

# Annexure - A

| Technical Specifications of All-in-One Video Bar for Video Conferencing System |                                   |   |
|--|-----------------------------------|---|
| Sr. No.  | Description                       | Specification Parameter   |
| 1  | Package                           | It should be All-In-One Video Bar (with Integrated Microphones, Speakers , 4K Camera with Privacy |
| 2  | Video Standards and Resolutions   | It should support H.323 & SIP standards for communications.                                       |
|  |                                   | It should support interoperability and bandwidth saving using video compression H.264 AVC,        |
|  |                                   | It should support 4K 30 fps,1080p 60 fps,1080p 30 fps ,720p 60 fps ,720p 30 fps.                  |
| 3  | Content Standards and Resolutions | It should support both wired and wireless content sharing using standard based H.239 and BFCP.It  |
|  |                                   | It should transmit both video and content to the far end location at 4K                           |
|  |                                   | It should support wireless content sharing using Airplay and Miracast.                            |
|  |                                   | It should support Content Annotation and WhiteBoarding capability when connected to Touch         |
| 4  | Audio Standards and Features      | It should support G.711, G.728, G.729A, G.722, G.722.1, G.719, AAC-LD or better                   |
|  |                                   | It should support 20 kHz or better bandwidth with crystal clear audio and stereo sound.           |
|  |                                   | Keyboard Noise Reduction and NoiseBlock   |
| 5  | Video and Audio Inputs            | 1 x HDMI input to share 4K & Full HD content from PC/Laptop/Document camera.                      |
| 6  | Video and Audio Outputs           | 2 x HDMI output for connecting primary and secondary 4K(UHD)/Full HD displays.                    |
|  |                                   | 2 x USB for two touch display support   |
| 7  | Other Interfaces                  | 1 x 10/100/1000 Ethernet port   |
|  |                                   | 1 x USB for software upgrade  |
|  |                                   | Bluetooth 5.0 and WiFi 802.11a/b/g/n/ac (MIMO)  |
| 8  | Camera                            | Integrated UHD 2160p (4K) capture resolution  |
|  |                                   | Minimum 5x digital automatic zoom and 120° FOV  |
|  |                                   | The camera should support automatic speaker framing and people framing.                           |
|  |                                   | The Camera should have privacy cover/shutter.   |
| 9  | Microphone and Speaker            | Stereo Microphone and Stereo Speaker  |
|  |                                   | Should support external expansion microphone from same OEM  |
| 10   | USB Device Mode                   | Single USB port functionality to use the system as an external camera, microphone and speaker     |
| 11   | Network Features                  | H.323 and SIP bandwidth supporting 64 kbps to 6 Mbps or more.                                     |
|  |                                   | Must support IPv4 and IPv6 from day one on both H.323 and SIP.                                    |
|  |                                   | Auto Gatekeeper Discovery, Lost Packet Recovery (LPR) technology, IP Precedence and DiffServ,     |
| 12   | Security                          | Media Encryption (H.323, SIP): AES-128, AES-256   |
|  |                                   | Authenticated access to admin menus, web interface and telnet API                                 |
|  |                                   | Local account password policy configuration   |
|  |                                   | Global Directory/Centralized Directory/LDAP support   |
| 13   | Other Standards/features          | H.460.18, H.460.19, SSL, TLS  |
| 14   | Touch Control                     | Min 8" display screen & WXGA resolution with call control option                                  |
| 15   | Warranty                          | The complete solution should be from the same OEM with 1 year warranty from day one.              |

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