

## Cisco Wireless Controllers

Cisco® Wireless Controllers help reduce overall operational expenses by simplifying network deployment, operations, and management. Extending the same Cisco Borderless Networks policy and security from the wired network core to the wireless edge, these Cisco wireless controllers deliver the visibility, scalability, and reliability needed to build secure, enterprise-scale wireless networks— from branch offices, to small enterprises, to main campuses. They support systemwide functions to deliver:

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

Options for wireless integrated switches and routers provide cost-effective support for converged networks that integrate wireless connectivity. Integrated platforms lower hardware costs, simplify remote management, and offer flexible configuration options that can reduce the total cost of operations and ownership.

Cisco Wireless Controllers for Mid-Sized and Large, Single-Site Enterprises

For medium-sized to large, single-site WLAN deployments, Cisco 5500 Series

Wireless Controllers and the Cisco Catalyst 6500 Series Wireless Services Module 2

(WiSM2) provide the highest performance, security, and scalability to support business communications today and in the future (Table 1). Benefits include:

- Mission-critical 802.11n performance and mobility services
- Updates 500 access points simultaneously
- Layer 3 mobility services, including video, voice, Cisco Virtualization Experience Infrastructure (VXI), guest, location, mesh, and teleworking
- Highest security (Layer 1 wIPS)
- Cisco VideoStream technology for optimized video performance
- Support for award-winning Cisco CleanAir technology for RF management

Table 1. Cisco Wireless Controllers for Mid-Sized and Large, Single-Site Enterprise



Cisco 5500 Series Wireless Controller

- Support for up to 500 access points and 7000 clients
- 8 Gbps throughput, eight 1 Gigabit Ethernet ports, with LAG support
- Standalone, rack-mountable appliance



<u>Cisco Catalyst 6500 Series Wireless</u> Services Module2 (WiSM2)

- Support for up to 500 access points and 10,000 clients
- 10 Gbps throughput
- Integrated switch blade for Cisco Catalyst 6500 Series chassis
- Supports up to seven Cisco WiSM2 blades per chassis for added scalability

#### Cisco Wireless Controllers for Small Enterprise

Cisco 2500 Series Wireless Controllers and the Wireless Controller Module for ISR G2 (Table 2) provide small, single-site enterprise WLAN deployments with entry-level wireless for data. They are ideal for improved mobility with laptops, providing guest access for vendors or customers, or offering limited hotspot coverage. Now you can enhance the productivity of your growing mobile workforce, and scale and add services over time. Other benefits include:

- 802.1 In performance and scalability at an attractive entry-level price
- Support for award-winning Cisco CleanAir technology for RF management
- Support for scanners and kiosks for Payment Card Industry (PCI) certified customers
- Support for highly secure guest access, voice, location services, and other collaboration applications

Table 2. Cisco Wireless Controllers for Small Enterprise



<u>Cisco 2500 Series Wireless</u> Controllers

- Support up to 50 access points and 500 clients
- 500 Mbps throughput, four 1 Gigabit Ethernet ports (two support Power over Ethernet [PoE])
- · Standalone, small form-factor appliance



## Cisco Wireless Controllers



Wireless Controller Module for ISR G2

- Supports up to 50 access points and 500 clients
- Integrated Services Module 300 (ISM-300) supports up to 10 access points
- Services Module 700 (SM-700)/SM-900 supports up to 50 access points
- PCI functionality for scanner and kiosk support
- Supported on the Cisco 1941 and Cisco 2900 and 3900 Series Integrated Services Routers Generation 2 (ISR G2) routers
- Integrated ISR G2 module (supports one wireless module per ISR G2)

#### Cisco Wireless Controllers for Multisite Deployments

Cisco Flex 7500 Series Cloud Controllers (Table 3) offer economies of scale for multisite, branch deployments. Now IT managers can configure, manage, and troubleshoot numerous branch office wireless networks from a single location. Layer 2 mobility delivers reliable Wi-Fi voice and video, and Cisco CleanAir technology provides the industry's only self-healing and self-optimizing wireless network for branches. Other benefits include:

Table 4. Cisco Wireless Controller Comparison Chart

- Ideal for data center consolidation: Use a single controller to manage up to 500 sites, 2000 access points, and 20,000 clients
- 802.11n performance and services for reliable video and voice
- Flexibility to remotely configure wireless policy, management, or security settings at any time
- Respond faster to business needs by managing wireless networks remotely
- Save on the cost of onsite visits, utility bills, and hardware support contracts
- Wireless guest access

Table 3. Cisco Wireless Controllers for Multisite Deployments



Cisco Flex 7500 Series Cloud Controller

- Private cloud deployment extends wireless services to distributed branches
- Supports up to 500 branch offices with up to 50 access points per branch
- Configure, manage and troubleshoot up to 2,000 access points and 20,000 clients from the data center
- Designed specifically for wireless branches with local survivability features

Table 4 provides a quick comparison of the different products in the Cisco Wireless Controller portfolio.

	Small E	Small Enterprises		Mid-Sized and Large, Single-Site Enterprise	
	2500 Series	Controller for ISR G2	5500 Series	WiSM2	Flex 7500 Series
Target	Small or Medium-Sized Business	Small or Medium-Sized Business	Mid-Sized to Large Enterprise	Mid-Sized to Large Enterprise	Large Number of Branches
Deployment Model	Local Mode FlexConnect	Local Mode FlexConnect	Local Mode FlexConnect	Local Mode FlexConnect	FlexConnect
Form Factor	Desktop	ISM/SM module for 1941/2900/3900 ISR G2	One rack unit (1-RU) Appliance	Blade for Catalyst 6500 Series Switches (CAT6K) Up to 7 per Chassis	1 RU Appliance
Interfaces or Network I/O	4 x 1 Gigabit Ethernet (GE)	ISR G2 Backplane	8xGE	CAT6K Backplane	2 x 10 Gigabit Ethernet
Power Consumption	80W	Refer to SRE	125W	220W	675W
Onsite Controller		•	•	•	
Centralized Management	•	•	•	•	•



	Small Enterprises		Mid-Sized and Large, Single-Site Enterprise		FlexConnect Branch
	2500 Series	Controller for ISR G2	5500 Series	WiSM2	Flex 7500 Series
Centralized Data Policy Enforcement					
Cisco OfficeExtend Teleworker Solution	•			•	
Wireless Mesh	•	•	•		
Workgroup Bridge	•				
Access Points Managed	5-50	ISM 5-10, SM 5-50	12-500	100-500	300-2,000
Client Support	500	500	7,000	10,000	20,000
Tag Support	500	500	5,000	5,000	-
Throughput	500 Mbps	500 Mbps	8 Gbps	10 Gbps	
# of Access Point Groups	30	30	500	500	500
Access Points per Group	25	25	25	25	50
WLANs	16	16	512	512	512
Link Aggregation Group (LAG)			•		
Mobility	Layer 2/Layer 3 (L2/L3)	L2/L3	L2/L3	L2/L3	L2
Radio Resource Management (RRM)	•		•		
Cisco Network Access Control (NAC)	•		•		
Datagram Transfer Layer Security (DTLS)	•		•		
Cisco Compatible Extensions Call Admission Control (CAC) / Wi-Fi Multimedia (WMM)	•	•	•	•	
Multicast	•		•		
Cisco VideoStream	-		•		
Guest Services (Wireless)	•		•		
Guest Services (Wired)			•		
Guest Anchor			•		
Access Control Lists (ACLs)	-		•		



# Cisco Wireless Controllers

### Service and Support

Cisco and our specialized partners offer a broad portfolio of end-to-end services to help you improve your organization's productivity and collaboration by assisting with the readiness, deployment, and optimization of your wireless network and mobility services.

To learn more about Cisco Wireless LAN Service offers, visit: <a href="http://www.cisco.com/go/wirelesslanservices">http://www.cisco.com/go/wirelesslanservices</a>.

#### For More Information

For more information about Cisco wireless controllers, contact your local account representative or visit: http://www.cisco.com/en/US/products/ps6366/index.html.