



INDIAN INSTITUTE OF TECHNOLOGY KANPUR

GT ROAD KALYANPUR KANPUR-208016

UTTAR PRADESH, INDIA

Tender Reference No. : DOFA/IITK/2023-24/01

BID SUBMISSION END DATE- 14.04.2023

TENDER DOCUMENT

FOR

“Purchase of Video Conferencing System”

BID DOCUMENT

Online bids (Technical & Financial) from eligible bidders which are valid for a period of 90 days from the date of Technical Bid opening (i.e. 14.04.2023) are invited for and on behalf of the Assistant Registrar, IIT, Kanpur for “**Purchase of Video Conferencing System**”

<i>Name of Work</i>	Purchase of VC System
<i>Estimated Cost</i>	Rs.14,00,000/-
<i>Date of Publishing</i>	03.04.2023 (05:00 PM)
<i>Clarification Start Date and Time</i>	03.04.2023 (05:00 PM)
<i>Clarification End Date and Time</i>	10.04.2023 (05:00 PM)
<i>Queries (if any)</i>	No queries will be entertained after clarification end date and time
<i>Bid Submission Start Date</i>	03.04..2023 (05:00 PM)
<i>Last Date and time of submitting the Bids</i>	14.04..2023 (05:00 PM)

The bids have to be submitted in sealed envelope (separate envelopes for technical and financial bids) in DOFA office.

INSTRUCTION FOR BID SUBMISSION

1. TECHNICAL BID: List of Documents to be submitted:-

- i. Copy of work experience of similar work.
- ii. OEM Authorization
- iii. Copy of specifications or brochures (if any).
- iv. Compliance Sheet for all the Technical Specifications

Please note that no indication of the rates/amounts be made in any of the documents submitted with the TC-BID.

2. Financial Bid

- a. The currency of all quoted rates may be in Indian currency.
- b. The Financial Proposal should be inclusive of all applicable taxes, duties, fees, levies, and other charges imposed under the applicable laws.

3. Last Date for Submission of Tender:

- a. Online bids complete in all respects, must be submitted on or before the last date and time specified in the schedule of events.
- b. The IIT, Kanpur may, at its own discretion, alter/extend the last date for submission of tenders.

4. Bid Validity

- a. All the Bids must be valid for a period of 90 days from the last date of submission of the tender for execution of Contract. However, the quoted rates should be valid for the initial/ extended period of the Contract from the effective date of the Contract. No request will be considered for price revision during the original Contract period.
- b. A bid valid for a shorter period shall be declared as non-responsive.
- c. In exceptional circumstances, prior to expiry of the original time limit, the IIT may request the bidders to extend the period of validity for a specified additional period beyond the original validity of 90 days. The request and the bidders' responses shall be made in writing. The bidders, not agreeing for such extensions will be allowed to withdraw their bids without forfeiture of their Bid Security.

5. Modification / Substitution/ Withdrawal of bids:

- a. No Bid shall be modified, substituted or withdrawn by the Bidder after the Bid 's due Date.
- b. Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid's due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.

6. Rejection of the Bid: The bid submitted shall become invalid and tender fee shall not be refunded if:-

- a. The bidder is found ineligible.
- b. The bidder does not provide all the documents as stipulated in the bid document.

Tender document

Office of Faculty Affairs
Institute of Technology Kanpur
Kanpur (UP) 208016 India

Subject: Enquiry for purchase of Video Conferencing System.

Enquiry Date: 03.04.2023 (05:00 PM)

Enquiry No DOFA/IITK/2023-24/01

Sir / Madam,

With reference to the subject mentioned above, you are invited to submit the quotation online for VC system to be deployed in Deputy Director Office Conference Room. Technical specifications of the required system are enclosed. Total required quantity is 1 VC system. Do not send the quotation through email.

Make sure that the quotation is valid up to 90 days and must submit online by date of **14.04.2023 before 5:00 PM.**

The quotation should have the following details:

1. Delivery Period
2. Rates quoted must be for IIT Kanpur including packing forwarding and freight
3. Bidder must be GST registered.
4. Include separate quotation for recommended spares
5. Bidder should submit authorization letter from the OEM of the VC system.
6. Bid should be in INR

Terms and condition:

1. Our Institute is partially exempted from custom duty. Custom duty exemption certificate will be issued.

Mr. Amar Pal
Assistant Registrar
Office of Faculty Affairs
Indian Institute of Technology Kanpur – 208016
Email: ouc_dofa@iitk.ac.in

Technical Specifications Sheet for VC System

The **minimum specifications** given below.

Technical Specifications of Video Conferencing System with Automatic Voice & Face Tracking Camera System		
The proposed system must be based on ITU standards & hardware based. No software based solution will be accepted. All components of the VC system like Codec, Camera, Microphones and Wireless Remote Control should be from the same OEM.		
Sr. No.	Description	Specification Parameter
1	Package	UHD 2160p (4K) Dual Integrated Cameras, 4K Codec, Omnidirectional Digital Microphone and Wireless Remote Control from the same OEM.
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, H.264 High Profile, H.265
		It should support 4K30 fps,1080p30 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 should also support audio from Laptop used for content sharing.
		It should transmit content to the far end location up to 4K15fps.
		It should support Content Annotation and WhiteBoarding/Blackboaring capability when connected to Touch Enabled Display/Monitor.
		It should support inbuilt feature for wireless content sharing from Windows, MacOS, Android, iOS Smartphones & Tables without downloading any application on the user device.
		Simultaneous content connection using the tools such as Airplay, Miracast and HDMI should be available.
5	Audio Standards and Features	It should support G.711, G.728, G.729A, G.722, G.722.1, G.719 or better
		It should support 20kHz or better bandwidth with crystal clear audio and stereo sound.
		Automatic Gain Control and Automatic Noise Suppression
		Keyboard Noise Reduction, NoiseBlockAI and Acoustic Fence.
6	Video and Audio Inputs	1 x HDMI/HDCI/USB input for connecting main 4K Camera
		1 x HDMI input to share 4K/Full HD content from PC/Laptop/Document camera/PTZ Camera.
		3 x HDMI/USB inputs to connect additional PTZ cameras from same OEM to capture whiteboard/presenter and podium area in future whenever required.
		3 x Microphone Inputs or more with support for minimum 3 digital omnidirectional mics. The bidder needs to quote 1 digital omnidirectional microphone with mute/unmute soft touch button on the microphone. Each microphone should have atleast 20 feet pickup range.
		1 x RCA/3.5mm stereo line-in
7	Video and Audio Outputs	2 x HDMI outputs for connecting primary and secondary 4K(UHD)/Full HD displays.
		1 x RCA/3.5 mm stereo line-out
8	Other Interfaces	1 x 10/100/1000 Ethernet port
		1 x RS-232 Serial Port or equivalent port for connecting to external RS-232 controller
		1 x USB to support system software upgrade
		Bluetooth 5.0 and WiFi 802.11a/b/g/n/ac (MIMO) for Wireless Content Sharing for Guests using their Smartphones and Tablets (Android and iOS)

9	Camera	The camera should support automatic speaker framing and group framing.
		The camera system should automatically scan the room and seamlessly command the cameras to appropriately frame the users/speaker during a call without any manual intervention upto a range of 25 feet or more.
		Video Conference Camera and Codec should be controlled using same remote control/touch panel
		The integrated camera system should have minimum dual cameras with 20 megapixel 4K sensors and 7x Digital Zoom or more. Integrated, motorized privacy shutters.
		Video Conference Camera and Codec should be controlled using same remote control.
10	Network Features	H.323 and SIP bandwidth supporting up 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, Configurable MTU size
11	Security	Media Encryption (H.323, SIP): AES-128, AES-256, H.235.6 support
		Authenticated access to admin menus, web interface and APIs
		Local account password policy configuration
		Global Directory/Centralized Directory/LDAP support
12	USB Pass-Thru Mode	The system should have inbuilt functionality to use the VC system as an external camera and microphones when connected to a Laptop/PC over a single USB cable without using any external hardware components to connect to any Cloud Based VC platform like Cisco Webex, Zoom, BlueJeans, Microsoft Teams, Google Meet, etc.
		The system should be able to support up to 1080p30fps video transmit in USB Pass-thru mode.
		It should be possible to Mute/Unmute all the microphones and control camera functionality from the same remote control during USB pass-thu mode.
		The system should be supplied with 10 mtrs. single USB 3.0 cable from the same OEM for USB Pass-thru mode for seamless functionality.
13	Other Standards/features	H.460.18, H.460.19, SSL, TLS
14	Warranty	The complete solution should be from the same OEM with 3 year warranty from day one.

TV/Display Specification (Quantity: 02)

Sr. No.	Features	Specifications
1	Display Size	55 inches or above
2	Panel Technology	Inplane Switching (IPS)
3	Back Light Type	Direct LED
4	Native Resolution	3840 x 2160 (UHD) 4K to get High resolution in case of UHD content or Multiple Windows application
5	Brightness	500 Nits
	Dynamic Contrast	1000000:1 or better to ensure the contrast as per requirement of contents
6	Viewing Angle	178 X 178 angle to cover Max viewing angle from any location of Room
	Connectivity	
5	Input Ports	HDMI-2, USB-2, RJ45(LAN-1) or high to cover maximum inputs as per site requirements & future requirements
6	Output Ports	Digital audio out/ Headphone out to connect extra Speakers as required in future
7	Required features	Smart Share / Screen Share to share display of Tablet/Mobile/Laptop, SNMP support to take control of display from remote location, Built In OS- Windows/WebOS, built in SOC (System on Chip) to share contents through LAN or WI-FI
8	Wi-Fi	built-in Wifi required to share contents without cables/ through Internet
	Environment Conditions	
9	Operation Temperature	0 °C to 40 °C or lower
10	Operation Humidity	10 % to 80 % or better
11	Audio	20W (10W * 2)
	POWER	
12	Power Supply	100-240V~, 50/60Hz
13	Power Type	Built-In Power
	Power Consumption	
14	Typ.	160 W or Less
	STANDARD (CERTIFICATION)	
15	Certificates	UL/CE for safety, Electro Magnatic Communication (EMC) & BIS
16	OEM Warranty	3 Years onsite warranty

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