Avaya Room System XT7100

The Avaya Room System XT7100 is the flagship offering in the XT series of video conferencing room systems. The XT7100 incorporates H.265 High Efficiency Video Coding (HEVC), one of the industries most advanced video compression technologies. H.265 HEVC doubles the video compression efficiency of H.264 High Profile, enabling full HD 1080p 60fps video with half the bandwidth required[1] , delivering an exceptional experience with a total lower cost of ownership.

The XT7100 delivers one of the best conferencing experiences available from a room system. With powerful processing, the system supports dual 1080p 60fps live video and content channels, along with 4K display and content support. Available PTZ cameras offer up to 20x optical zoom (12x digital) to view details and include wide-angle capability for group participation. A digital beam forming microphone array pod is available that isolates meeting speakers from background noise, while CD-clarity stereo audio brings added presence to meetings. Optional embedded 9-way multi-party conferencing including the ability to engage with participants via desktop and mobile devices makes it easy to host meetings with remote participants.

Built for user simplicity, intuitive Apple iPad and iPhone control puts the power of the XT7100 at the user's fingertips. Meetings can be easily recorded directly to a USB drive. And with Avaya Screen Link, users can wirelessly present content from their laptops, while Avaya Mobile Link enables seamless meeting transitions with your Avaya Workplace mobile UC app.

Exceptional Experience

The Avaya XT7100 sets the standard for an exceptional conferencing experience, helping users feel like they are together in the same room with remote participants, where distance has disappeared. 4K display support, simultaneous HD 1080p/60fps for live video and content along with CD-clarity stereo audio transform a simple video meeting into a true collaborative session as if local and remote participants are working together at the same table.

Extreme Efficiency

Incorporating powerful and robust processing, the XT7100 supports H.265 High Efficiency Video Coding (HEVC) providing up to a 50% reduction in bandwidth required over H.264 High Profile. This extreme bandwidth efficiency enables the XT7100 to deliver impressive performance in network applications and conditions where bandwidth is at a premium. With bandwidth the same, the XT7100 delivers significantly higher performance than systems only supporting H.264 High Profile or more common H.264 AVC technology.

Intuitive, Easy-to-Use

The XT7100 delivers intuitive meeting control with little or no training required. With Microsoft Exchange calendar support, users can join meetings directly from the integrated calendar. The on-screen participant list gives leaders full meeting moderation, and with Avaya Screen Link, users can wirelessly present content from their laptops. Avaya Mobile Link enables seamless meeting transitions with your Avaya Workplace mobile application, while optional Apple iPad or iPhone control makes the system even easier to use.

Recording and Multi-party Conferencing

The power of meeting recording and multi-party conferencing is available enabling team engagement far beyond the basics. Recording, and turning your real-time meeting into a valuable stored asset, is an important capability for note taking, meeting review, fiduciary, and educational needs. Included with the XT7100, this capability requires only a USB drive. Optional built-in support for continuous presence multi-party calls requires no external bridging capabilities or services.

All-in-one, Easy to Deploy

The XT7100 is offered as a unique all-in-one video meeting solution combining its room system capabilities with embedded 9-way multiparty conferencing, along with desktop and mobile connectivity for remote participants including firewall traversal. Cascading to additional XT systems enables meetings with up to 65 remote participants. The system can also be automatically configured with minimal user intervention. A provisioning code entered at startup configures the XT7100 with a profile created through Avaya Workplace, enabling deployment without technical resources.

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Available Cameras

Camera Model	Advanced Camera II 20x 1080p60	Deluxe Camera 12x 1080p60	Flex Camera 5x 1080p60	HC020 2160p30	HC050 12x 1080p30	Tracking Camera TC220
Image device		Exmor CMOS 1/2.8''		4K@30/25 CMOS1/2.5"	CMOS1/3"	CMOS1/2.8"
Video Formats with laptop	Not applicable	Not applicable	Not applicable	2160p30/25 1080p60/50/30/25	1080p30/25 720p30/25	-
Video Formats with XT	1080p60/50/30/25 720p60/50/30/25	1080p60/50/30/25 720p60/50/30/25	1080p60/50/30/25 720p60/50/30/25	1080p30 / 720p30	1080p30 / 720p30	1080p60/50/30/25, 720p60/50
Video signal	Uncompressed on HDMI	Uncompressed on HDMI	Uncompressed on HDMI	Compressed (H.264) on USB or uncompressed on HDMI	Compressed (H.264) on USB	Compressed (H.264 & H.265) or uncompressed on HDMI & 3G-SDI
Focal Length	f = 4.7 ~ 94 mm F1.6 to F3.5	f=3.9 to 46.8 mm, F1.6 to F2.8	f=3.9 ~ 19.5 mm, F1.6 to F2.5	f=2.8mm	f3.5mm ~ 42.3mm, F1.8 ~ F2.8	f = 3.9 ~ 46.8 mm F1.6 ~ F2.8
Min object distance (wide)	1000(Wide) ~ 1500(Tele) mm	500mm (20inches)	500mm (20inches)	500mm	100mm	500(Wide) - 1000(Tele) mm
Min illumination	1.0 lux (F1.6, 50IRE, 60fps)	0.5 lux (F1.6, 50 IRE, 60 fps)	0.5 lux (F1.6, 50 IRE, 60 fps)	0.05 Lux @ (F1.8, AGC ON)	0.5 Lux @ (F1.8, AGC ON)	0.5 lux (F1.6, AGC ON)
HFoV	63°	72°	72°	104° (up to 123°)	72.5°	72.5°
VFoV	36°	43°	43°	68°	43°	42°
Optical Zoom (*)	20x	12x	5x	NA	12x	12x
Digital Zoom (*)	12x	4x	8x	8x	16x	12x
Pan Range	+/- 170°	+/- 100°	+/- 100°	ePTZ (**)	+/-170°	+/- 90°
Tilt Range	-30° ~ +90°	+/-30°	+/- 30°	ePTZ (**)	+/- 30°	-30° ~ +90°
Serial Control	Serial In – Out	Serial In - Out	Serial In	Via USB	Serial In – Out - USB	Serial In – Out, Via Network
Ceiling Mount	Supported	Supported	Supported	Supported	Supported	Not supported
Camera mount	Basic kit for ceiling mount included in the box	XT Camera mount (55111-00056) available for wall mount and display mount.	Mount (55111- 00056) available for wall mount and display mount.	Tripod screw hole (1/4-20 UNC)	Tripod screw hole (1/4-20 UNC)	Available for wall mount and Tripod screw hole (1/4-20 UNC)
Weight	2 kg (4.4 lbs.)	1.3 Kg (2lbs 14oz)	1.3 Kg (2lbs 14oz)	0.34Kg	0.91Kg	3Kg
Dimensions w/h/d	174 x 186 x 187 mm (6.9" x 7.3" x 7.3")	268 x 156 x 124 mm (10.5 x 6.1 x 4.8 inches)	268 x 156 x 123 mm (10.5 x 6.1 x 4.8 inches)	194mm x 34mm x 42mm (without bracket)	128.5mm x 118mm x 156.2mm	500mm x 162mm x 137mm
Current consumption (max)	2.5 A	2.2 A	2.2 A	0.6 A	1A	2A
Use with Workplace Client	No	No	No	Yes	Yes	
Video configurations	White balance (auto/manual); Focus Mode (auto/manual); Sharpness; Backlight; Exposure Compensation; Picture (auto/manual) and WDR level					
Voltage Range	12V nominal (10.8 to 13.0 V)	12V nominal (10.8 to 13.0 V)	12V nominal (10.8 to 13.0 V)	5V(USB)	DC 12V	12V nominal (10.8 to 13.2 V)
IR repeater as TTL signal	On pin 7 Serial IN	On pin 7 Serial IN	On pin 7 Serial IN	Not available	Not available	On pin 7 Serial In
Camera Output	DVI-I	DVI-I	DVI-I	USB 3.0	USB 3.0	HDMI /3G-SDI
Microphone	Not included	Not included	Not included	Included, frequency response 50Hz - 8KHz, 3m radius omni (6m diameter), coverage 360°	Included, frequency response 50Hz - 8KHz, 3m radius omni (6m diameter), coverage 360°	
Presets	122 (for all connected cameras, directly on XT codec)					128
Far end camera control	Through XT codec (H.224, H.281)					
S/N dB	S/N>50dB	S/N>50dB	S/N>50dB	-	S/N≥ 55dB	S/N≥ 50dB

(*) Zoom factor can be limited to 5x on some XT Models, such as XT for IPO. Zoom Upgrade license allows enabling full zoom features of selected model
(**) Digital Pan Tilt is supported when camera zoom is enabled.

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Available Microphones

Model	XT 1-way POD	XT Premium 3-way POD
Type	1x condenser half cardioid	3x condenser half cardioid
Audio Channels	1x mono	3x mono or 1x stereo
Frequency Response	30-20,000Hz	50-22,000Hz
Coverage	3m (9.8') radius cardioid / 180°	6m (19.7') diameter omnidirectional / 360°
Output Impedance / Configuration	250 ohm / Balanced	Digital / Custom interface
Sensitivity	-53dB + / -3dB	-37dB + / -3dB
Maximum SPL	130dB	110dB
Signal to Noise Ratio	>60dB	>68dB
Mute Switch	—	Yes
Cable Length and Connector Type	6m (19.7'), stereo jack 3.5mm (1/8") to Mini XLR 3 pole female	6m (19.7'), RJ11 6 pole plug
Weight	380g (0.8lb)	450g (1.0lb)
Dimensions w / h / d	12.0 x 2.0 x 11.0cm (4.7 x 0.8 x 4.3")	13.4cm (5.3") diameter x 2.5cm (1.0") h
Power Requirements	9-52V Phantom, 1.0mA max.	12V, 70mA max.

XT7100 Specifications

Communications

- IP: H.323, SIP (RFC 3261)

- Bit rate: H.323, SIP: up to 6 / 122 Mbps

- MCU compatibility: H.243, H.231

- XMPP Presence Server support

Video

- 2 simultaneous 1080p60 channels: camera + auxiliary camera or camera + content

- Content capture on DVI or HDMI3

- H.263, H.263+, H.263++, H.264, H.264 High Profile, H.265 HEVC, SVC

- Dual: H.239 (H.323); BFCP (SIP)

- Avaya Multi-Stream Switching (MSS) video

- RTMP support for video streaming

- RTSP support for video streaming

- RTX support for error resiliency with Spaces

- **Important:**

  Platforms listed below are for convenience only and are subject to change without notice.

  Facebook, Periscope/Twitter, YouTube, Adobe Media Server Live Stream, Meridix, NGINX, Red5 Media Server, Restream.io, Twitch, Ustream, Wowza Streaming Server

- **HDMI input formats**

  3840 x 2160 @ 24, 25, 30fps (YCbCr 4:2:2)[3]
  1920 x 1080p @ 25, 30, 50, 60fps
  1600x1200 @ 24, 25, 30fps (YCbCr 4:2:2)[3]
  1600 x 900p @ 60fps (digital only)[3]
  1440 x 900p @ 60fps: WSXGA[3]
  1400 x 1050 @ 60fps[3]
  1280 x 1024p @ 60fps: SXGA[3]
  1280 x 960p @ 60fps: SXGA[3]
  1280 x 768p @ 60fps: WXGA[3]
  1280 x 800p @ 60fps: WXGA[3]

1280 x 720p @ 25, 30, 50, 60fps
1024 x 768p @ 60fps: XGA[3]
800 x 600p @ 60fps: SVGA[3]
720 x 576p @ 50fps
720 x 480p @ 60fps
640 x 480p @ 60, 72, 75fps: VGA[3]

- **Live video encoding formats**

  1920 x 1080p @ 25, 30, 50, 60fps
  1280 x 720p @ 25, 30, 50, 60fps
  1024 x 576p @ 25, 30fps: w576p
  848 x 480p @ 25, 30fps: w480p
  768 x 448p @ 25, 30fps: w448p
  704 x 576p @ 25, 30fps: 4CIF
  704 x 480p @ 25, 30fps: 4SIF
  624 x 352p @ 25, 30fps: w352p
  576 x 336p @ 25, 30fps
  512 x 288p @ 25, 30fps: wCIF
  416 x 240p @ 25, 30fps: w240p
  400 x 224p @ 25, 30fps
  352 x 288p @ 25, 30fps: CIF
  352 x 240p @ 25, 30fps: SIF

- **DVI input formats**

  1920 x 1080p @ 60fps
  1600 x 900p @ 60fps (digital only)
  1440 x 900p @ 60fps: WSXGA
  1400 x 1050 @ 60fps
  1280 x 1024p @ 60, 75fps: SXGA
  1280 x 1024 @ 60fps
  1280 x 960p @ 60, 85fps: SXGA
  1280 x 768p @ 60fps: WXGA
  1280 x 800p @ 60fps: WXGA
  1280 x 720p @ 60fps
  1024 x 768p @ 60, 70, 75fps: XGA
  800 x 600p @ 60, 72, 75fps: SVGA
  640 x 480p @ 72, 75fps: VGA

- **PC content encoding formats:**

  Up to 1080p @ 60fps

- **HDMI output formats**

  3840 x 2160 @ 25, 30fps (on HD1)
  1920 x 1080 @ 25, 30, 50, 60fps
  1280 x 720 @ 50, 60fps

Content Sharing / Web Collaboration

- Dual video: H.239 (H.323); BFCP (SIP)

- Avaya Workplace native web collaboration

- Avaya Workplace chat and web collaboration pointer tool via Control[2]

Recording

- Recording on USB drive (with dual display systems, both displays show the same images while recording; uses 2 ports of the 9 port MCU, no impact on 4 port MCU)

- USB drive formats: FAT32, EXT2, EXT3, EXT4

- Recording formats: MP4 file

- Time watermark on recorded files[2]

- Digital signature for recorded files[2]

Audio

- Stereo audio with Premium 3-way POD

- Acoustic echo cancellation

- Adaptive post filtering

- Audio error concealment

- Automatic Gain Control (AGC)

- Automatic noise suppression

- **Frequency response:**

  G.711: 300-3,400Hz
  G.728: 50-3,400Hz
  G.729A: 50-3,400Hz
  G.729AB: 50-3,400Hz
  G.722, G.722.1: 50-7,000Hz
  G.722.1 Annex C: 50-14,000Hz
  AAC-LD: 50-14,000Hz
  AAC-LC: 50-14,000Hz
  G.719: 50-20,000Hz
  Opus: 50-20,000Hz

Audio / Video Interfaces

▪ **Video inputs:**

2 x HDMI
1 x DVI-I
3 x Additional HDMI via switcher[2]

▪ **Video outputs:**

2 x HDMI for dual display

▪ **Audio inputs:**

2 x HDMI
1 x Microphone Array Pod (RJ11)
1 x 3.5mm (1 / 8") line in jack for audio source (analog / digital with mini-TOSLINK adapter) 3 x Additional HDMI via switcher[2]

▪ **Audio outputs:**

2 x HDMI
1 x 3.5mm (1/8") line out jack (analog / digital with mini-TOSLINK adapter)

Auxiliary Camera Interface

VISCA RS232 for PTZ control (Mini-DIN 8-pin)

USB Ports

1 x USB2
1 x USB3
Supports recording, firmware upgrade, USB to serial adapter for control, limited headsets and USB2 cameras

Network Features

▪ IPv4 and IPv6 simultaneous support • Auto Gatekeeper discovery

▪ QoS support: IP Precedence, IP Type of Service (ToS), Differentiated Services (diffserv)

▪ Avaya NetSense bandwidth adaptation for high quality over unmanaged networks

▪ DTMF tones: H.245, RFC2833 S

▪ NTP date and time synchronization

▪ **IP adaptive packet management**

▪ Flow control
Packet Loss based down-speeding
Packet Loss recovery policies

Network Protocols

- DHCP, DNS, HTTP, HTTPS, RTP/ RTCP, SNTP, STUN, TCP / IP, TELNET, TFTP, 802.1Q, 802.1X, 802.1p

Network Interfaces

- 2 x 10 / 100 / 1000 Base-T full-duplex (RJ-45)

Firewall Traversal

- Auto NAT discovery HTTP and STUN

- H.460.18, H.460.19

- "Keep Alive" packet time configurable

User Interface

- 25 language on-screen user interface

- Infrared remote control

- API for endpoint control

- Control application for Apple iPad and iPhone

- Microsoft Exchange calendar integration

- Bitmaps and logo customization[2]

- Standard Android compatible touch screens support

- Automatic Configuration using credentials on Equinox on prem

- Transmit the Site Name in overlay

- Preset for USB camera

Directory Service & Address Book

- LDAP Client (H.350)

- Receive global address book from LDAP Server including Avaya Workplace

Multipoint Control Unit[2]

- H.323 and SIP mixed mode

- 4 / 9 HD continuous presence participants

- Desktop and Mobile Client support[2]

- Dial-in / Dial-out capabilities

- Encryption for up to 4 connected participants[3]

- Automatic continuous presence layouts

- Dual-video from any site

- Lecturer mode on system hosting the conference

- Supports 5 additional audio calls in MCU[4]

- XT MCU cascading (up to 65 participants in conference with 8 MCU slaves)

Physical Characteristics

- **Horizontal / Vertical Mounting:**

  W: 29.0cm (11.4'')
  D: 16.5cm (6.5'')
  H: 4.0cm (1.6'')
  Weight: 1.5kg (3.5lb)

Power Supply

- 100-240VAC, 50-60Hz, 2A Max.

Security Features

- Embedded encryption4

- H.323 security per H.235v3 / Annex D

- SIP security per SRTP and TLS 1.2, enciphering up to AES-256

- SIP "Digest" authentication (MD5)

- RTP media enciphering with AES-256

- Public-Key including Diffie-Hellman (2048 bits), RSA (up to 4096 bits)

- Cryptographic hash (up to SHA-512)

- Web access via HTTPS

- API access via SSH

- Selective enable / disable of IP features

- White list support

- Avaya Enhanced Access Security Gateway (EASG) support

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Avaya Room System XT7100 Options

- 4 / 9 Port Embedded 1080p30 MCU
- Desktop and Mobile Client Support
- Extended IP Bit Rate: Multipoint = 12Mbps, P2P = 10 / 8Mbps (SIP/H.323)
- Full Brand Customization
- 4 HD Port Camera / Source Switch
- Codec Wall Mount
- Camera Wall Mount
- Carts supporting one or two displays

Web Management

- Configuration, call, diagnostics and management functions are accessible with Internet Explorer 8.0+, Firefox 3.6+, Safari 5.0+, Chrome 11.0+, Opera 11+
- Automatic Firmware Upgrade through Cloud

Interoperability

- Calendar integration for third party cloud like Zoom, BlueJeans, Webex, Pexip
- For detailed information, please contact an Avaya representative for the interoperability report
- Pexip management support
- Support to DingTalk SIP cloud service

Software Platform

- Avaya Aura® 7.0 & Avaya IP Office™ 11.0
- Interoperability with Open SIP platforms like Broadsoft 22.0, Asterisk™ 16.5, 3CX™ 16.0, FreeSWITCH™ 1.8, Cisco, Polycom, Huawei, Lifesize, Yealink video systems, Cisco Webex (via SIP gateway), Blue Jeans, Zoom, Hangouts, Pexip, Starleaf

Support for Avaya Spaces Meeting via SIP Gateway

About Avaya

Businesses are built by the experiences they provide, and every day millions of those experiences are delivered by Avaya Holdings Corp. (NYSE: AVYA). Avaya is shaping what's next for the future of work, with innovation and partnerships that deliver game-changing business benefits. Our cloud communications solutions and multi-cloud application ecosystem power personalized, intelligent, and effortless customer and employee experiences to help achieve strategic ambitions and desired outcomes. Together, we are committed to help grow your business by delivering Experiences that Matter. Learn more at www.avaya.com.

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