

|                              | Room 1   | Room 2  | Room 3                                     | Room 4                       | Room 5  | Room 6  | Room 7  |
|------------------------------|--|---|--|------------------------------|---|---|---|
| Video Conferencing Unit Type | 1 x Full HD Video Conferencing MCU with 6 Site License | 1 x USB Conference Camera for Mid-Large Rooms | 1 x USB 4K Camera Soundbar for Huddle Room | 1 x USB 4K Conference Camera | 1 x USB Conference Camera for Mid-Large Rooms | 1 x USB Conference Camera for Mid-Large Rooms | 1 x USB Conference Camera for Mid-Large Rooms |
| Additional Microphone Array  | 2 x Expansion Microphone and 5m cable                  | 1 x Expansion Microphone pair incl. 5m cable  | No   | No                           | 1 x Expansion Microphone pair incl. 5m cable  | 1 x Expansion Microphone pair incl. 5m cable  | 1 x Expansion Microphone pair incl. 5m cable  |
| Interactive Control Unit     | 1 x Interactive Control Box                            | No  | No   | No                           | No  | No  | No  |
| Smart Display                | 1 x UHD 85" 4K Smart TV                                | 1 x UHD 85" 4K Smart TV                       | No   | No                           | 1 x 65" CP Series Interactive Flat Panel      | 1 x 65" CP Series Interactive Flat Panel      | 1 x 65" CP Series Interactive Flat Panel      |
| Additional Speaker           | 2 x Speaker System                                     | 1 x Speaker Phone                             | No   | No                           | No  | No  | No  |

| Aver SVC 500 - Full HD Video Conferencing MCU |  | Complied (Y/N) | Remarks |
|---|--|----------------|---------|
| QTY - 1                                       |  |                |         |
| <b>Requirements</b>                           |  |                |         |
| Multipoint Control Unit (MCU)                 | Should support atleast 6 Sites and should be upgradable to 16  |                |         |
| Communications                                | H.323, SIP standards, SIP TLS<br>WebRTC support<br>Mixed protocols between H.323, SIP, and WebRTC<br>Call Quality bandwidth 64Kbps ~ 8Mbps<br>RJ45 network LAN (10/100/1000)<br>Manual Max. bandwidth settings   |                |         |
| Camera PTZ                                    | Pan/Tilt/Zoom camera<br>2-megapixel CMOS sensor<br>18X total zoom (12X Optical, 1.5X Digital zoom)<br>±110° pan; +25°/-25° tilt<br>72° FOV (H); 43° FOV (V); 82° FOV (diagonal)  |                |         |
| People Video Resolutions                      | HD1080p (1920 x 1080), up to 60fps<br>HD720p (1280 x 720)<br>480p (848 x 480)<br>4CIF (704 x 576)<br>CIF (352 x 288)<br>SIF (352 x 240)<br>All resolutions at 30fps  |                |         |
| Content Video Resolutions                     | HD1080p (1920 x 1080)<br>720p (1280 x 720)<br>D1 (720 x 480)<br>SXGA (1280 x 1024)<br>XGA (1024 x 768)<br>SVGA (800 x 600)<br>VGA (640 x 480)<br>DVI (digital) upto 1080p (1920 x 1080)  |                |         |
| Video Standards                               | H.264, H.264 HP, H.264 SVC, H.263+, H.263, H.261<br>H.239 dual video streams<br>BFCP content sharing<br>BFCP content sharing<br>RTMP for live video streaming<br>Forward Error Correction (FEC)<br>Anti 30% video packet loss with FEC   |                |         |
| Video Features                                | 3D Denoise   |                |         |
| Video Inputs                                  | Main camera<br>HDMI for 2nd camera<br>DVI-I /VGA for presentation<br>HDMI for presentation   |                |         |
| Video Outputs                                 | HDMI x 2   |                |         |
| Audio Standards                               | G.711, G.722, G.722.1, G.728, G.722.1C, AAC-LD, G729   |                |         |
| Audio Features                                | Automatic gain control (AGC)<br>Advanced noise reduction<br>Acoustic echo cancellation (AEC)<br>Microphone pickup range of 6m, daisy chain up to 4   |                |         |
| Audio Inputs                                  | HDMI<br>Line-in (3.5 mm)   |                |         |
| Audio Outputs                                 | HDMI x 2   |                |         |
| User Interface                                | Single/dual monitor layout styles<br>User-friendly OSD (supported languages: English, ++)<br>Display/edit site name  |                |         |
| Network                                       | 10/100/1000Mbps<br>NAT/firewall traversal (H.460)<br>High Efficiency Lost Packet Recovery (HELPeR™)<br>API support via Telnet<br>Wake-on-LAN (WOL) support<br>IPv4 and IPv6 support<br>Network Test<br>QoS<br>VLAN (802.1Q / 802.1P)<br>EAP 802.1x   |                |         |
| Security                                      | AES (Advanced Encryption Standard) function (128-bit)<br>Password protection for system settings<br>Password protection for remote system management   |                |         |
| Web Management Tool                           | Remote management and Firmware update<br>Live monitoring<br>Phonebook download/upload/edit<br>Restore system settings<br>Export call history   |                |         |
| Value-added features                          | Meeting recording<br><input type="checkbox"/> In meeting and offline recording<br><input type="checkbox"/> Save directly to USB flash drive<br><input type="checkbox"/> Supports screen re-layout during playback<br><input type="checkbox"/> Playback and file conversion via VCPlayer software (.mov and .mp4 format)<br>ScreenShare software (Wirelessly share content)<br>Control and Sharing using smartphone app<br>Dual monitor support<br>Speed dialing via hot keys (10 sets)<br>Camera presets (100 positions)<br>Screensaver and auto power off mode<br>SnapShot<br>Group calling and SIP voice calls<br>Dual camera and dual content image by Side-by-Side or Picture-in-Picture<br>iSCSI storage device settings<br>Built-in SIP server<br>High-Res mode<br>Support Aver Register Server (ARS)<br>Meeting ID method |                |         |
| Optional accessories                          | 1 x Additional microphone  |                |         |
| Warranty                                      | 3 years Support   Warranty<br>Installation and Configuration   |                |         |

| Aver VC 540 - Conference Camera for Mid-Large Rooms |  | Complied (Y/N) | Remarks |
|---|--|----------------|---------|
| QTY - 1   |  |                |         |
| <b>Requirements</b>                                 |  |                |         |
| Camera  | Ultra-crystal-clear image support up to 4K   |                |         |
|   | WebRTC support   |                |         |
|   | Frame rate: 4K 30fps, 1080p , 720p , 640x480, 320x240 at 60, 30, 15fps   |                |         |
|   | SmartFrame: automatic FOV adjustment to fit all participants   |                |         |
|   | 16X zoom   |                |         |
|   | Autofocus: minimum working distance 1 meter  |                |         |
|   | 86° horizontal field of view   |                |         |
|   | Backlight compensation and 2D noise reduction technology for optimizing light balance in varying conditions  |                |         |
|   | Standard tripod screw holes  |                |         |
|   | Analytics API: enterprises and third-party software providers can obtain people-counting data to better understand meeting-space usage   |                |         |
| Speakerphone  | Bluetooth / USB Wired  |                |         |
|   | Full-duplex microphone array with echo cancellation  |                |         |
|   | Advanced noise suppression   |                |         |
|   | 2-microphone array   |                |         |
|   | 3.5 mm phone-in Jack   |                |         |
|   | 3.5 mm line out  |                |         |
|   | Speaker volume: adjustable to 90 dB SPL at 0.5 m   |                |         |
|   | Touch controls for volume down/up, mute, phone input, call, and hang up  |                |         |
|   | Can bridge phone-in and USB into one call  |                |         |
|   | Security: Kensington slot  |                |         |
| Motorized Pan & Tilt Movement                       | Pan: ±160°   |                |         |
|   | Tilt: +90° (up) -30° (down)  |                |         |
|   | 10 camera presets (via remote control)   |                |         |
|   | Fast and quiet pan & tilt movement   |                |         |
| Connectivity  | Mini DIN 6 for RS232 connector for camera  |                |         |
|   | USB Type-C connector for camera  |                |         |
|   | Micro USB connector for speakerphone   |                |         |
|   | IP (RJ45) connector for speakerphone   |                |         |
| Video Format  | Bluetooth for speakerphone   |                |         |
|   | YUV, MJPEG   |                |         |
| USB   | 2.0, 3.1 Gen1  |                |         |
|   | UVC (USB Video Class) 1.1<br>UAC (USB Audio Class) 1.0   |                |         |
| Control   | IR remote control  |                |         |
|   | VISCA/pelco and P/pelco D via RS232  |                |         |
|   | UVC/plug-and-play<br>PTZApp  |                |         |
| Security and Mount                                  | Camera mount for wall or ceiling   |                |         |
|   | Kensington slot  |                |         |
| System Requirements                                 | Windows® 7/10 or later   |                |         |
|   | Mac OS X v10.13 or later   |                |         |
|   | Google Chromebook™ version 76.0.3809.102 or later  |                |         |
|   | Android™ 6 or later  |                |         |
| Hardware Specifications                             | Processor: 3.2 GHz Intel® Core™i5-4460 or later  |                |         |
|   | 4 GB RAM   |                |         |
| Free Applications for Meeting Collaboration         | USB 3.1 port, backward compatible with USB 2.0 port  |                |         |
|   | Upgrade firmware automatically or manually   |                |         |
|   | Control camera   |                |         |
|   | Set parameters and adjust camera image   |                |         |
|   | Diagnose operating status  |                |         |
|   | View live video  |                |         |
| Speakerphone  | Real-time streaming / annotating / snapshots /video recording  |                |         |
| Optional accessories                                | Should be included   |                |         |
| Compatible Applications                             | <b>1 x Additional microphone</b>   |                |         |
|   | Zoom, Microsoft® Teams, Skype for Business, Skype, Google Meet, Intel® Unite™, RingCentral, BlueJeans, V-Cube, LiveOn, CyberLink U Meeting®, TrueConf, Adobe® Connect™, Cisco Webex®, Fuze, GoToMeeting™, Vidyio, vMix, WebRTC, Wirecast, Xsplit |                |         |
| Warranty  | 3 years Support   Warranty   |                |         |
|   | Installation and Configuration   |                |         |

| Aver VB 342+ - 4K Camera Soundbar for Huddle Room |   | Complied (Y/N) | Remarks |
|---|---|----------------|---------|
| QTY - 1   |   |                |         |
| <b>Requirements</b>                               |   |                |         |
| Camera  | Sony Exmore sensor: Ultra crystal-clear image support up to 4K  |                |         |
|   | Frame rate: 4K 30fps; 1080p, 720p, 960 x 540, 848 x 480, 800 x 448, 640 x 480, 640 x 360, 424 x 240, 320 x 240, 320 x 180 at 60, 30, 15fps  |                |         |
|   | SmartFrame & SmartSpeaker: Automatic FOV adjustment (auto focus) to fit all participants and focus on the speaker   |                |         |
|   | 120°wide field of view  |                |         |
|   | True WDR up to 120 db: Superb back light compensation technology for optimizing light balance in high-contrast conditions   |                |         |
|   | Digital zoom rate up to 4X leveraging 4K sensor   |                |         |
|   | 3D denoise technology maintains clear and natural imaging in low light conditions   |                |         |
|   | Mirror, AE, white balance: Auto, manual override via PTZApp   |                |         |
|   | Minimum focus distance: 80 cm   |                |         |
|   | Analytics API: Enterprises and third-party software providers can obtain people-counting data for better understanding of meeting-space usage   |                |         |
| Motorized Pan & Tilt Movement                     | Pan: Total horizontal viewing area 180°   |                |         |
|   | Tilt: Total vertical viewing area 105°  |                |         |
|   | 10 camera presets (via remote control)<br>Fast and quiet pan & tilt movement  |                |         |
| Audio   | Microphones: 2 unidirectional microphones supporting 6 m pickup   |                |         |
|   | 5Wx2 stereo full range speakers with professional bass port tuned for communication   |                |         |
|   | Volume up to 96 dB SPL at 1/2 meter   |                |         |
|   | Echo cancellation<br>Noise suppression  |                |         |
| HDMI  | 3.5 mm Line-in (aux) cable connects BYOD smartphones or PCs as speakerphones  |                |         |
|   | Display Link: Built-in USB 3.1 (Gen 1) to HDMI adapte<br>1080p HDMI output to TV  |                |         |
| Connectivity                                      | 12V/5A power adaptor  |                |         |
|   | Mini DIN6 for RS232 connection  |                |         |
|   | USB type C connector  |                |         |
|   | HDMI out connection (DisplayLink)   |                |         |
|   | Phone in (3.5 mm audio Jack)  |                |         |
|   | Mic input<br>Wireless connection with mobile devices  |                |         |
| Video Format                                      | YUV, MJPEG  |                |         |
| USB   | 3.1 Gen 1, backward compatible USB 2.0  |                |         |
|   | UVC (USB Video Class) 1.1   |                |         |
| Control   | IR remote control   |                |         |
|   | VISCA/pelco and P/pelco D via RS232   |                |         |
|   | UVC/plug-and-play   |                |         |
|   | PTZApp  |                |         |
| Security and Mount                                | Camera mount for wall or ceiling  |                |         |
| System Requirements                               | Windows® 7/10 or later  |                |         |
|   | Mac OS X v10.13 or later  |                |         |
|   | Google Chromebook™ version 76.0.3809.102 or later   |                |         |
|   | Android 5 or higher   |                |         |
| Hardware Specifications                           | 2.4 GHz Intel® Core™2 Duo processor   |                |         |
|   | 2 GB RAM or more  |                |         |
|   | USB 3.1 Gen1 port (supports 4K); USB 2.0 port (supports up to 1080p)  |                |         |
| Free Applications for Meeting Collaboration       | Remotely group FW/SW upgrades, control the camera, and manage settings  |                |         |
|   | Compatible with Skype plugin for answering and hanging up via remote control  |                |         |
|   | Upgrade firmware automatically or manually  |                |         |
|   | Control the camera  |                |         |
|   | Set parameters and adjust the camera image  |                |         |
|   | Diagnose operating status<br>View live video  |                |         |
| Compatible Applications                           | Real-time streaming / annotating / image capturing / video recording  |                |         |
|   | Zoom, Microsoft® Teams, Skype for Business, Skype, Google Meet, Intel® Unite™, RingCentral, BlueJeans, V-Cube, LiveOn, CyberLink U Meeting®, TrueConf, Adobe® Connect™, Cisco Webex®, Fuze, GoToMeeting™, Vidyo, vMix, WebRTC, Wirecast, Xsplit |                |         |
| Warranty  | 3 years Support   Warranty  |                |         |
|   | Installation and Configuration  |                |         |

| AVer CAM340+ - 4K Conference Camera         |  | Complied (Y/N) | Remarks |
|---|--|----------------|---------|
| <b>Requirements</b>                         |  |                |         |
| Camera                                      | Sensor: 1/2.5" Sony Exmor 4K CMOS sensor<br>Frame rate: 4K 30fps; 1080p, 720p, 960x540, 848x480, 800x448, 640x480, 640x360, 424x240, 320x240, 320x180 at up to 60fps<br>120° Wide field of view<br>Lens iris, focus, zoom: fixed<br>AE, white balance: auto, manual override by PTZApp<br>Minimum working distance: 80 cm<br>Back light compensation and 2D noise reduction technology for optimizing light balance in different conditions<br>Standard tripod screw holes |                |         |
| Zoom, Pan, and Tilt Movement                | Zoom: up to 4X leveraging 4K sensor (not available in 4K or 60 fps)<br>Pan and tilt: when zoomed in leveraging 4K sensor   |                |         |
| Microphone                                  | 1 uni-directional microphones<br>Frequency response: 100~12K Hz<br>Sensitivity: -37dB  |                |         |
| Connectivity                                | USB type C connector<br>Reset button   |                |         |
| Video Format                                | DC jack for power adapter (for USB 2.0 connection)<br>YUV, MJPEG   |                |         |
| Control                                     | 2.0, 3.1 Gen1 typeC<br>UVC (USB Video Class) 1.1<br>IR remote control<br>UVC/plug-and-play<br>PTZApp   |                |         |
| Security and Mount                          | Built-in TV mount (above TV, up to 46 mm deep)<br>Kensington slot<br>1/4" tripod mountingscrew   |                |         |
| System Requirements                         | Windows® 7/10<br>Mac OS X v10.13 or later<br>Android 5 or higher   |                |         |
| Hardware Specifications                     | 2.4 GHz Intel® Core™2 Duo processor<br>2 GB RAM or more<br>USB 2.0 port and above (USB 3.1 required for 4K or 60fps)<br>Compatible with Skype plugin for answering and hanging up via remote control<br>Upgrade firmware automatically or manually<br>Control the camera<br>Set parameters and adjust the camera image<br>Diagnose operating status<br>View live video   |                |         |
| Free Applications for Meeting Collaboration | Real-time streaming / annotating / image capturing / video recording<br>ZOOM, Microsoft® Teams, Skype for Business, Skype™, Google Hangouts, Intel® Unite™, RingCentral, BlueJeans, V-Cube, LiveOn, CyberLink U Meeting®, TrueConf, Adobe Connect, Cisco WebEx®, Fuze, GoToMeeting™, Microsoft® Lync™, Vidyo, vMix, WebRTC, Wirecast, XSplit   |                |         |
| Warranty                                    | 3 years Support   Warranty<br>Installation and Configuration   |                |         |