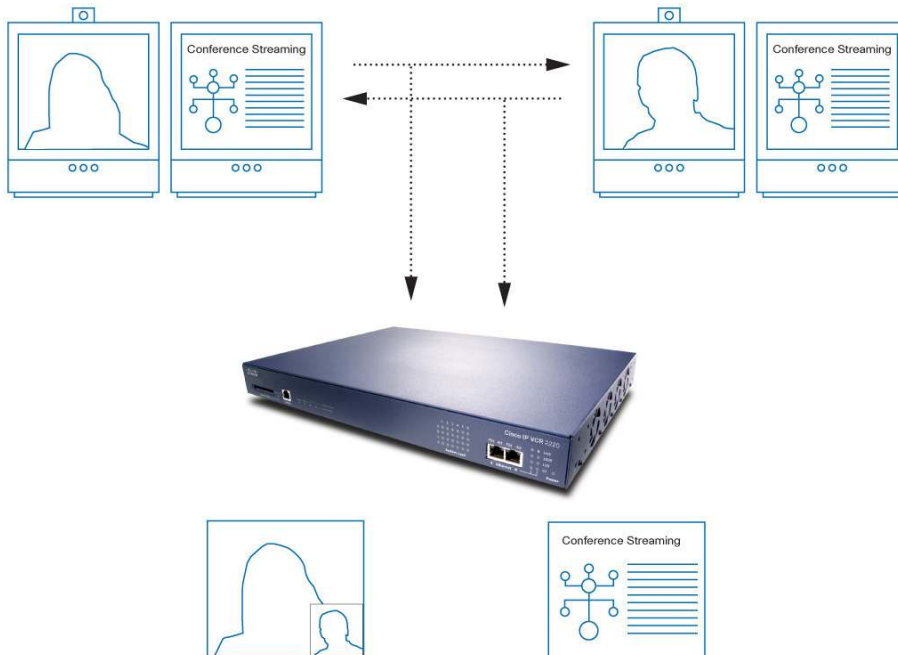# Cisco TelePresence IP VCR 2200 Series

The Cisco TelePresence™ portfolio creates a face-to-face experience over the network—empowering you to collaborate with others like never before. Through a powerful combination of technologies and design that allows you and remote participants to feel as if you are all in the same room, the Cisco TelePresence portfolio has the potential to provide great productivity benefits and transform your business. Many organizations are already using it to control costs, make decisions faster, improve customer intimacy, scale scarce resources, and speed products to market.

Product Overview

The Cisco® TelePresence IP VCR 2200 Series is an innovative, high-performance, IP-based videoconference recording, playback, and streaming system. It is exceptionally easy to install and operate, with an intuitive and versatile management interface. Compatible with all major vendors' endpoints, it is ideal for corporate training, executive briefings, webcasts, news, distance learning, telemedicine, and more.

Cisco IP VCR 2200 Series Features

Table 1 summarizes the key features for the Cisco IP VCR 2200 Series.

Table 1.   Cisco IP VCR 2200 Series Feature Summary

Feature Summary	
Design Features	• Standards-based and compatible with all major vendors' endpoints • Easy-to-use, versatile management interface • Up to 10 recording ports and 20 playback ports • Fully integrated, with built-in gatekeeper and streaming server • Comprehensive wideband audio support • H.239 dual-video support • Compact size: 1U tall and 19" rack mountable
Application Features	• Record voice, video and content from standard video conferencing equipment • Stream live or play back the content on demand to any PC or videoconferencing endpoint • Support for QuickTime™, RealPlayer™ and Windows Media Player™ • Offers full interoperability with ISDN networks using standalone Cisco or third-party ISDN Gateways • PacketSafe™ technology minimizes effects of network packet loss
Performance Features	• Cisco TelePresence Universal Port technology ensures each participant gets an excellent experience • Constant high capacity • Bandwidth per site up to 2 Mbps • Video resolutions from QCIF up to 720p • Frame rate up to 30 fps • Standard Definition Continuous Presence

Model	H.323 Recording Ports[*]	H.323 Playback Ports[*]	Live Streaming Unicast[**]/Multicast	Recorded Hours High/Med/Low Quality[***]	Video Firewall
IP VCR 2210	1	5	80/unlimited	75/150/300	No
IP VCR 2220	5	10	80/unlimited	150/300/600	Included
IP VCR 2240	10	20	80/unlimited	300/600/1200	Included

[*] Numbers are not concurrent, i.e. the IP VCR cannot support stated number of recordings and playbacks at the same time.
[**] Maximum number of unicast streams is dependent on network topology.
[**] Maximum of 50 UDP streams with H.239, Maximum of 25 TCP streams with H.239, Maximum of 50 TCP streams with no content, Maximum of 80 UDP streams with no content.
[**] No live streams with H.323 playback.
[***] Example capacities assume high quality is H.264 at 512 kbps, medium is H.264 at 256 kbps and low is H.264 at 128 kbps.

Product Capabilities

Table 2 provides a listing of the product capability specifications for the Cisco IP VCR 2200 Series.

Table 2.   Product Specifications

Specification	Description
Video Standards	• H.261, H.263, H.263+, H.263++, H.264, MPEG-1
Resolution	• From QCIF up to 720p
Frame Rates	• Up to 30 frames or 60 fields per second in all modes
Audio Standards	• G.711, G.722, G.723.1, G.728, G.729, MPEG-4 AAC-LC, MPEG-4 AAC-LD, Polycom® Siren14™/G.722.1 Annex C
Protocols	• H.323 v4, SIP, H.239 (dual video), FTP, RTP, RTSP, HTTP, DHCP, SNMP, NTP
Bandwidth	• From 128 kbps to 2 Mbps
Universal Transcoding and Transrating	• Video and audio are played back via H.323/SIP or streamed using a bandwidth and codec that can be different to the source • The IP VCR will transcode and transrate as required • All recordings are stored in native format with no loss of quality

Specification	Description
Recording	• From an endpoint, MCU or gateway • From two endpoints on a point-to-point call • H.323/SIP dial in, or dial out from built-in web server • Data from H.239 (dual video) capable endpoints • Up to 200 recordings • Folders for structured storage
Streaming Video	• Stream live or recorded content • Slides presented alongside video • Pause, rewind, and fast-forward for recorded playback • Embedded via web interface or standalone via URL • Stream at multiple bandwidths • Viewed using Windows Media Player™, RealPlayer™ or QuickTime™ • Support for 3rd party streaming servers • Unicast and multicast • UDP, TCP, or HTTP
Playback	• To endpoint, MCU, or gateway • Select using E.164 address, using auto attendant or dial out from web server • Replay of data/slides using H.239 (dual video) • Choose side-by-side or picture-in-picture (voice activated) layout for playback of point-to-point recordings • Pause, rewind, and fast forward using remote control • Bandwidth/codec adjusted to match endpoint and network
Export Recordings	• Export in industry-standard MPEG-1 format • Easily create CDs or DVDs
Import Video	• Upload industry standard MPEG-1 video presentations
Localization and Customization	• Custom IVR/auto attendant audio prompts and graphics • Uploadable multi-language support
Built-in Web Server	• Complete configuration, control, and monitoring of the system and recordings
System Management	• Management via embedded Web server • RS-232 for local control and diagnostics • Syslog for diagnostics • Configurable event logs and full H.323 and SIP decoding • Configuration backup to network • Secure upgrades through Ethernet or CompactFlash • SNMP
Quality of Service	• Configurable DSCP or TOS/IP precedence
Network Resilience	• Cisco TelePresence Packet Safe technology provides intelligent downspeeding, packet pacing, and packet loss concealment to ensure optimum video and audio quality • Dynamic jitter buffering
Security Features	• Administrator, User and Guest passwords • Password-protected streaming and content playback • DTMF passwords for H.323 endpoints • Secure non-PC hardware and operating system • Video Firewall Option using second Ethernet port
Interfaces	• 2 x RJ45 Ethernet, 10/100/1000 Mbps full/half duplex, manual or auto sensing • RJ45 serial port • CompactFlash socket • 41 status LEDs
Environmental Data	• Operating temperature 0℃ to 35℃ ambient • Relative humidity below 95% (non-condensing)
Physical Dimensions	• Height 1.73", 44 mm (1U) • Width 17.2", 437 mm • Depth 12.3", 312 mm • Weight 9 lbs, 4 kg • 19" rack mountable (kit supplied) or standalone • Power 100-240 VAC, 50/60Hz110W max power consumption

Regulatory Compliance

- European safety: EN 60950-1:2001

- USA safety: UL 60950-1 First Edition

- Canada safety: CSA 60950-1-03

- CB Scheme certificate, CE Marked

- EMC: EN55022 class A, EN61000-3-2, EN61000-3-3,

- EN55024: EN61000-4-2,-3,-4,-5,-6,-11,

- FCC Part 15 class A, VCCI class A, AS/NZS 3548 (C-Tick),

- CCC Approved: GB4943-2001, GB9254-1998, YD/T993-1998

- NAL Certificate (China)

- RoHS compliant

Ordering Information

To place an order, please contact your Cisco sales representative.

Table 3.   Ordering Information

Product Name	Part Number
Cisco TelePresence IP VCR 2210	**CTI-2210-VCR-K9**
Includes: IP VCR 2210 – 1 Port IP VCR, license software, cables	
Software License Feature Options for Cisco TelePresence IP VCR 2210	
IP VCR 2210 – Video Firewall Option	LIC-2210-VFO
AES and HTTPS Enable Upgrade	LIC-AESCDN2-K9
Cisco TelePresence IP VCR 2220	**CTI-2220-VCR-K9**
Includes: IP VCR 2220 – 5 Port IP VCR, license software, Video Firewall license feature, cables	
Software License Feature Options for Cisco TelePresence IP VCR 2220	
AES and HTTPS Enable Upgrade	LIC-AESCDN2-K9
Cisco TelePresence IP VCR 2240	**CTI-2240-VCR-K9**
Includes IP VCR 2240 – 10 Port IP VCR, license software, Video Firewall license feature, cables	
Software License Feature Options for Cisco TelePresence IP VCR 2240	
AES and HTTPS Enable Upgrade	LIC-AESCDN2-K9
Post Initial Sale Software License Upgrade Options for Cisco TelePresence IP VCR 2210	
Upgrade PAK (Product Authorization Key) **Enter PAK number first to see options below**	**L-VCR2200-UPG-PAK**
IP VCR 2210 – Video Firewall Option	L-2210-VFO
AES and HTTPS Enable Upgrade for VCR 2200 Series (Outside Russia)	L-AESCDN2-K9=

Service and Support

Cisco and our partners provide a broad portfolio of intelligent, personalized services and support that can help you realize the full value of your Cisco IP VCR 2200 Series investment by increasing business agility and network availability. This portfolio of services accelerates business innovation through a network-based collaboration platform that enables businesses to collaborate anywhere, anytime. For more information about these services, visit: http://www.cisco.com/go/telepresenceservices.

For More Information

For more information about the Cisco IP VCR 2200 Series, visit http://www.cisco.com/go/telepresence or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.

Printed in USA

C78-624757-01   07/11