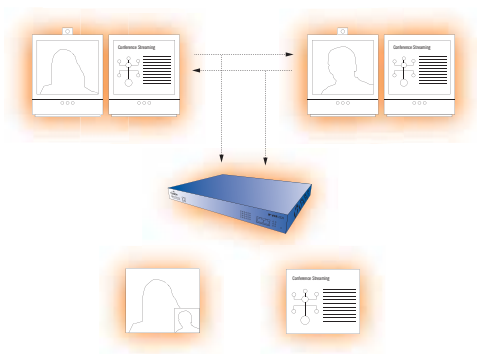




## TANDBERG Codian IP VCR 2200 Series

The TANDBERG Codian 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.



#### 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 videoconferencing equipment
- Stream live or playback 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 TANDBERG Codian or third-party ISDN Gateways
- PacketSafe™ technology minimizes effects of network packet loss

#### PERFORMANCE FEATURES

- TANDBERG Codian 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

GET THE MOST FROM YOUR INVESTMENT. WITH **PROFESSIONAL SERVICES**, TANDBERG EXPERTS SUPPORT TANDBERG CODIAN IP VCR 2200 DEPLOYMENT AND TRAINING. VISIT [WWW.TANDBERG.COM](http://WWW.TANDBERG.COM)

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	100 80/UNLIMITED	75/150/300	NO
IP VCR 2220	5	10	200 80/UNLIMITED	150/300/600	INCLUDED
IP VCR 2240	10	20	400 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. When sharing content, the maximum number of live unicast streams supported is 50

\*\*\* 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

#### 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.

#### 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

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

2xRJ45 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°C to 35°C 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

#### APPROVALS AND 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

All specifications subject to change without notice, system specifics may vary.

All images in these materials are for representational purposes only, actual products may differ.

TANDBERG and Codian are registered trademarks or trademarks of TANDBERG in the U.S. and other countries.

All other trademarks are property of their respective owners.



## TANDBERG

# Codian IP VCR 2200 Series

TANDBERG WORLD HEADQUARTERS  
Philip Pedersens vei 20  
1366 Lysaker, Norway  
Tel: +47 67 125 125  
Fax: +47 67 125 234  
Video: +47 67 126 126  
tandberg@tandberg.com

1212 Avenue of the Americas,  
24<sup>th</sup> Floor  
New York, NY USA 10036  
Tel: +1 212 692 6500  
Fax: +1 212 692 6501  
Video: +1 212 692 6535  
tandberg@tandberg.com

July 2009