

**BID FOR SUPPLY, INSTALLATION, AND COMMISSIONING OF VIDEO CONFERENCING EQUIPMENT &
OTHER ACCESSORIES ACROSS THE STATE ON BEHALF OF OFFICE OF THE ADDITIONAL DIRECTOR
GENERAL OF POLICE & INSPECTOR GENERAL PRISONS, AHMEDABAD - TENDER NO.
HWT301219600**

**CORRIGENDUM-1
(10.01.2020)**

1. High Definition Video Conferencing System 1080p

Features	Specifications
Video	
Video Standards	H.263, H.264, H.265 (or equivalent)
	H.264 in an Encrypted call should be possible
	H.264 should be possible when sending or receiving two live video sources e.g. Presenter and Presentation.
Video Frame Rate	Should support 30 fps & 60fps (frames per second) with 1080p resolution from day one
Video Features	Ability to send and receive two live simultaneous video sources in a single call, so that the image from the main camera and PC or document camera can be seen simultaneously.
	Should support H.239/BFCP protocols with 720p @ 30fps
Video Output	Should have at least 2 HDMI / DVI (High Definition Multimedia Interface) output to connect Full High Definition display devices such as LCD / LED and projectors for both Video and Content. (Dual Monitor Support)
	It should be possible to display the main video on one HD screen and the presentation / dual video on the other HD screen.
Video Input	Should have at least Two FHD video Input to in the form of HDMI/HDCI/3G SDI to connect FDH cameras with full functionalities as mentioned in the camera specifications.
	Should have HDMI/DVI (Digital Video Interface) input to connect PC / Laptop directly to the Video conferencing system and display resolutions 1080P/HD 720P along with PC Audio.
Audio	
Audio standards supported	G.711, G.722, G.722.1, 64 kbps MPEG-4 AAC-LD/ LC or equivalent standard must be supported.
Other Desirable features	Noise Reduction, Automatic Gain control, Acoustic Echo Canceller, Active Lip synchronization
Audio Inputs	Should support 3 Microphone from day one
	The microphones must be standard based microphones. Minimum voice pickup should be 6 feet radially or atleast 100 square feet.
	The pickup of the microphones should be at least 100 square feet from the microphone.
	Echo Cancellation for every input must be available.
External devices	Should have 2 USB port
Network Interfaces	1 LAN / Ethernet - 10/100/1000 Mbps full duplex
	Should have support for IPV4 and IPV6
Bandwidth	IP - at least 6 Mbps
Network Capabilities	Packet Loss Based Downspeeding
H.323/ IP Features	Differentiated Services(QOS):
	DiffServ
	IP adaptive bandwidth management (including flow control)

	Auto Gatekeeper discovery
	Auto Network Address Translation(NAT) support
	Standards based- Packet Loss Recovery feature on H.323 call
	Should support URL Dialing
	Support for H.245 DTMF tones in H.323
SIP Features	The endpoints must support SIP in addition to H323 protocol. Calls can be made on SIP or H323 without having to restart or reconfigure the endpoint.
	The endpoint must register with any standard SIP server.
	Must support data sharing capability in SIP calls for dual stream transmit and receive.
Security	
Menu Control	Password protected system menu
Encryption of video call	ITU-T standards based Encryption of the video call
	Call should be encrypted end-to-end on IP
	Should support Standards-based: H.235 v3 and AES Encryption via Automatic key generation and exchange.
	Ability to manually turn encryption On or OFF should be there.
	Automatic key generation and exchange
Directory services	Should support Local and Global directories
	Should support LDAP and H.350 protocols for directory transfer.
Package	Codec must be custom-built hardware and not software loaded on a PC. Codec and Camera should be from same OEM.
Multisite Feature	The codec should be able to support up to 4 sites connectivity at 720p resolution or more. This feature should be available as a future upgrade option on the device.
Experiences	Ability to share content from laptop at resolution of Full HD
	Ability to share content on wireless from Desktop or laptop
Camera	<ul style="list-style-type: none"> • PTZ camera with 1/2.5 HD CMOS or better • 10 X Zoom (5 X Optical Zoom and 2 X digital Zoom) • 1920X1080 Resolution @60FPS • Field View 84.5 degree or better • Interface USB 3.0 port, HDMI/3G SDI Port