Built-in managed switch (WAP361)
- Integrated wireless spectrum analysis tool (WAP581)
- [Single Point Setup](#) for easy, cost-effective deployment of multiple access points (most models)
- Easy to set up and use with wizard-based configuration (all models)

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Cisco Wireless Access Points (WAP)



Overview

Positioning Map

Platform Spec

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

1.7 Gbps			 WAP581
1.3 Gbps		 WAP571  WAP571E  WAP371	
867 Mbps		 WAP125  WAP361  WAP150	
450 Mbps	 WAP561		
300 Mbps	 WAP121  WAP131		
	11n	11ac Wave 1	11ac Wave 2

Cisco Wireless Access Points (WAP)



Overview

Positioning Map

Platform Spec

Cisco 100 Series Wireless Access Points (WAP)

Product SKU	Service (CSE) SKU	IEEE 802			2.4 GHz	5 GHz	Concurrent Radios	Active Clients per Radio	APs per Cluster (SPS)	Ports			PoE (PD) ^{*1}		AC Power
		11n	11ac Wave 1	11ac Wave 2						FE	GE	mGig	802.3af	802.3at	
WAP121-x-K9-xx	-	●	-	-	●	-	-	16	-	1	-	-	●	●	External
WAP125-x-K9-xx	CON-SMBS-WAP12K9x	●	●	-	●	●	-	16	-	-	1	-	●	●	External
WAP131-x-K9-xx	CON-SMBS-WAP131AK	●	-	-	●	●	●	16	-	-	1	-	●	●	External
WAP150-x-K9-xx	CON-SMBS-WAP159xx	●	●	-	●	●	●	16	4	-	1	-	●	●	External

*1 Power Adapter (included) or Power Injector is required when not using PoE receiving.

Cisco 300 Series Wireless Access Points (WAP)

Product SKU	Service (CSE) SKU	IEEE 802			2.4 GHz	5 GHz	Concurrent Radios	Active Clients per Radio	APs per Cluster (SPS)	Ports			PoE (PD) ^{*1}		AC Power
		11n	11ac Wave 1	11ac Wave 2						FE	GE	mGig	802.3af	802.3at	
WAP361-x-K9	CON-SMBS-WAP361xK	●	●	-	●	●	●	32	8	-	5 ^{*2}	-	● ^{*3}	●	External
WAP371-x-K9	CON-SMBS-WAP71xK9	●	●	-	●	●	●	32	8	-	1	-	● ^{*3}	●	External

*1 Power Adapter or Power Injector is required when not using PoE receiving.

*2 GE PoE (PSE) x 1 is included. *3 Some features are disabled when powered via 802.3af PoE.

Cisco 500 Series Wireless Access Points (WAP)

Product SKU	Service (CSE) SKU	IEEE 802			2.4 GHz	5 GHz	Concurrent Radios	Active Clients per Radio	APs per Cluster (SPS)	Ports			PoE (PD) ^{*1}		AC Power
		11n	11ac Wave 1	11ac Wave 2						FE	GE	mGig	802.3af	802.3at	
WAP561-x-K9	-	●	●	-	●	●	-	64	16	-	1	-	●	●	-
WAP571-x-K9	CON-SMBS-WAP57xK9	●	●	-	●	●	●	64	16	-	2	-	● ^{*2}	●	-
WAP571E-x-K9	CON-SMBS-WAP571Ex	●	●	-	●	●	●	64	16	-	2	-	● ^{*2}	●	-
WAP581-x-K9	CON-SMBS-WAP581xK	●	●	●	●	●	●	64	16	-	1	1	● ^{*2}	●	-

*1 Power Adapter or Power Injector is required when not using PoE receiving.

*2 Some features are disabled when powered via 802.3af PoE.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Positioning Map

Platform Spec

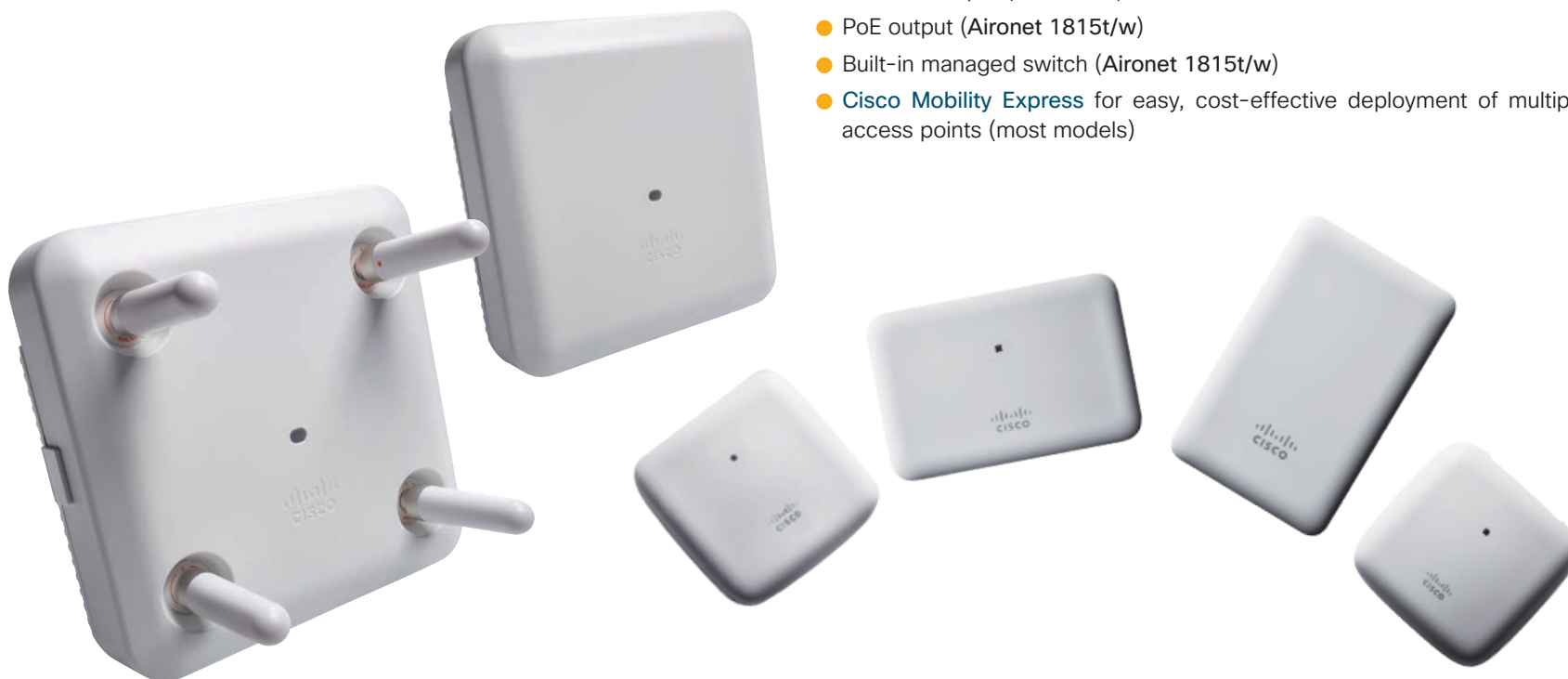
Accessories

Industry-Leading Wireless Performance

Ideal for small and medium-sized networks, the [Cisco Aironet Access Points](#) deliver industry-leading wireless performance with support for the latest Wi-Fi standard, IEEE's new 802.11ac Wave 2 specification, and meet the growing requirements of wireless networks by delivering a better user experience. For organizations paving the way for the new 11ac Wave 2 standard, the Cisco Aironet Access Points are the perfect solution. The access points go beyond getting ready for the new standard, providing the ultimate in flexibility and versatility.

Highlights

- IEEE 802.11ac Wave 2-compatible (all models)
- Dual 5-GHz radios allowing an industry-leading 5.2 Gbps (2 x 2.6 Gbps) over-the-air speeds ([Aironet 2800/3800](#))
- [Cisco High Density Experience \(HDX\)](#) including features such as custom hardware in 11ac Wave 2 radios, [Cisco CleanAir](#), [Cisco ClientLink 4.0](#), cross-access point noise reduction, and an optimized client roaming experience ([Aironet 2800/3800](#))
- Multigigabit uplink ([Aironet 3800](#))
- Dual GE uplinks ([Aironet 1850/2800/3800](#))
- PoE/PoE+ input (all models)
- PoE output ([Aironet 1815t/w](#))
- Built-in managed switch ([Aironet 1815t/w](#))
- [Cisco Mobility Express](#) for easy, cost-effective deployment of multiple access points (most models)



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Positioning Map

Platform Spec

Accessories

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

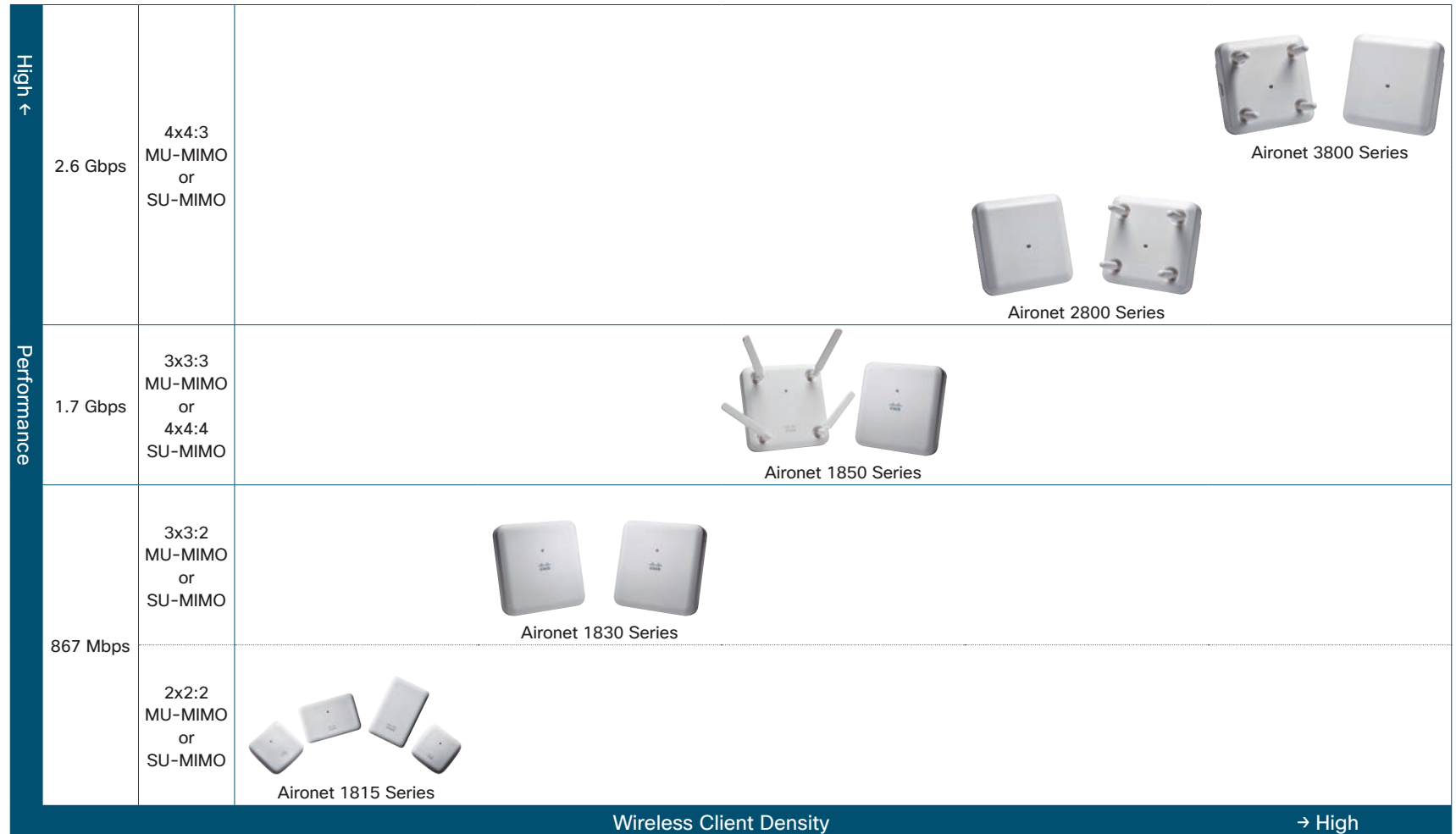
Controllers

Meraki MR

CMX

Routers

Services



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Positioning Map

Platform Spec

Accessories

Cisco Aironet 1815 Series

Product SKU	Service (CSE) SKU	Default Mode ^{*1}		IEEE 802			HDX	Maximum Clients		Ports		PoE (PD) ^{*2}		Antenna
		ME Master	Controller based	11n	11ac Wave 1	11ac Wave 2		w/o ClientLink	with ClientLink	GE	mGig	802.3af	802.3at	
AIR-AP1815I-x-K9C	CON-SMBS-xxxx	●	-	●	●	●	-	400	-	1	-	●	●	Internal
AIR-AP1815I-x-K9	CON-SMBS-xxxx	-	●	●	●	●	-	400	-	1	-	●	●	Internal
AIR-AP1815M-x-K9C	CON-SMBS-xxxx	●	-	●	●	●	-	400	-	1	-	●	●	Internal
AIR-AP1815M-x-K9	CON-SMBS-xxxx	-	●	●	●	●	-	400	-	1	-	●	●	Internal
AIR-AP1815T-x-K9	CON-SMBS-xxxx	-	● ^{*3}	●	●	●	-	400	-	4	-	-	-	Internal
AIR-AP1815W-x-K9C	CON-SMBS-xxxx	●	-	●	●	●	-	400	-	4 ^{*4}	-	● ^{*5}	●	Internal
AIR-AP1815W-x-K9	CON-SMBS-xxxx	-	●	●	●	●	-	400	-	4 ^{*4}	-	● ^{*5}	●	Internal

*1 Mode migration is supported. *2 Power Adapter or Power Injector is required when not using PoE receiving.

*3 Mode migration is not supported. *4 Local GE x 2 and PoE power supplying local GE x 1 are included.

*5 Some features are disabled when powered via 802.3af PoE.

Cisco Aironet 1830 Series

Product SKU	Service (CSE) SKU	Default Mode ^{*1}		IEEE 802			HDX	Maximum Clients		Ports		PoE (PD) ^{*2}		Antenna
		ME Master	Controller based	11n	11ac Wave 1	11ac Wave 2		w/o ClientLink	with ClientLink	GE	mGig	802.3af	802.3at	
AIR-AP1832I-x-K9C	CON-SMBS-xxxx	●	-	●	●	●	-	400	-	1	-	● ^{*3}	●	Internal
AIR-AP1832I-x-K9	CON-SMBS-xxxx	-	●	●	●	●	-	400	-	1	-	● ^{*3}	●	Internal

*1 Mode migration is supported. *2 Power Adapter or Power Injector is required when not using PoE receiving.

*3 Some features are disabled when powered via 802.3af PoE.

Cisco Aironet 1850 Series

Product SKU	Service (CSE) SKU	Default Mode ^{*1}		IEEE 802			HDX	Maximum Clients		Ports		PoE (PD) ^{*2}		Antenna
		ME Master	Controller based	11n	11ac Wave 1	11ac Wave 2		w/o ClientLink	with ClientLink	GE	mGig	802.3af	802.3at	
AIR-AP1852I-x-K9C	CON-SMBS-xxxx	●	-	●	●	●	-	400	-	2	-	● ^{*3}	●	Internal
AIR-AP1852I-x-K9	CON-SMBS-xxxx	-	●	●	●	●	-	400	-	2	-	● ^{*3}	●	Internal
AIR-AP1852E-x-K9C	CON-SMBS-xxxx	●	-	●	●	●	-	400	-	2	-	● ^{*3}	●	External
AIR-AP1852E-x-K9	CON-SMBS-xxxx	-	●	●	●	●	-	400	-	2	-	● ^{*3}	●	External

*1 Mode migration is supported. *2 Power Adapter or Power Injector is required when not using PoE receiving.

*3 Some features are disabled when powered via 802.3af PoE.

Overview

Positioning Map

Platform Spec

Accessories

Cisco Aironet 2800 Series

Product SKU	Service (CSE) SKU	Default Mode ^{*1}		IEEE 802			HDX	Maximum Clients		Ports		PoE (PD) ^{*2}		Antenna
		ME Master	Controller based	11n	11ac Wave 1	11ac Wave 2		w/o ClientLink	with ClientLink	GE	mGig	802.3af	802.3at	
AIR-AP2802I-x-K9C	-	●	-	●	●	●	●	400	256	2	-	● ^{*3}	●	Internal
AIR-AP2802I-x-K9	-	-	●	●	●	●	●	400	256	2	-	● ^{*3}	●	Internal
AIR-AP2802E-x-K9C	-	●	-	●	●	●	●	400	256	2	-	● ^{*3}	●	External
AIR-AP2802E-x-K9	-	-	●	●	●	●	●	400	256	2	-	● ^{*3}	●	External

*1 Mode migration is supported. *2 Power Injector is required when not using PoE receiving.

*3 Some features are disabled when powered via 802.3af PoE.

Cisco Aironet 3800 Series

Product SKU	Service (CSE) SKU	Default Mode ^{*1}		IEEE 802			HDX	Maximum Clients		Ports		PoE (PD) ^{*2}		Antenna
		ME Master	Controller based	11n	11ac Wave 1	11ac Wave 2		w/o ClientLink	with ClientLink	GE	mGig	802.3af	802.3at	
AIR-AP3802I-x-K9C	-	●	-	●	●	●	●	400	256	1	1	● ^{*3}	●	Internal
AIR-AP3802I-x-K9	-	-	●	●	●	●	●	400	256	1	1	● ^{*3}	●	Internal
AIR-AP3802E-x-K9C	-	●	-	●	●	●	●	400	256	1	1	● ^{*3}	●	External
AIR-AP3802E-x-K9	-	-	●	●	●	●	●	400	256	1	1	● ^{*3}	●	External
AIR-AP3802P-x-K9C	-	●	-	●	●	●	●	400	256	1	1	● ^{*3}	●	External
AIR-AP3802P-x-K9	-	-	●	●	●	●	●	400	256	1	1	● ^{*3}	●	External

*1 Mode migration is supported. *2 Power Injector is required when not using PoE receiving.

*3 Some features are disabled when powered via 802.3af PoE.



What is Meant by a "x" Included in the SKU

Country ^{*1}	Australia	Brunei	China	Fiji	Hong Kong	India	Indonesia	Japan	Korea	Macau
x (Regulatory Domain)	Z	S	H	N	N, S	D, N	F	Q	K	C, S

Country ^{*1}	Malaysia	Mongolia	New Zealand	Pakistan	Philippines	Singapore	Sri Lanka	Taiwan	Thailand	Vietnam
x (Regulatory Domain)	C, K	E, H	Z	C, G	A	S	E	T	E, S	E, S

*1 Customers are responsible for verifying approval for use in their individual countries.

To verify approval that corresponds to a particular country, or the regulatory domain used in a specific country, see <http://www.cisco.com/go/aironet/compliance>.
Not all models available for all regulatory domains. Not all regulatory domains have been approved. As they are approved, the SKU will be available on the Global Price List.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Positioning Map

Platform Spec

Accessories

Cisco Aironet Power Injectors & Power Supplies

Product SKU	Description	Compatible Models												
		1815i	1815m	1815t	1815w	1830i	1850i	1850e	2800i	2800e	3800i	3800e	3800p	
AIR-PWRINJ5=	Power Injector (802.3af)	●	●	-	●	●*1	●*1	●*1	-	-	-	-	-	
AIR-PWRINJ6=	Power Injector (802.3at)	●	●	-	●	●	●	●	●	●	●	●	●	
AIR-PWR-C=	Power Supply (Black)	-	-	-	-	●	●	●	-	-	-	-	-	
AIR-PWR-D=	Power Supply (White)	-	-	●	-	●	●	●	-	-	-	-	-	
AIR-PWR-50=	Power Supply (White)	-	-	-	-	-	-	-	-	-	●	●	●	

*1 Some features are disabled.

Cisco Aironet Antennas

Product SKU	Description	Compatible Models												
		1815i	1815m	1815t	1815w	1830i	1850i	1850e	2800i	2800e	3800i	3800e	3800p	
AIR-ANT2524DB-R	Dual-Band Dipole Antenna (Black)	-	-	-	-	-	-	●	-	●	-	●	●	
AIR-ANT2524DG-R	Dual-Band Dipole Antenna (Gray)	-	-	-	-	-	-	●	-	●	-	●	●	
AIR-ANT2524DW-R	Dual-Band Dipole Antenna (White)	-	-	-	-	-	-	●	-	●	-	●	●	
AIR-ANT2535SDW-R	Short Dual-Band Omni Antenna (White)	-	-	-	-	-	-	●	-	●	-	●	●	
AIR-ANT2524V4C-R	Dual-Band Ceiling Mount Omnidirectional Antenna	-	-	-	-	-	-	●	-	●	-	●	●	
AIR-ANT2544V4M-R	Dual-Band Wall-Mounted Omnidirectional Antenna	-	-	-	-	-	-	●	-	●	-	●	●	
AIR-ANT2566P4W-R	Dual-Band Patch Antenna	-	-	-	-	-	-	●	-	●	-	●	●	
AIR-ANT2566D4M-R	Dual-Band Polarization-Diverse Directional Array Antenna	-	-	-	-	-	-	●	-	●	-	●	●	
AIR-ANT2513P4M-N	Dual-Band Polarization-Diverse Array Antenna	-	-	-	-	-	-	-	-	-	-	-	●	

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Positioning Map

Platform Spec

Licenses & Accessories

Centralized Control, Management, and Troubleshooting for Small to Medium-Sized Wireless Networks

The **Cisco Wireless Controllers** provide centralized control, management, and troubleshooting for small to medium-sized enterprises and branch offices. They offer flexibility to support multiple deployment modes in the same controller—a centralized mode for campus environments, Cisco FlexConnect mode for lean branches managed over the WAN, and a mesh (bridge) mode for deployments in which full Ethernet cabling is unavailable.

Highlights

- Flexibility to configure wireless policy, management or security settings at any time
- Faster response to business needs by centrally managing wireless networks
- Standardized access point configuration for software versioning
- Networkwide quality of service (QoS) for voice and video across wired and wireless networks
- Networkwide centralized security policies across wired and wireless networks



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Positioning Map

Platform Spec

Licenses & Accesories

Appliance



3504 Wireless Controller

NEW



5520 Wireless Controller



8540 Wireless Controller

Virtual Machine



Virtual Wireless Controller

Switch



Catalyst 3650 Series



Catalyst 3850 Series

Access Point
(Mobility Express)



Aironet 1815/1830/1850 Series



Aironet 2800/3800 Series

Maximum Access Points

→ More

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Positioning Map

Platform Spec

Licenses & Accesories

Cisco Aironet 1815/1830/1850/2800/3800 Series Access Points

Series Name	Deployment Mode						Managed Access Points		Clients	RF Tags	Through-put	Ports ^{*1}		Rack Mount
	Central	Flex Connect	Mesh	Flex Connect + Mesh	Office Extend	Mobility Express	Default	Maximum						
Aironet 1815/1830/1850	-	-	-	-	-	●	50	50	1,000	-	1 Gbps	-	-	-
Aironet 2800/3800	-	-	-	-	-	●	100	100	2,000	-	1 Gbps	-	-	-

*1 Depends on models.

Cisco Catalyst 3650/3850 Series Switches

Series Name	Models	Deployment Mode						Managed Access Points		Clients	RF Tags	Through-put	Ports ^{*1}		Rack Mount
		Central	Flex Connect	Mesh	Flex Connect + Mesh	Office Extend	Mobility Express	Default	Maximum				GE	mGig	
Catalyst 3650	24-Port Copper	●	-	-	-	-	-	0	50	1,000	1,000	20 Gbps	-	-	1 RU
	48-Port Copper	●	-	-	-	-	-	0	50	1,000	1,000	40 Gbps	-	-	1 RU
Catalyst 3850	24-Port Copper 1 GE Fiber	●	-	-	-	-	-	0	100	2,000	1,000	20 Gbps	-	-	1 RU
	48-Port Copper 10 GE Fiber	●	-	-	-	-	-	0	100	2,000	1,000	40 Gbps	-	-	1 RU

*1 Depends on models.

Cisco 3504 Wireless Controller NEW

Product SKU	Service (CSE) SKU	Deployment Mode						Managed Access Points		Clients	RF Tags	Through-put	Ports		Rack**1 Mount
		Central	Flex Connect	Mesh	Flex Connect + Mesh	Office Extend	Mobility Express	Default	Maximum				GE	mGig	
AIR-CT3504-K9	-	●	●	●	●	●	-	0	150	3,000	1,500	4 Gbps	4	1	1 RU

*1 Rack Mount Bracket (AIR-3504-RMNT=) is required.

Cisco Wireless Controllers



Overview

Positioning Map

Platform Spec

Licenses & Accessories

Cisco Catalyst 3650/3850 Series Switches License*1

Product SKU	Description
L-LIC-CTIOS-1A	1 Access Point Adder License

*1 L-LIC-CT3650-UPG is required for Catalyst 3650.
L-LIC-CT3850-UPG is required for Catalyst 3850.

Cisco 3504 Wireless Controller License*1

Product SKU	Description
LIC-CT3504-1A	1 Access Point Adder License

*1 LIC-CT3504-UPG is required.

Cisco 3504 Wireless Controller Rack Mount Bracket

Product SKU	Description
AIR-3504-RMNT=	Rack Mount Bracket



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Cisco Meraki MR Cloud Managed Access Points



Overview

Positioning Map

Platform Spec

Licenses & Accessories

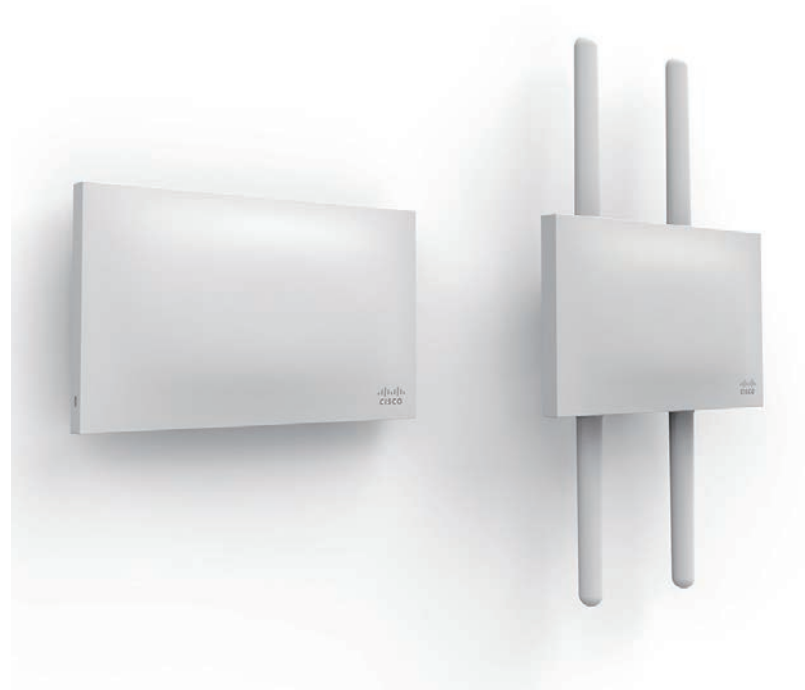
100 % Cloud Managed for Faster Deployment, Simplified Administration, and Richer Visibility

The **Cisco Meraki MR Cloud Managed Access Points** are built from the highest grade components and carefully optimized for a seamless user experience. The outcome: faster connections, greater user capacity, more coverage, and fewer support calls.

The Cisco Meraki wireless solution includes a complete, robust feature set right out of the box. No additional purchase required.

Highlights

- **Centralized Management:** Seamlessly manage campus-wide Wi-Fi deployments and distributed multi-site networks from a single pane-of-glass.
- **Multigigabit Ethernet:** Pass 2.5Gbps of traffic over a single cable in order to take full advantage of high speed 802.11ac Wave 2 wireless.
- **Location Analytics:** Reveal powerful metrics such as visitor capture rate, user visit time, and repeat visits by listening for wireless devices.
- **Application Visibility & Control:** Identify which applications are being used, and then prioritize critical apps while limiting recreational apps.
- **High Capacity 802.11ac:** RF optimization with real-time spectrum analysis enables high performance wireless in dense, demanding environments.
- **Automatic RF Optimization:** Automatically optimize Wi-Fi by measuring channel utilization, signal strength, throughput, and interference.
- **Dedicated Security Radio:** Instantly detects interference, vulnerabilities, and attacks on all channels.
- **Identity-Based Firewall:** Automatically assigns firewall and traffic shaping rules, VLAN tags, and bandwidth limits to enforce the right policies for each class of users.



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Cisco Meraki MR Cloud Managed Access Points



Overview

Positioning Map

Platform Spec

Licenses & Accessories

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet









Controllers

Meraki MR

CMX

Routers

Services

Performance	High ←	Wireless Client Density		
		→ High		
Performance	High ←	1,733 Mbps (5 GHz) + 800 Mbps (2.4 GHz)	4x4:4 MU-MIMO or SU-MIMO	<div><div> MR52</div><div> MR53</div><div> MR53E <small>NEW</small></div></div>
		1,300 Mbps (5 GHz) + 600 Mbps (2.4 GHz)	3x3:3 MU-MIMO or SU-MIMO	<div><div> MR42</div><div> MR42E <small>NEW</small></div></div>
		866 Mbps (5 GHz) + 400 Mbps (2.4 GHz)	2x2:2 MU-MIMO or SU-MIMO	<div><div> MR30H</div><div> MR33</div><div> MR20 <small>NEW</small></div></div>

Cisco Meraki MR Cloud Managed Access Points



Overview

Positioning Map

Platform Spec

Licenses & Accessories

Product SKU	Cloud Man- agement	IEEE 802			2.4 GHz	5 GHz	Concurrent Radios	WIDS/ WIPS	Bluetooth Low Energy	Ports		PoE (PD) ^{*1}		Antenna
		11n	11ac Wave 1	11ac Wave 2						GE	mGig	802.3af	802.3at	
MR20-HW <small>NEW</small>	●	●	●	●	●	●	●	-	-	1	-	●	●	Internal
MR30H-HW	●	●	●	●	●	●	●	●	-	5 ^{*1}	-	● ^{*2}	●	Internal
MR33-HW	●	●	●	●	●	●	●	●	●	1	-	●	●	Internal
MR42-HW	●	●	●	●	●	●	●	●	●	1	-	● ^{*2}	●	Internal
MR42E-HW <small>NEW</small>	●	●	●	●	●	●	●	●	●	1	-	● ^{*2}	●	External

^{*1} Local GE x 3 and PoE power supplying local GE x 1 are included.

^{*2} Some features are disabled when powered via 802.3af PoE.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Positioning Map

Platform Spec

Licenses & Accessories

Cisco Meraki MR Cloud Managed Access Points Enterprise Licenses

Product SKU	Description	Compatible Models				
		MR20	MR30H	MR33	MR42	MR42E
LIC-ENT-1YR	License and Support, 1-Year	●	●	●	●	●
LIC-ENT-3YR	License and Support, 3-Years	●	●	●	●	●
LIC-ENT-5YR	License and Support, 5-Years	●	●	●	●	●
LIC-ENT-7YR	License and Support, 7-Years	●	●	●	●	●
LIC-ENT-10YR	License and Support, 10-Years	●	●	●	●	●

Cisco Meraki MR Cloud Managed Access Points Injectors & Power Supplies

Product SKU	Description	Compatible Models				
		MR20	MR30H	MR33	MR42	MR42E
MA-INJ-4-xx	PoE Injector (802.3at)	●	●	●	●	-
MA-INJ-5-xx	Multigigabit PoE Injector (802.3at)	-	-	-	-	●
MA-PWR-30W-xx	Power Supply	●	-	●	●	●

Cisco Meraki MR Cloud Managed Access Points

Antennas

Product SKU	Description	Compatible Models				
		MR20	MR30H	MR33	MR42	MR42E
MA-ANT-3-A5	Dipole Antenna	-	-	-	-	●
MA-ANT-3-B5	Dipole Antenna (Bendable)	-	-	-	-	●
MA-ANT-3-C5	Panel Omni Antenna	-	-	-	-	●
MA-ANT-3-D5	Downtilt Panel Omni Antenna	-	-	-	-	●
MA-ANT-3-E5	Wide Patch Antenna	-	-	-	-	●
MA-ANT-3-F5	Narrow Patch Antenna	-	-	-	-	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

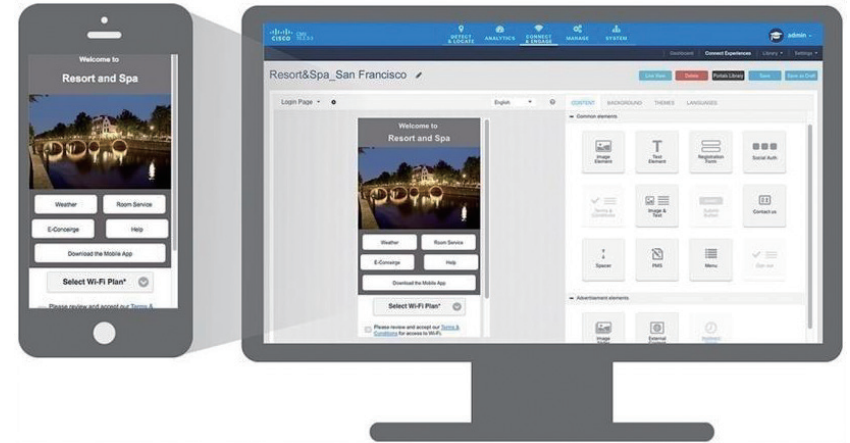
Overview

Licenses

Cloud-Delivered Wi-Fi Guest Access Solution that Engages Visitors and Enables Analytics and Insights

The **Cisco Connected Mobile Experiences (CMX) Cloud** is a cloud-delivered version of the on-premises CMX 10 software. The CMX Cloud revolutionizes the delivery of wireless services, integrating seamlessly with the Cisco wireless infrastructure and creating out-of-the-box capabilities that are intuitive as well as quick and easy to deploy and use. The affordable subscription billing model helps reduce up-front investments in equipment (CapEx) and IT resources. Ultimately, CMX Cloud accelerates how wireless infrastructure can deliver business outcomes by:

- Detecting all Wi-Fi devices that are in the proximity of access points in the venue and providing analytics on their presence, including dwell times, new vs. repeat visitors, peak times, etc.
- Providing a simplified guest access solution to onboard visitors through a custom drag-and-drop portal using various authentication methods (social, self-registration, SMS, guest vouchers, sponsor email approval, etc.).
- Enabling you to engage visitors directly on the guest portal page with external content based on location. Clickable menu items in the captive portal editor create interactive experiences. Alternatively, CMX APIs can be used to engage users via a mobile app.
- Providing the ability to create profile rules to define criteria for in-location personas, for a better understanding of and insights into customers visiting physical locations, enabling the delivery of more personalized engagements and content.
- Turning insights into action by delivering personalized engagements to consumers' mobile devices using the best available channel based on location, user preferences, and type of engagement. Multichannel engagement capabilities include SMS, email, app push notification, and API trigger.



CMX Connect: Guest Portal



CMX Presence Analytics

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Overview

Licenses

Cisco Connected Mobile Experiences (CMX) Cloud Licenses

The **Cisco Connected Mobile Experiences (CMX) Cloud** is an simple and scalable offering which enables delivery of wireless guest access and in-venue analytics, integrating seamlessly with Cisco wireless infrastructure. This cloud-delivered Software-as-a-Service (SaaS) offering is quick to deploy and intuitive to use. It is based on CMX 10.x code and is compatible with **Cisco Wireless Controller Software 7.6 or higher**, and **Cisco Mobility Express Release 8.3 or higher**.

It offers the following services:

- **Connect** (for Guest Access): Providing an easy-to-use guest-access solution for visitors through a custom portal using various authentication methods including social, self-registration, and Short Message Service (SMS).
- **Presence Analytics**: Detecting all Wi-Fi devices (the “devices”) in the venue and providing analytics on their presence, including dwell times, new vs. repeat visitors, and peak time.

Product SKU*1	Description
AIR-CMX-SVC-CX	CMX Cloud Connect License, per Access Point/Month with a 1-, 3-, or 5-Year Initial Term and Annual Renewals
AIR-CMX-SVC-CPAX	CMX Cloud Connect with Presence Analytics License, per Access Point/Month with a 1-, 3-, or 5-Year Initial Term and Annual Renewals

*1 AIR-CMX-CLOUD is required.required.



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

WAP

Aironet

Controllers

Meraki MR

CMX

Routers

Services

Cisco ISR 1100 Series



C1111-8PLTELAWx

IOS XE IP Base	Multicore CPU	Dual GE-WAN	250 Mbps Max Crypto Throughput	LTE Advanced
8-port GE Managed Switch	Optional PoE/PoE+	11ac Wave 2 AP	Mobility Express	

C1111-4P

IOS XE IP Base	Multicore CPU	Dual GE-WAN	125 Mbps Max Crypto Throughput
4-port GE Managed Switch	Optional PoE/PoE+		

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

High → Performance, Function, Flexibility, Scalability



RV Series



ISR 800 Series



ISR 1000 Series



ISR 4000 Series



ASR 1000 Series

Fixed Platforms

Modular Platforms

Overview

Positioning Map

Platform Spec

Secure, Flexible Connectivity for Small Business

The **Cisco RV Series** are affordable, highly secure network access devices, designed and built for small businesses. Cisco offers a broad range of small business routers to meet any requirement from basic Internet connectivity to high-capacity, business-critical networking.

Highlights

- Dual Gigabit Ethernet WAN ports for load balancing and/or business continuity (select models)
- Dual USB ports for storage and 3G/4G modem failover (select models)
- Site-to-site and remote access VPN enable highly secure connectivity, making Cisco RV Series perfect for multiple offices and remote employees.
- Strong security by proven stateful packet inspection (SPI) firewall
- Built-in managed switch (all models)
- Built-in IEEE 802.11n/ac-compatible wireless access point (wireless models)
- Easy to set up and use with wizard-based configuration



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 **NEW**

ISR 4000

Services

Overview

Positioning Map

Platform Spec

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

GE WAN



RV130 WF



RV130W WF



RV130



RV130W



RV134W



RV042G



RV340W



RV340



RV320 WF



RV320



RV345P



RV345



RV325 WF



RV325

FE WAN



RV132W



RV215W



RV042

Performance, Function, Flexibility, Scalability

→ High



Overview

Positioning Map

Platform Spec

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Product SKU	Service (CSE) SKU	WAN Ports				LAN Ports		PoE			IPsec Through-put	IPsec VPN Tunnels		Web Filtering	Wireless				AC Power
		FE	GE	xDSL	3G/4G	FE	GE	Ports	Power Budget	IEEE 802.3		Site-to-Site	Remote Access		11n	11ac	2.4 GHz	5 GHz	
RV042-xx	CON-SMBS-V02xxxxx	2	-	-	-	4	-	-	-	-	59 Mbps	50	50	-	-	-	-	-	External
RV042G-K9-xx	CON-SMBS-RV02G9xx	-	2	-	-	-	4	-	-	-	75 Mbps	50	50	-	-	-	-	-	External
RV130-K9-xx	CON-SMBS-V10K9xxx CON-SMBS-RV1N10K9	-	1	-	1**	-	4	-	-	-	50 Mbps	10	10	-	-	-	-	-	External
RV130-WB-K9-xx	CON-SMBS-V10K9xxx CON-SMBS-RV1N10K9	-	1	-	1**	-	4	-	-	-	50 Mbps	10	10	●	-	-	-	-	External
RV130W-x-K9-xx	CON-SMBS-V10W9xxx	-	1	-	1**	-	4	-	-	-	50 Mbps	10	10	-	●	-	●	-	External
RV130W-x-WB-K9-xx	-	-	1	-	1**	-	4	-	-	-	50 Mbps	10	10	●	●	-	●	-	External
RV132W-x-K9-xx	CON-SMBS-RV13K9xx	1	-	1	1**	3	-	-	-	-	3 Mbps	5	5	-	●	-	●	-	External
RV134W-x-K9-xx	CON-SMBS-RV134Wxx	-	1	1	1**	-	4	-	-	-	20 Mbps	5	5	-	●	●	●	●	External
RV215W-x-K9-xx	CON-SMBS-RV25W9xx	1	-	-	1**	4	-	-	-	-	5 Mbps	1	5	-	●	-	●	-	External
RV320-K9-xx	CON-SMBS-RV30K9xx CON-SMBS-RV320K9x	-	2	-	1**	-	4	-	-	-	100 Mbps	25	25	●	-	-	-	-	External
RV320-WB-K9-xx	CON-SMBS-RV20BKxx	-	2	-	1**	-	4	-	-	-	100 Mbps	25	25	-	-	-	-	-	External
RV325-K9-xx	CON-SMBS-RV35K9xx	-	2	-	1**	-	14	-	-	-	100 Mbps	25	25	-	-	-	-	-	External
RV325-WB-K9-xx	CON-SMBS-RV32WBxx	-	2	-	1**	-	14	-	-	-	100 Mbps	25	25	●	-	-	-	-	External
RV340-K9-xx	CON-SMBS-RV340Kxx	-	2	-	1**	-	4	-	-	-	650 Mbps	50	50	●*2	-	-	-	-	External
RV340W-K9-xx	-	-	2	-	1**	-	4	-	-	-	650 Mbps	50	50	●*2	●	●	●	●	External
RV345-K9-xx	CON-SMBS-V345K9xx	-	2	-	1**	-	16	-	-	-	650 Mbps	50	50	●*2	-	-	-	-	External
RV345P-K9-xx	CON-SMBS-RV345Pxx	-	2	-	1**	-	16	8	120 W	af/at	650 Mbps	50	50	●*2	-	-	-	-	External

*1 3G/4G modem is required. *2 Security License is required.

Overview

Platform Spec

Licenses

Small but Mighty Business-class Routers

Do you have limited space, but need best-in-class routing, voice and video, security, application performance, cloud connection, and wireless capabilities? The [Cisco ISR 800 Series](#) routers offer all that in a single device. They are well suited for customer premises and priced for small and midsize businesses.

Highlights

- Cisco IOS Universal Image ([IP Base/Advanced Security/Advanced IP Services](#))
- Dual WAN ports for load balancing and/or business continuity (select models)
- 4G LTE wireless WAN (select models)
- Built-in managed switch (all models)
- Built-in IEEE 802.11n-compatible wireless access point (wireless models)
- Easy to set up and use with wizard-based configuration ([Cisco Configuration Professional Express](#))



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses

Product SKU	Service (CSE) SKU	Cisco IOS	WAN Ports						LAN Ports		Wireless		AppX	Security		Voice	Rack mount
			FE	GE	GE/SFP	ISDN	xDSL	Voice	FE	GE	AP	4G LTE		FW	VPN		
C819H-K9	CON-SMBS-C819HK9	Advanced IP Services	-	1	-	-	-	-	4	-	-	-	●	●	●	-	_*5
C819G-LTE-LA-K9	CON-SMBS-C819TEK9	Advanced IP Services	-	1	-	-	-	-	4	-	-	●	●	●	●	-	_*5
C819GW-LTE-LA-xK9*1	CON-SMBS-C8QT9GWL	Advanced IP Services	-	1	-	-	-	-	4	-	●	●	●	●	●	-	_*5
C867VAE	CON-SMBS-C867VAE	IP Base	-	1	-	-	1	-	3	2	-	-	-	-	-	-	-
C867VAE-K9	CON-SMBS-C867VAK9	Advanced Security	-	1	-	-	1	-	3	2	-	-	-	●	●	-	-
C881W-x-K9	CON-SMBS-C881WxK9	Advanced Security	1	-	-	-	-	-	4	-	●	-	-	●	●	-	-
C881-V-K9	CON-SMBS-C881VK8	Advanced IP Services	1	-	-	-	-	7*2	4	-	-	-	-	●	●	●*4	-
C891F-K9	CON-SMBS-C891F8BB	Advanced IP Services	1	-	1	1	-	-	-	8	-	-	●*3	●	●	-	_*6
C891-24X/K9	CON-SMBS-C89124K9	Advanced IP Services	-	-	2	-	-	-	-	24	-	-	-	●	●	-	_*7
C892FSP-K9	CON-SMBS-C892FSPK	Advanced IP Services	-	1	1	-	-	-	-	8	-	-	●*3	●	●	-	_*6
C897VA-K9	CON-SMBS-C897VAK9	Advanced IP Services	-	-	1	1	1	-	-	8	-	-	●*3	●	●	-	_*6
C897VAG-LTE-LA-K9	CON-SMBS-CLTEAGK9	Advanced IP Services	-	-	1	-	1	-	-	8	-	●	●*3	●	●	-	_*6
C898EAG-LTE-LA-K9	CON-SMBS-C898EAGA	Advanced IP Services	-	-	1	-	1	-	-	8	-	●	●*3	●	●	-	_*6
C899G-LTE-LA-K9	CON-SMBS-C89LKEGL	Advanced IP Services	-	1	1	-	-	-	-	8	-	●	●*3	●	●	-	_*6

*1 The "x" corresponds to the supported domain. *2 BRI x 2, FXS x 4, FXO x 1. *3 Feature License is required. *4 Call control and messaging are not supported. *5 DIN Rail Mount and Floor/Wall Mount are supported (Optional). *6 ACS-890-RM-19 is required. *7 ACS-2901-RM-19 is required.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services



Overview

Platform Spec

Licenses

Cisco IOS Feature Licenses

Product SKU	Description
L-FL-C800-APP=	Cisco IOS APP License for Cisco ISR 891F/892FSP/897VA/899G
L-FL-CME-SRST-5=	Cisco Unified CME or SRST 5 License for Cisco ISR 881-V

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses

Fixed, High-Performance Routers

The [Cisco ISR 1000 Series](#) routers are best suited for small and midsize businesses, enterprise branches, and as customer premises equipment in managed services environments. The routers come in two models: an 8-LAN-port option and a 4-LAN-port option. There are multiple LAN, WLAN, WAN, and LTE combinations to choose from, depending on your branch needs. The 1000 Series can be used in ATMs, retail stores, and kiosks, as well as for various other purposes.

Highlights

- Cisco IOS XE Universal Image ([IP Base/SEC/AX](#))
- High-performance multicore processors for high-speed WAN connections and multiple services
- Dual WAN ports for load balancing and/or business continuity
- 4G LTE wireless WAN (select models)
- Built-in managed switch (all models)
- Optional integrated power supply for distribution of PoE/PoE+
- Built-in IEEE 802.11ac **Wave 2**-compatible wireless access point (wireless models)
- [Cisco Mobility Express](#) for flexible deployment



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses

Product SKU	Service (CSE) SKU	Cisco IOS	Crypto Throughput		WAN Ports			LAN Ports	Wireless		AppX	Security		Voice	Rack Mount
			Default	Upgradable ^{*1}	GE	GE/SFP	xDSL		AP	4G LTE		FW	VPN		
C1111-4P	CON-SMBS-C11114P	IP Base ^{*3}	50 Mbps	150 Mbps	1	1	-	4	-	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1111-8P	CON-SMBS-C11118P	IP Base ^{*3}	50 Mbps	250 Mbps	1	1	-	8	-	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1111-4PWx ^{*2}	CON-SMBS-C111xW4P ^{*2}	IP Base ^{*3}	50 Mbps	150 Mbps	1	1	-	4	●	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1111-8PWx ^{*2}	CON-SMBS-C111xW8P ^{*2}	IP Base ^{*3}	50 Mbps	250 Mbps	1	1	-	8	●	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1111-4PLTELA	CON-SMBS-C1114PAL	IP Base ^{*3}	50 Mbps	150 Mbps	1	1	-	4	-	●	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1111-8PLTELA	CON-SMBS-C1118PAL	IP Base ^{*3}	50 Mbps	250 Mbps	1	1	-	8	-	●	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1111-8PLTELAwx ^{*2}	CON-SMBS-C11118PW	IP Base ^{*3}	50 Mbps	250 Mbps	1	1	-	8	●	●	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1116-4P	TBD	IP Base ^{*3}	50 Mbps	150 Mbps	-	1	1	4	-	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1117-4P	TBD	IP Base ^{*3}	50 Mbps	150 Mbps	-	1	1	4	-	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1117-4PM	TBD	IP Base ^{*3}	50 Mbps	150 Mbps	-	1	1	4	-	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1117-4PWx ^{*2}	TBD	IP Base ^{*3}	50 Mbps	150 Mbps	-	1	1	4	●	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1117-4PMWx ^{*2}	TBD	IP Base ^{*3}	50 Mbps	150 Mbps	-	1	1	4	●	-	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1117-4PLTELA	TBD	IP Base ^{*3}	50 Mbps	150 Mbps	-	1	1	4	-	●	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}
C1117-4PLTELAwx ^{*2}	TBD	IP Base ^{*3}	50 Mbps	150 Mbps	-	1	1	4	●	●	- ^{*4}	- ^{*5}	- ^{*5}	-	- ^{*6}

*1 Cisco IOS IPsec Performance License and Cisco IOS HSEC License are required. *2 The "x" corresponds to the supported domain.

*3 Cisco IOS SEC License, Cisco IOS APP License, Cisco IOS IPsec Performance License, and Cisco IOS HSEC License can be added. *4 Cisco IOS APP License is required.

*5 Cisco IOS SEC License is required. *6 ACS-1100-RM-19 is required.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses

Cisco IOS Technology Package Licenses

Product SKU	Description
SL-1100-4P-SEC	Cisco IOS SEC License for Cisco ISR 1111 (4-port Model)
SL-1100-8P-SEC	Cisco IOS SEC License for Cisco ISR 1111 (8-port Model)
SL-1100-4P-APP	Cisco IOS APP License for Cisco ISR 1111 (4-port Model)
SL-1100-8P-APP	Cisco IOS APP License for Cisco ISR 1111 (8-port Model)

Cisco IOS Feature Licenses

Product SKU	Description
FL-VPERF-4P-100	Cisco IOS VPER License for Cisco ISR 1111 (4-port Model)
FL-VPERF-8P-200	Cisco IOS VPER License for Cisco ISR 1111 (8-port Model)
FL-1100-4P-HSEC	Cisco IOS HSEC License for Cisco ISR 1111 (4-port Model)
FL-1100-8P-HSEC	Cisco IOS HSEC License for Cisco ISR 1111 (8-port Model)



Cisco IOS Software Licensing and Packaging

A single Cisco IOS XE universal image encompassing all functions is delivered with the platform. Advanced features can be enabled simply by activating a software license on the Universal image. The following licenses are available:

- **IP Base:** Available as the default.
- **Security (SEC):** Includes features for securing network infrastructure.
- **Application Experience (APP):** Includes data and application performance features.
- **Performance (VPER):** Provides additional IPsec performance 100 Mbps for ISR 1100-4P and 200 Mbps for ISR 1100-8P.
- **High Performance Security (HSEC):** Provides High IPsec maximum performance security.

VPER

HSEC

APP

SEC

IP Base

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Meet All Your Needs with One Device

The **Cisco ISR 4000 Series** routers consolidate many must-have IT functions, including network, security, compute, storage, and unified communications. So you get everything you need in a single platform.

The platform is modular and upgradable, so you can add new services without changing equipment. It supports multiple application-aware services concurrently while maintaining WAN performance of up to 2 Gbps, even during heavy traffic loads. The backplane architecture supports high-bandwidth, module-to-module communication at speeds up to 10 Gbps.

Highlights

- Cisco IOS Universal Image ([IP Base/SEC/UC/AX](#))
- High-performance multicore processors for high-speed WAN connections and multiple services
- Separates control- and data-plane operations (Cisco **4431/4451**: the default control-plane memory is 4 GB, upgradable to 16 GB, and the default data-plane memory is 2 GB)
- **Cisco Enhanced Services Module (SM-X)** and **Cisco Network Interface Module (NIM)** integrate networking, services, computing, and storage into a single form factor



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 **NEW**

ISR 4000

Services

Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Product SKU	Service (CSE) SKU	Cisco IOS	Throughput		Ports			Expansion Slots			Default Power Supply	Power Redundancy	Rack Mount
			Default	Upgradable	GE	SFP	GE/SFP	NIM	SM-X	PVDM			
ISR4221/K9	CON-SMBS-ISR4221K	IP Base*1	35 Mbps	75 Mbps	1	-	1	2	-	-	External AC	-	1 RU
ISR4321/K9	CON-SMBS-ISR4321K	IP Base*1	50 Mbps	100 Mbps	1	-	1	2	-	1	External AC	-	1 RU
ISR4331/K9	-	IP Base*1	100 Mbps	300 Mbps	1	1	1	2	1	1	Internal AC	-	1 RU
ISR4351/K9	-	IP Base*1	200 Mbps	400 Mbps	-	-	3	3	2	1	Internal AC	-	2 RU
ISR4431/K9	-	IP Base*1	500 Mbps	1 Gbps	-	-	4	3	-	1	Internal AC	●	1 RU
ISR4451-X/K9	-	IP Base*1	1 Gbps	2 Gbps	-	-	4	3	2	1	Internal AC	●	2 RU

*1 Cisco IOS SEC License, Cisco IOS UC License, and Cisco IOS APP License can be added.



Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Cisco IOS Technology Package Licenses

Product SKU	Description	Compatible Models					
		4221	4321	4331	4351	4431	4451
SL-4220-SEC-K9	Cisco IOS SEC License for Cisco ISR 4221	●	-	-	-	-	-
SL-4320-SEC-K9	Cisco IOS SEC License for Cisco ISR 4321	-	●	-	-	-	-
SL-4330-SEC-K9	Cisco IOS SEC License for Cisco ISR 4331	-	-	●	-	-	-
SL-4350-SEC-K9	Cisco IOS SEC License for Cisco ISR 4351	-	-	-	●	-	-
SL-44-SEC-K9	Cisco IOS SEC License for Cisco ISR 4400 Series	-	-	-	-	●	●
SL-4320-UC-K9	Cisco IOS UC License for Cisco ISR 4321	-	●	-	-	-	-
SL-4330-UC-K9	Cisco IOS UC License for Cisco ISR 4331	-	-	●	-	-	-
SL-4350-UC-K9	Cisco IOS UC License for Cisco ISR 4351	-	-	-	●	-	-
SL-44-UC-K9	Cisco IOS UC License for Cisco ISR 4400 Series	-	-	-	-	●	●
SL-4220-APP-K9	Cisco IOS APP License for Cisco ISR 4221	●	●	-	-	-	-
L-SL-4320-APP-K9	Cisco IOS APP License for Cisco ISR 4321	-	●	-	-	-	-
L-SL-4330-APP-K9	Cisco IOS APP License for Cisco ISR 4331	-	-	●	-	-	-
L-SL-4350-APP-K9	Cisco IOS APP License for Cisco ISR 4351	-	-	-	●	-	-
L-SL-44-APP-K9	Cisco IOS APP License for Cisco ISR 4400 Series	-	-	-	-	●	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services



Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Cisco IOS Feature Licenses

Product SKU	Description	Compatible Models					
		4221	4321	4331	4351	4431	4451
FL-4320-HSEC-K9	Cisco IOS HSEC License for Cisco ISR 4321 ^{*1}	-	●	-	-	-	-
FL-4330-HSEC-K9	Cisco IOS HSEC License for Cisco ISR 4331 ^{*1}	-	-	●	-	-	-
FL-4350-HSEC-K9	Cisco IOS HSEC License for Cisco ISR 4351 ^{*1}	-	-	-	●	-	-
FL-44-HSEC-K9	Cisco IOS HSEC License for Cisco ISR 4400 Series ^{*1}	-	-	-	-	●	●
SW-CCME-UL-ESS	Cisco Unified CME Phone License - Essential	-	●	●	●	●	●
SW-CCME-UL-BASIC	Cisco Unified CME Phone License - Basic	-	●	●	●	●	●
SW-CCME-UL-ENH	Cisco Unified CME Phone License - Enhanced	-	●	●	●	●	●
L-FL-CME-SRST-5	Cisco Unified CME or SRST 5 License ^{*2}	-	●	●	●	●	●
L-FL-CME-SRST-25	Cisco Unified CME or SRST 25 License ^{*2}	-	●	●	●	●	●
L-FL-CME-SRST-100	Cisco Unified CME or SRST 100 License ^{*2}	-	-	●	●	●	●
FL-CUBEE-5-RED	Cisco Unified BEe 5 Redundant Configuration License ^{*2}	-	●	●	●	●	●
FL-CUBEE-25-RED	Cisco Unified BEe 25 Redundant Configuration License ^{*2}	-	●	●	●	●	●
FL-CUBEE-100-RED	Cisco Unified BEe 100 Redundant Configuration License ^{*2}	-	●	●	●	●	●
SL-200-AKC	Cisco IWAN with Akamai Connect 200 Connections License ^{*3}	●	●	●	-	-	-
SL-750-AKC	Cisco IWAN with Akamai Connect 200 Connections License ^{*3}	-	-	●	●	●	-
SL-1300-AKC	Cisco IWAN with Akamai Connect 1,300 Connections License ^{*3}	-	-	●	●	●	●
SL-2500-AKC	Cisco IWAN with Akamai Connect 2,500 Connections License ^{*3}	-	-	●	●	-	●
SL-6K-AKC	Cisco IWAN with Akamai Connect 6,000 Connections License ^{*3}	-	-	●	●	-	●
FL-4220-PERF-K9	Cisco IOS Performance-on-Demand License for Cisco ISR 4221	●	-	-	-	-	-
FL-4320-PERF-K9	Cisco IOS Performance-on-Demand License for Cisco ISR 4321	-	●	-	-	-	-
FL-4330-PERF-K9	Cisco IOS Performance-on-Demand License for Cisco ISR 4331	-	-	●	-	-	-
FL-4350-PERF-K9	Cisco IOS Performance-on-Demand License for Cisco ISR 4351	-	-	-	●	-	-
FL-44-PERF-K9	Cisco IOS Performance-on-Demand License for Cisco ISR 4400 Series	-	-	-	-	●	●

*1 Cisco IOS SEC License is required. *2 Cisco IOS UC License is required. *3 Cisco IOS APP License is required.

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Cisco Layer 2/3 EtherSwitch Modules

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
NIM-ES2-4	EtherSwitch Module (L2, 4-port GE)	NIM	●	●	●	●	●	●
NIM-ES2-8	EtherSwitch Module (L2, 8-port GE)	NIM	●	●	●	●	●	●
NIM-ES2-8-P	EtherSwitch Module (L2, 8-port GE/PoE+)	NIM	-	●	●	●	●	●
SM-X-ES3-16-P	EtherSwitch Service Module (L2/L3, 16-port GE/PoE+)	SM-X	-	-	●	●	-	●
SM-X-ES3-24-P	EtherSwitch Service Module (L2/L3, 24-port GE/PoE+)	SM-X	-	-	●	●	-	●
SM-X-ES3D-48-P	EtherSwitch Service Module (L2/L3, 48-port GE/PoE+)	SM-X	-	-	-	●	-	●

Cisco Gigabit Ethernet WAN Modules

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
NIM-1GE-CU-SFP	GE/SFP Module (1-port)	NIM	●	●	●	●	●	●
NIM-2GE-CU-SFP	GE/SFP Module (2-port)	NIM	-	●	●	●	●	●
SM-X-6X1G	GE/SFP Service Module (6-port)	SM-X	-	-	●	●	-	●
SM-X-4X1G-1X10G	GE/SFP (4-port) or SFP+ (1-port) Service Module	SM-X	-	-	●	●	-	●

Cisco Serial WAN Interface Modules

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
NIM-1T	Serial WAN Module (1-port)	NIM	●	●	●	●	●	●
NIM-2T	Serial WAN Module (2-port)	NIM	●	●	●	●	●	●
NIM-4T	Serial WAN Module (4-port)	NIM	-	●	●	●	●	●
SM-X-1T3/E3	T3/E3 Service Module (1 port)	SM-X	-	-	●	●	-	●

Cisco Async WAN Interface Modules

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
NIM-16A	Asynchronous Module (16-port)	NIM	●	●	●	●	●	●
NIM-24A	Asynchronous Module (24-port)	NIM	●	●	●	●	●	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services



Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Cisco Multimode VDSL2 and ADSL2/2+ Network Interface Modules

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
NIM-VAB-A	Multi Mode VDSL2/ADSL2/2+ (Annex A)	NIM	●	●	●	●	●	●
NIM-VA-B	Multi Mode VDSL2/ADSL2/2+ (Annex B)	NIM	●	●	●	●	●	●
NIM-VAB-M	Multi Mode VDSL2/ADSL2/2+ (Annex M)	NIM	●	●	●	●	●	●

Cisco 4G LTE Network Interface Modules

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
NIM-4G-LTE-GA	4G LTE Module for Global	NIM	●	●	●	●	●	●
NIM-4G-LTE-NA	4G LTE Module for North America	NIM	●	●	●	●	●	●
NIM-4G-LTE-ST	4G LTE Module for Sprint	NIM	●	●	●	●	●	●
NIM-4G-LTE-VZ	4G LTE Module for Verizon	NIM	●	●	●	●	●	●
NIM-4G-LTE-LA	4G LTE Module for Asia Pacific, Australia and Latam	NIM	●	●	●	●	●	●
NIM-LTEA-EA	LTE Advanced Module for Europe and North America	NIM	●	●	●	●	●	●
NIM-LTEA-LA	LTE Advanced Module for Asia Pacific, Australia and Latam	NIM	●	●	●	●	●	●

Cisco T1/E1 Voice and WAN Network Interface Modules

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
NIM-1MFT-T1/E1	Voice/WAN Module (1-port T1/E1)	NIM	●	●	●	●	●	●
NIM-2MFT-T1/E1	Voice/WAN Module (2-port T1/E1)	NIM	●	●	●	●	●	●
NIM-4MFT-T1/E1	Voice/WAN Module (4-port T1/E1)	NIM	-	●	●	●	●	●
NIM-8MFT-T1/E1	Voice/WAN Module (8-port T1/E1)	NIM	-	●	●	●	●	●
NIM-1CE1T1-PRI	Voice/WAN Module (1-port T1/E1/G.703)	NIM	-	●	●	●	●	●
NIM-2CE1T1-PRI	Voice/WAN Module (2-port T1/E1/G.703)	NIM	-	●	●	●	●	●
NIM-8CE1T1-PRI	Voice/WAN Module (8-port T1/E1/G.703)	NIM	-	●	●	●	●	●
SM-X-1T3/E3	T3/E3 Service Module (1 port)	SM-X	-	-	●	●	-	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Cisco Analog Voice Network Interface Modules

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
NIM-2FXSP	Voice Module (2-port FXS)	NIM	-	●	●	●	●	●
NIM-4FXSP	Voice Module (4-port FXS)	NIM	-	●	●	●	●	●
NIM-2FXO	Voice Module (2-port FXO)	NIM	-	●	●	●	●	●
NIM-4FXO	Voice Module (4-port FXO)	NIM	-	●	●	●	●	●
NIM-2FXS/4FXOP	Voice Module (2-port FXS and 4-port FXO)	NIM	-	●	●	●	●	●
NIM-4E/M	Voice Module (4-port E/M)	NIM	-	●	●	●	●	●
NIM-2BRI-NT/TE	Voice Module (2-port BRI)	NIM	-	●	●	●	●	●
NIM-4BRI-NT/TE	Voice Module (4-port BRI)	NIM	-	●	●	●	●	●

Cisco Packet Voice Digital Signal Processor Modules (PVDMs)

Product SKU	Description	Slot	Compatible Models					
			4221	4321	4331	4351	4431	4451
PVDM4-32	High-density Voice DSP Module (16-channel)	PVDM4	-	●	●	●	●	●
PVDM4-64	High-density Voice DSP Module (32-channel)	PVDM4	-	●	●	●	●	●
PVDM4-128	High-density Voice DSP Module (64-channel)	PVDM4	-	●	●	●	●	●
PVDM4-256	High-density Voice DSP Module (128-channel)	PVDM4	-	●	●	●	●	●
SM-X-PVDM-500	High-density Voice DSP Service Module (768-channel)	SM-X	-	-	●	●	-	●
SM-X-PVDM-1000	High-density Voice DSP Service Module (1,024-channel)	SM-X	-	-	●	●	-	●
SM-X-PVDM-2000	High-density Voice DSP Service Module (2,048-channel)	SM-X	-	-	-	●*1	-	●
SM-X-PVDM-3000	High-density Voice DSP Service Module (3,080-channel)	SM-X	-	-	-	●*1	-	●

*1 Supports up to 1,024 channels.

Cisco UCS E Series Servers

Product SKU	CPU Cores	Memory		Internal Drive Slots	RAID	Slot	Compatible Models					
		Default	Maximum				4221	4321	4331	4351	4431	4451
UCS-EN140N-M2/K9	4	8 GB	8 GB	1	-	NIM	-	●	●	●	●	●
UCS-EN120S-M2/K9	2	4 GB	16 GB	2	0/1	SM-X	-	-	●	●	-	●
UCS-E140S-M2/K9	4	8 GB	16 GB	2	0/1	SM-X	-	-	●	●	-	●
UCS-E160S-M3/K9	6	8 GB	32 GB	2	0/1	SM-X	-	-	●	●	-	●
UCS-E160D-M2/K9	6	8 GB	96 GB	3	0/1/5	SM-X	-	-	-	●	-	●
UCS-E180D-M2/K9	8	8 GB	96 GB	3	0/1/5	SM-X	-	-	-	●	-	●

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services

Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Platform	Product SKU	Service (CSE) SKU
Cisco ISR 4221	ISR4221-SEC/K9	CON-SMBS-ISR4221S
	ISR4221-AX/K9	-
Cisco ISR 4321	ISR4321-SEC/K9	-
	ISR4321-V/K9	-
	ISR4321-VSEC/K9	-
	ISR4321-AX/K9	-
	ISR4321-AXV/K9	-
Cisco ISR 4331	ISR4331-SEC/K9	-
	ISR4331-V/K9	-
	ISR4331-VSEC/K9	-
	ISR4331-AX/K9	-
	ISR4331-AXV/K9	-
Cisco ISR 4351	ISR4351-SEC/K9	-
	ISR4351-V/K9	-
	ISR4351-VSEC/K9	-
	ISR4351-AX/K9	-
	ISR4351-AXV/K9	-

Platform	Product SKU	Service (CSE) SKU
Cisco ISR 4431	ISR4431-SEC/K9	-
	ISR4431-V/K9	-
	ISR4431-VSEC/K9	-
	ISR4431-AX/K9	-
Cisco ISR 4451	ISR4431-AXV/K9	-
	ISR4451-X-SEC/K9	-
	ISR4451-X-V/K9	-
	ISR4451-X-VSEC/K9	-
	ISR4451-X-AX/K9	-
	ISR4451-X-AXV/K9	-

Cisco ISR 4000 Series Bundles Comparison

Bundles	Characters Included in SKU	Bundled Licenses/Modules			
		IOS SEC	IOS UC	IOS APP	PVDM4
Security Bundles	SEC	●	-	-	-
Voice Bundles	V	-	●	-	●
Voice Security Bundles	VSEC	●	●	-	●
Application Experience Bundles	AX	●	-	●	-
Application Experience Voice Bundles	AXV	●	●	●	●

Cisco ISR 4000 Series



Overview

Platform Spec

Licenses & Accessories

Bundles

Migration

Benefits of Migrating to Cisco ISR 4000 Series

Network Requirements for the Digital Organization	Features	Cisco ISR 1800/2800/3800 Series	Cisco ISR 1900/2900/3900 Series	Cisco ISR 4000 Series	Benefits
 Insights and Experiences	Maximum throughput	Up to 50 Mbps	Up to 350 Mbps	Up to 2 Gbps	4 to 10 times greater performance than ISR G2 at lower price
	Cisco Application Visibility and Control (AVC)	-	•	•	Visibility into 1000+ applications for capacity planning and prioritization
	Intelligent path selection (Cisco Performance Routing [PFR] v3)	-	•	•	Real-time analytics to help ensure application experience and lower costs with path selection
	WAN optimization (Cisco Wide Area Application Services [WAAS] and Akamai)	-	•	•	Improved application performance and WAN offload with Layer 4 through 7 optimization and intelligent caching
 Automation and Assurance	Pay-as-you-grow performance and services	-	-	•	Ability to buy what you need today and upgrade anytime without a complete equipment upgrade
	Cisco ONE Software Suites	-	•	•	Predictable OpEx, license portability, and investment protection
	Cisco Intelligent WAN app with Application Policy Infrastructure Controller Enterprise Module (APIC-EM)	-	•	•	Automated provisioning for faster SD-WAN deployments
 Security and Compliance	Cisco Firepower Threat Defense for ISR	-	•	•	Industry-leading advanced threat defense
	Cisco Umbrella Branch (OpenDNS)	-	-	•	Protection from malware, botnets, phishing, and targeted online attacks using real-time threat intelligence
	Cisco Stealthwatch Learning Network License	-	•	•	Branch network visibility and device-level incident response with packet capture and machine learning (ISR 2900/3900 Series requires UCS E-Series blade)
	Multicore hardware VPN acceleration	-	-	•	High-performance encryption for secure WAN
 Virtualization	Enterprise Network Functions Virtualization	-	-	•	Simplified operations and deployment of virtual network services on any platform
	Native Application Hosting	-	-	•	No need for additional network devices in the branch
	Integrated compute with Cisco UCS E-Series servers	-	•	•	Local compute resources for applications, data backup, and analytics
	Cisco IOS XE operating system			•	Multi-core processing increases network services performance and availability

Getting Started

What's New

Feature Story

Collaborate

Compute

Secure

Connect

Switches

Wireless

Routers

RV

ISR 800

ISR 1000 NEW

ISR 4000

Services