Cisco Edge 340 Series

Product Overview

The Cisco® Edge 340 Series (as shown in Figure 1) is next generation platform for vertical and enterprise connected room deployments that provide rich media enablement capabilities and vertical-specific application supporting capability. It integrates rich connectivity to enable all the essential components of a digital connected room experience with Ethernet LAN uplink, wireless access, rich media, and application computing. It is also an open application platform that allows partners and customer to customize it to enable vertical solutions.

Cisco Edge340 Series have both wireless and non-wireless versions; the wireless version supports Wi-Fi and Bluetooth functions.

Figure 1. Cisco Edge 340 Series

Wireless Non-wireless

Consolidation at Connected Room Deployment

Currently, with continuously-growing of customer requirement and the booming of cloud-based technology and application, the ways people work and communicate are also experiencing continuous change insensibly, so many organizations around the world are further modernizing their IT infrastructure to promote better productivity, communication, and collaboration. As part of this effort, the workspaces and service environments, such as classrooms in schools, healthcare clinics, service halls of bank branches, and retail stores, need a platform to provide rich connectivity for various peripherals and diversified digital communication experience based on its media-enablement capability. Most importantly, they also want this platform to support a wide range of vertical-specific applications based on its powerful compute capability and openness.

In general, the typical requirement for this connected platform is as following:

- Rich connectivity to connect vertical-specific peripheral through wired and wireless interfaces, such as interactive digital whiteboards and HD display in classrooms, digital media display and multiple touch screen in DMS system deployed in service hall of bank and airport, medical appliances in healthcare center, etc.
- Powerful media support capability for collaboration and communication, such as HD video (display and conferencing), audio and various internet-based contents.

- Support vertical-specific applications based on local compute and storage capability, such as cloud-based client of teaching applications in schools, remote customer device monitoring and management application in enterprise, automobile show and interaction application in 4S store, and so on; these applications are often run in the service areas with content centrally managed in the cloud.
- Efficient provisioning, easy deployment and flexible management.

To meet these requirements, organizations today deploy and manage multiple in-room devices. Given that many of these sites are remote without any advanced IT expertise, the operation cost can be a big challenge.

The Cisco Edge 340 Series platform provides a simplified and cost-effective solution by consolidating wireless and wired connectivity, rich media capability and compute capability into a compact, fan-less and highly reliable device (as shown in Figure 2). By doing this, it helps customer to easily modernize their IT infrastructure to provide more efficient communication and collaboration with significantly lower the total cost of ownership:

- CapEx savings on hardware costs, hardware support contracts with reduced number of devices needed in the room, and software costs with Linux operating system.
- OpEx savings on energy bills, onsite visits with less devices to manage, and low power consumption.

Features and Benefits

Prime features of the Cisco Edge 340 series:

- Powerful compute capability can support application more efficient and quickly.
- 32G built-in local storage with SD extension slot provide customer with strong and flexible storage capability.
- Strong video capability and various content formats support with hardware acceleration delivery local rich-media experience.
- Unified content and device management with management API.
- Web-based GUI for configuration and management.
- Simplified deployment with Power-over-Ethernet(PoE+).
- Compact, fan-less design delivery higher reliability and noise-free deployment.
- Lower TCO with purpose-built appliance design with long-lifecycle embedded chipset, compact, fan-less and low power consumption.

Primary benefits of the Cisco Edge 340 series:

- Consolidate and simplify connected room deployment into one device.
- Customizable for vertical-specific application requirements.
- Save on hardware and software cost, license, support contract, and energy bills.
- Simplified and user-friendly management.

Figure 2. Interfaces on Cisco Edge 340 Series

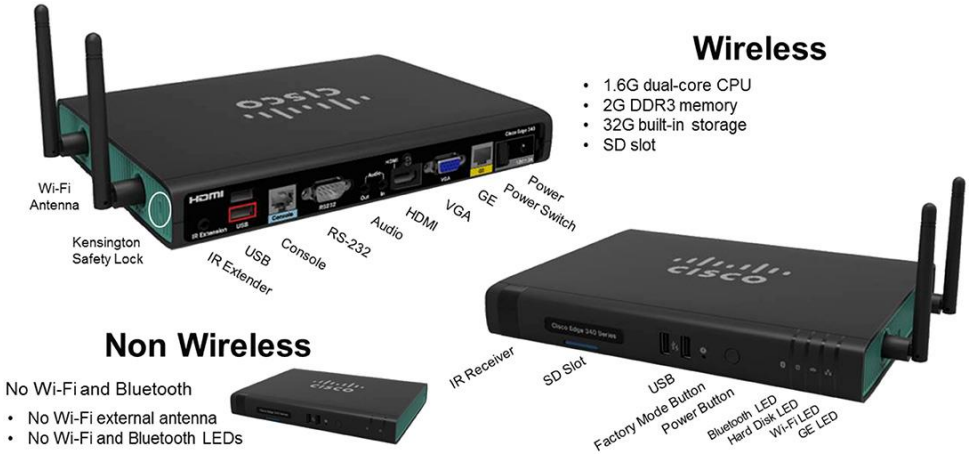

Table 1 provides additional details about the primary features and benefits of the Cisco Edge 340 series.

Table 1. Features and Benefits

Feature	Benefit
Hardware	
Strong compute performance & storage • 1.6 GHz dual-core CPU and 2 GB DDR3 memory • 32 GB storage and SD slot for extendable	• High performance improves quality, efficiency, and effectiveness of digital media communication. • Storage of content for local playback or failover offers greater reliability and robust operation. Content size can be increased.
Hardware accelerated high-definition (HD) and standard-definition (SD) video • MPEG 2, and 4, H.264 and VC-1 hardware decoding up to 24fps • Up to 2 simultaneous HD video streams • Flash support (10 & 11 and action scripts v2, v3, .swf and .flv) • HDMI, VGA	• Strong media capabilities enable various content format support, delivering higher-quality media experience to customer. • More video interfaces to connect more display to save deployment cost.
802.3af (PoE) and 802.3at (PoE+) powered device support	• More flexible deployment options. • More peripherals supported concurrently.
Built-in 802.11a/b/g/n dual-band, both access point and client modes(available only on wireless SKU)	• The player offers high-performance wireless connectivity for Internet access with more channels and less interference. • More flexible deployment options are available.
Software	
Open API	• The player can be easily integrated with a partner content management system. • The player can be customizable for various digital signage solutions.
Web-based GUI configuration	• The player can be easily configured and managed.
Form factor	
Low power consumption (11W on average)	• Low power consumption offers higher reliability and reduced capital expenses (CapEx) and operating expenses (OpEx). • The player is environmentally friendly.
Compact and fan-less design	• The player has no moving parts, so the lifecycle is longer. • The player provides noise-less deployment for indoor deployment

Product Specifications

Table 2 lists product specifications for the Cisco Edge 340 series.

Table 2. Product Specifications for Cisco Edge 340 Digital Media Player

Specification	Description
Compute and Storage	
CPU	• 1.60 GHz dual-core
Memory	• 2 GB dual data rate 3 (DDR3) memory
Storage	• 32 GB built-in Flash • One SD slot(multi-level cell [MLC] SD card highly preferred)
Interface	
Video	• One HDMI(v1.3a) • One VGA
Audio	• Audio in and out (3.5mm, jack)
Ethernet Uplink	• One 10/100/1000Mbps Ethernet
Universal Serial Bus (USB)	• Four USB2.0 interfaces (Type A)
Wireless	• 802.11a/b/g/n, dual-band, both access-point and client modes, and internal and external antennas with toggle switch, support for simultaneous access for multiple clients (available only on wireless SKU)
Bluetooth	• Bluetooth v4.0 (available only on wireless SKU)
RS232	• One (DB-9, male)
Console	• One (RJ-45)
Infrared	• Built-in receiver • One extender interface (3.5mm jack) • IR remote (optional, maximum distance is 15 ft [4.57m])
Multimedia	
High-Definition Multimedia Interface (HDMI)	• Support for 720p, 1080i, and 1080p high-definition video outputs • Hardware decoding for MPEG2, MPEG4, H.264, VC-1
Video graphics array interface (VGA)	• Support for VGA (720p59.94 and 720p50; 1080p59.94 and 1080p50; 1080i59.94 and 1080i50; 1024 x 768 @ 60 Hz; and 1280 x 960 @ 85 Hz)
Audio	• MPEG1 Layers 1 and 2, MP3, AAC, AC3, PCM, WAV, WMA, and OggVorbis
Pictures	• PNG, JPEG, GIF, BMP, TIFF
Flash	• v10 and v11 • .swf and .flv • Action Scripts 2 and 3
Network	
Supported protocols	• TCP and UDP • Dynamic Host Configuration Protocol (DHCP) • Internet Group Management Protocol Versions 1, 2, and 3 (IGMPv1, v2, and v3) • Simple Network Management Protocol Versions 1, 2, and 3 (SNMP v1, v2, and v3) • Network Time Protocol (NTP) • Cisco Discovery Protocol and Link Layer Discovery Protocol (LLDP) • Common Internet File System (CIFS) • Secure Shell Protocol Version 2 (SSHv2)
Security	
VPN	• IP Security (IPsec), Layer 2 Tunneling Protocol (L2TP), and Point-to-Point Protocol (PPP) preshared key (PSK) • IPsec, L2TP, and PPP Rivest, Shamir, and Adelman (RSA) • Point-to-Point Tunneling Protocol (PPTP) and PPP • Cisco Easy VPN Hybrid and PSKCisco Easy VPN Hybrid/PSK

Specification	Description
Wi-Fi authentication	• 802.1X authentication for Wi-Fi user
System	
System indicators	LED indicators to show system status, including: • Gigabit Ethernet uplink • Wireless (available only for wireless SKU) • Bluetooth (available only for wireless SKU) • Storage • Infrared
System power button	• Press to boot system
Factory mode button	• Press to reboot into factory model
Power Specifications	
Power consumption	• 11W(on average)
Power input	• AC input voltage: 100-240V • Line frequency: 50-60Hz
Physical and Environmental Specifications	
Dimensions	• H x W x D: 244 x 186 x 35 mm (9.6 x 7.3 x 1.4 in.) (without mount)
Shipping dimensions	• 317.5 x 242.8 x 158.8 mm (12.5 x 9.56 x 6.25 in.)
Net weight	• 0.912 kg (2.01 lb)
Maximum shipping weight	• 2.75 kg (6.06 lb) (with mount, power adapter, power cable, remote, IR extender, and Wi-Fi antenna)
Operating environments	• Operating temperature: 0 to 50ºC (32ºF to 122ºF) • Storage temperature: -25 to 70ºC (-13ºF to 158ºF) • Storage altitude: 4573m (14,999 feet) • Relative humidity: 10 to 90%, noncondensing (operating or storage) • Operating altitude: 0 to 2000m (0 to 6,562 feet)
Stability	• Mean time between failure (MTBF): > 100,000 hours
Safety and Compliance	
Safety certifications	• IEC 60950-1 • EN 60950-1 • AS/NZS 60950-1 • UL 60950-1 • CAN/CSA-C22.2 No. 60950-1
Electromagnetic emissions certifications	**EMI/EMC** • CISPR 22 • EN 55022 • EN 61000-3-2 • EN 61000-3-3 • AS/NZS CISPR 22 • 47 CFR FCC Part 15B • ICES-003 • CISPR 24 • AS/NZS CISPR 24 • EN 55024 • EN 301 489-1 • EN 301 489-17 **Radio** • EN 300 328 • EN 301 893 • AS/NZS 4268 • 47 CFR FCC Part 15C • 47 CFR FCC Part 15E • 47 CFR FCC Part 15.247

Specification	Description
	• RSP-100 • RSS-GEN • RSS-210 • RSS-310 • China regulations • G.S.R 45(E) • NOM-121-SCT1-2009 • CNT-Q2.63.01 • Resolution 506 • KC Rules • EN 300 328 • IDA TS SRD **RF SAFETY** • EN 50385 • FCC OET 65, Suppl. C • RSS-102
Bluetooth	• BQB
Wi-Fi	• 802.11a/b/g/n Mark • China SRRC Certification • FCC
Operating System	
OS	• Linux with Kernel 3.1

Table 3 lists the browsers Cisco Edge 340 supports.

Table 3. Browser

Specification	Description
Browser	Chrome: 26.0 Firefox: 18.0

Table 4 lists all accessories of Cisco Edge 340.

Note: All accessories are optional and need additional cost.

Table 4. Accessory List

Accessory	Description	Note
Power Adapter		
ACC-E340-PWR=	Cisco Edge 340 power adapter	Orderable alone
ACC-E340-PWR	Cisco Edge 340 power adapter	Not orderable alone
Installation Mount		
ACC-E340-M-V=	Cisco Edge 340 mount for desktop vertical deployment	Orderable alone
ACC-E340-M-E=	Cisco Edge 340 mount for wall, ceiling, pole deployment	Orderable alone
ACC-E340-M-D=	Cisco Edge 340 mount for display deployment	Orderable alone
Other		
ACC-E340-ANT	Cisco Edge 340 Wi-Fi external antenna, Omni	Not orderable alone, only available for Wi-Fi SKU
ACC-E340-IRE	Cisco Edge 340 IR extender	Not orderable alone

Ordering Information

Table 5 provides ordering information for the Cisco Edge 340 Digital Media Player.

To place an order, visit the Cisco Ordering Home Page. To download software, visit the Cisco Software Center.

Table 5. Ordering Information

PID	Product Description	Note
Digital Media Player		
CS-E340-G32-K9	Cisco Edge 340 Generic ver, 2G Mem,32G SSD,1GE, PoE+ PD	Non-wireless
CS-E340W-G32-A-K9	Cisco Edge 340 Generic ver, Wi-Fi,2G Mem,32G SSD,1GE, PoE+ PD, A Reg. domain	Wireless, A domain
CS-E340W-G32-C-K9	Cisco Edge 340 Generic ver, Wi-Fi,2G Mem,32G SSD,1GE, PoE+ PD, C Reg. domain	Wireless, C domain
CS-E340W-G32-N-K9	Cisco Edge 340 Generic ver, Wi-Fi,2G Mem,32G SSD,1GE, PoE+ PD, N Reg. domain	Wireless, N domain
CS-E340W-G32-E-K9	Cisco Edge 340 Generic ver, Wi-Fi,2G Mem,32G SSD,1GE, PoE+ PD, E Reg. domain	Wireless, E domain
CS-E340W-G32-K9	Cisco Edge 340 Generic ver, Wi-Fi, 2.4GHz band only, 2G Mem,32G SSD,1GE, PoE+ PD	Wireless, only 2.4G band supported, 1-13 channel enabled
Spare		
ACC-E340-PWR=	Cisco Edge 340 power adapter	Orderable alone
ACC-E340-PWR	Cisco Edge 340 power adapter	Not orderable alone
ACC-E340-M-V=	Cisco Edge 340 mount for desktop vertical deployment	Orderable alone
ACC-E340-M-E=	Cisco Edge 340 mount for wall, ceiling, pole deployment	Orderable alone
ACC-E340-M-D=	Cisco Edge 340 mount for display deployment	Orderable alone
DMP-RM-K9=	Digital Media Player Remote Control	Orderable alone
ACC-E340-ANT	Cisco Edge 340 Wi-Fi external antenna, Omni	Not orderable alone, only available for wireless SKU
ACC-E340-IRE	Cisco Edge 340 IR extender	Not orderable alone
CAB-CONSOLE-RJ45	Console Cable 6ft with RJ45 and DB9F	Not orderable alone
UCS-SD-16G=	16 GB SD card for storage extension	Orderable alone

Note: The spectrum and channel definitions of domain are given in Table 6. You are responsible for verifying approval for use in your individual country. To verify approval and to identify the regulatory domain that corresponds to a specific country, please refer to Cisco Edge 340 compliance status on Cisco website.

Table 6. Spectrum and Channel Definitions of Domain

Domain	2.4 GHz	5 GHz	Country
A domain	• 2.412 to 2.462 GHz; 11 channels	• 5.18 to 5.24 GHz; 4 channels • 5.745 to 5.825 GHz; 5 channels	• U.S. • Canada
C domain	• 2.412 to 2.472 GHz; 13 channels	• 5.745 to 5.825 GHz; 5 channels	• China (Main land)
E domain	• 2.412 to 2.472 GHz; 13 channels	• 5.180 to 5.320 GHz; 8 channels • 5.500 to 5.700 GHz, 8 channels (excludes 5.600 to 5.640 GHz)	• European Union, Thailand, Saudi, South Africa, Turkey, Sir Lanka, Ukraine
N domain	• 2.412 to 2.462 GHz; 11 channels	• 5.180 to 5.320 GHz; 8 channels • 5.745 to 5.825 GHz; 5 channels	• Australia, New Zealand, India, Mexico, China (Hong Kong)

Cisco Services

Cisco is committed to minimizing TCO for the network. Our portfolio of technical support services helps ensure that our products operate efficiently, they remain highly available, and they benefit from the most up-to-date system software. The services and support programs described in Table 7 are available as part of the Cisco Desktop Switching Service and Support solution and are available directly from Cisco and through resellers.

Table 7. Cisco Services and Support Programs

Service and Support	Features
Cisco Smart Foundation Service	• Next-business-day advance hardware replacement as available • Access to SMB TAC during business hours (access levels vary by region) • Access to Cisco.com SMB knowledge base • Online technical resources through Smart Foundation Portal • Operating system software bug fixes and patches
Cisco SMARTnet Service	• Around-the-clock, global access to the Cisco TAC • Unrestricted access to the extensive Cisco.com knowledge base and tools • Next-business-day, 8x5x4, 24x7x4, or 24x7x2 advance hardware replacement and onsite parts replacement and installation available[1] • Ongoing operating system software updates within the licensed feature set[2]

[1] Advance hardware replacement is available in various service-level combinations. For example, 8x5xNBD indicates that shipment will be initiated during the standard 8-hour business day, 5 days a week (the generally accepted business days within the relevant region), with next-business-day (NBD) delivery. Where NBD is not available, same day shipping is provided. Restrictions apply; please review the appropriate service descriptions for details.

[2] Cisco operating system updates include the following: maintenance releases, minor updates, and major updates within the licensed feature set.

For More Information

For more information about the Cisco Edge 340 Series, please visit Cisco Website or contact your local Cisco account representative.

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