

**Devices and Phones**

# Avaya Room System XT7100



**Exceptional Experience, Extreme Efficiency**

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<sup>1</sup>, 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.



### Highlights

- Exceptional Experience
- Extreme Efficiency
- Intuitive, Easy-to-Use
- Recording and Multi-party
- Conferencing
- All-in-one, Easy to Deploy

### 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



**With more than 100 years as a leader in communications, Avaya can help your company maximize productivity with the communications solutions specific to the needs of your workforce.**

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 multi-party 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.

## Available Cameras

|                            |   |    |  |                 |                |  |
|----------------------------|--|---|---|---|---|---|
| Camera Model               | Advanced Camera II<br>20x 1080p60  | Deluxe Camera<br>12x 1080p60  | Flex Camera<br>5x 1080p60   | HC020<br>1080p@30   | HC050<br>12x 1080p30  | Tracking Camera<br>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  | 4K@30/25<br>1080p60/50/30/25  | 1080p30/25<br>720p30/25   | -   |
| Video Formats with XT      | 1080p60/50/30/25<br>720p60/50/30/25  | 1080p60/50/30/25<br>720p60/50/30/25   | 1080p60/50/30/25<br>720p60/50/30/25   | 1080p30 / 720p30  | 1080p30 / 720p30  | 1080p60/50/30/25,<br>720p60/50  |
| Video signal               | Uncompressed on<br>HDMI  | Uncompressed on<br>HDMI   | Uncompressed on<br>HDMI   | Compressed (H.264)<br>on USB or<br>uncompressed on<br>HDMI  | Compressed (H.264)<br>on USB  | Compressed (H.264 &<br>H.265) or<br>uncompressed on<br>HDMI & 3G-SDI                |
| Focal Length               | f = 4.7 - 94 mm F1.6<br>to F3.5  | f=3.9 to 47.3 mm, F1.8<br>to F2.8   | f=3.2 - 20 mm, F1.8<br>- 4.3  | f=2.8mm   | f3.5mm - 42.3mm,<br>F1.8 - F2.8   | f = 3.9 - 46.8 mm F1.6<br>- F2.8  |
| Min object distance (wide) | 1000(Wide) -<br>1500(Tele) mm  | 500mm (20inches)  | 600mm (24inches) in<br>standard mode and<br>300 in wide mode                      | 500mm   | 100mm   | 500(Wide) -<br>1000(Tele) mm  |
| Min illumination           | 1.0 lux<br>(F1.6, 50IRE, 60fps)  | 0.5 lux<br>(F1.6, 50 IRE, 60 fps)   | 1.3 lx<br>(F1.8, 50 IRE 60fps)  | 0.05 Lux @<br>(F1.8, AGC ON)  | 0.5 Lux @<br>(F1.8, AGC ON)   | 0.5 lux<br>(F1.6, AGC ON)   |
| HFoV                       | 63°  | 74°   | 80° (***)   | 104° (up to 123°)   | 72.5°   | 72.5°   |
| VFoV                       | 36°  | 44°   | 48° (***)   | 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,<br>Via Network   |
| Ceiling Mount              | Supported  | Supported   | Supported   | Supported   | Supported   | Not supported   |
| Camera mount               | Basic kit for ceiling<br>mount included in<br>the box  | XT Camera mount<br>(55111- 00056) available<br>for wall mount and<br>display mount. | mount (55111- 00056)<br>available for wall mount<br>and display mount.            | Tripod screw hole<br>(1/4-20 UNC)   | Tripod screw hole<br>(1/4-20 UNC)   | Available for wall<br>mount and Tripod<br>screw hole<br>(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<br>(6.9" x 7.3" x 7.3")   | 268 x 156 x 124 mm<br>(10.5 x 6.1 x 4.8<br>inches)                                  | 268 x 156 x 123 mm<br>(10.5 x 6.1 x 4.8<br>inches)                                | 194mm x 34mm x<br>42mm (without<br>bracket)   | 128.5mm x 118mm x<br>156.2mm  | 500mm x x 162mm x x<br>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)<br>and WDR level |   |   |   |   |   |
| Voltage Range              | 12V nominal<br>(10.8 to 13.0 V)  | 12V nominal<br>(10.8 to 13.0 V)   | 12V nominal<br>(10.8 to 13.0 V)   | 5V(USB)   | DC 12V  | 12V nominal (10.8 to<br>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 - HDMI  | USB 3.0   | HDMI /3G-SDI  |
| Microphone                 | Not included   | Not included  | Not included  | Included, frequency<br>response 50Hz -<br>8KHz, 3m radius<br>omni (6m diameter),<br>coverage 360° | Included, frequency<br>response 50Hz -<br>8KHz, 3m radius<br>omni (6m diameter),<br>coverage 360° |   |
| Presets                    | 122 (for all connected cameras, directly on XT codec)  |   |   |   |   | 128   |
| Far end camera control     | Through XT codec (H.224, H.281)  |   |   |   |   |   |

(\*) 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.

(\*\*\*) Upgradable to HFoV 84°/ VFoV 51° with XT advanced settings.

|                                  |  |  |
|----------------------------------|---|---|
| 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 / 12<sup>2</sup>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 HDMI<sup>3</sup>
- 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

#### 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)<sup>3</sup>
- 1920 x 1080p @ 25, 30, 50, 60fps
- 1600x1200 @ 24, 25, 30fps (YCbCr 4:2:2)<sup>3</sup>
- 1600 x 900p @ 60fps (digital only)<sup>3</sup>
- 1440 x 900p @ 60fps: WSXGA<sup>3</sup>
- 1400 x 1050 @ 60fps<sup>3</sup>
- 1280 x 1024p @ 60fps: SXGA<sup>3</sup>
- 1280 x 960p @ 60fps: SXGA<sup>3</sup>
- 1280 x 768p @ 60fps: WXGA<sup>3</sup>
- 1280 x 800p @ 60fps: WXGA<sup>3</sup>
- 1280 x 720p @ 25, 30, 50, 60fps
- 1024 x 768p @ 60fps: XGA<sup>3</sup>
- 800 x 600p @ 60fps: SVGA<sup>3</sup>
- 720 x 576p @ 50fps
- 720 x 480p @ 60fps
- 640 x 480p @ 60, 72, 75fps: VGA<sup>3</sup>

#### • 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<sup>2</sup>

## 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<sup>2</sup>
- Digital signature for recorded files<sup>2</sup>

## 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<sup>2</sup>

- **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<sup>2</sup>

- **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
- SNTP 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

### Support Services

Avaya offers a full set of services to help maximize a video investment. Strategic and technical consulting along with deployment and customization services help ensure that video collaboration rollouts are successful and aligned to business requirements.

Avaya support services maximizes up time with software updates, upgrades, remote maintenance and expert repairs.

### 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<sup>2</sup>
- 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<sup>2</sup>

- H.323 and SIP mixed mode
- 4 / 9 HD continuous presence participants
- Desktop and Mobile Client support<sup>2</sup>
- Dial-in / Dial-out capabilities
- Encryption for up to 4 connected participants<sup>3</sup>
- Automatic continuous presence layouts
- Dual-video from any site

- Lecturer mode on system hosting the conference
- Supports 5 additional audio calls in MCU4
- 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 encryption<sup>4</sup>
- 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

### 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+

### 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

- 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.

### 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 on the experiences they provide and every day millions of those experiences are built by Avaya (NYSE:AVYA). For over one hundred years, we've enabled organizations around the globe to win—by creating intelligent communications experiences for customers and employees. Avaya builds open, converged and innovative solutions to enhance and simplify communications and collaboration—in the cloud, on premise, or a hybrid of both. To grow your business, we're committed to innovation, partnership, and a relentless focus on what's next. We're the technology company you trust to help you deliver Experiences that Matter. Visit us at [www.avaya.com](http://www.avaya.com).

<sup>1</sup> Report on HEVC compression performance verification testing—Joint Collaborative Team on Video Coding (JCT-VC) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11.

<sup>2</sup> Optional.

<sup>3</sup> Only on HDI.

<sup>4</sup> Encryption is subject to local regulations and in some countries, is restricted or limited. Please contact your Avaya representative for details.

