



**CENTRE FOR CONTINUING EDUCATION
INDIAN INSTITUTE OF TECHNOLOGY MADRAS
Chennai – 600 036**

**Prof. Devendra Jalihal
Chairman**

Ref: No. CCE/ VC/ Studios/001

DATE: 12.03.2020

Due date : 27.03.2020

Dear Sir,

1. Quotations are invited in duplicate for the various items shown below/overleaf/enclosed list.
2. The **quotations are to be in two parts as Technical Offer and as Commercial offer**: The two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in separate envelopes must be enclosed in the one bigger envelope duly sealed and super scribed with reference number and due date and must be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. Fax and Email quotation are not acceptable.
4. Quotations should be valid for 60 days from the due date and period of delivery required warranty terms etc. should also be clearly indicated. A minimum of three year warranty is required from the date of commissioning.
5. Imported supplies should be quoted **for CIF Madras**.
6. Local firms to quote for free delivery to this Institute. If quoted for Ex-Godown delivery charges be indicated separately.
7. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges, and collected back at the supplier's expenses. Compliancy certificate is to be provided indicating conformity to the technical specifications
8. Sales Tax/GST/ED if applicable and such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. If this is not indicated no such claim will be admitted at any stage. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to Non-Government Educational Institutions run with no profit motive for which a concession is given. GST Certificate will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
12. The Guarantee period of the item may be indicated clearly.
13. In case of LC. Payment, 90% of the payment will be made after completion of the supply. The balance 10% of the payment will be made after satisfactory installation of the equipment.
14. IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
15. **Acceptance and Rejection**:- I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

Yours faithfully,

Devendra Jalihal
Chairman CCE

Items required: **Supply of HD Video conference system** as per specifications enclosed.
Quantity required – 2 Nos.

Phone Nos.: **(044) 2257 4904/ 5906**

E-mail: cceoffice@iitm.ac.in

Prof. DEVENDRA JALIHAL
CHAIRMAN
CCE & QIP CO-ORDINATOR
INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI - 600 036. INDIA

TABLE – 1**Technical specifications**

The proposed system must support PAL/equivalent with PTZ camera. The codec must be based on ITU standards & hardware based. No software based solution will be accepted. All components of the VC system like Codec and Camera should be from the same OEM.

Sr. No.	DESCRIPTION
PACKAGE	
1	Full HD 1080p60 PTZ camera, codec, Microphone Array, cables & remote control
VIDEO STANDARDS AND RESOLUTIONS	
2	It should support H.323, SIP standards for communications.
3	It should support H.261, H.263, H.264 AVC, H.264 SVC, H.264 High Profile
4	It should support 1080p 60 fps, 1080p 30 fps, 720p 60 fps, 720p 30fps & 4CIF.
CONTENT STANDARDS AND RESOLUTIONS	
5	It should support content sharing using standard based H.239 & BFCP & must also support audio from PC during content sharing.
6	It should transmit both people and content simultaneously to the far end location at 1080p 30fps
7	It should support 1080p 60 fps, 1080p 30 fps, 720p 60 fps, 720p 30fps & 4CIF.
AUDIO STANDARDS AND FEATURES	
8	It should support G.711, G.728, G.729A, G.722, G.722.1, AAC-LD or better
9	It should support 20kHz or better bandwidth with crystal clear audio and stereo sound.
10	Automatic Gain Control and Automatic Noise Suppression and Lip Synchronization.
11	Keyboard noise reduction and instant adaptation echo cancellation
12	It should be capable of eliminating background noise by creating a virtual acoustic zone such that the far end participants should only hear audio from the people with in that zone. Any audio originating outside of the zone should be cancelled / filtered by the solution.
VIDEO AND AUDIO INPUTS	
13	1 x HDMI/HDCI input for connecting main FULL HD camera supporting 1080p60fps.
14	1 x HDMI/DVI & 1 VGA input to share HD content from PC/Laptop/Document camera.
15	1 x Microphone Input or more with support for minimum 4 microphones. The bidder needs to quote 1 microphone with 360 degree coverage from day one with mute/unmute button on the microphone.
16	1 x 3.5mm stereo line-in
VIDEO OUTPUTS	
17	2 x HDMI output for connecting primary & secondary full high definition display.

AUDIO OUTPUTS	
18	1 x HDMI output
19	1 x 3.5 mm stereo line-out
20	1 x RCA pair line-out
21	In the above mentioned audio outputs atleast one output should provide the local site audio.
OTHER INTERFACES	
22	1 x 1G LAN port
23	1 x USB for software upgrade and connecting external devices
24	1 x RS-232 mini-DIN 8-pin or equivalent
CAMERA	
25	It should support 1080p 60fps with 10x or more optical zoom and 10x or more digital zoom
26	It should support minimum PAN Range of +/-90°, and Tilt of +/-20°
27	Camera and Codec should be controlled using same remote control
NETWORK FEATURES	
28	H.323 and SIP bandwidth up to 6 Mbps
29	IPv4 and IPv6 support from day one
30	Auto Gatekeeper Discovery, IP Precedence & QoS with support for H.323 based lost packet recovery.
MULTISITE FEATURE	
31	It should support inbuilt multiparty feature with support for 1+3 sites or more at HD resolution from day one
32	It should support Multiple screen Layouts
SECURITY	
33	Media Encryption (H.323, SIP): AES-256
34	Authenticated access to admin menus, web interface and telnet API It should support web interface for during the call period for call control and call statistics.
35	Local account password policy configuration
WARRANTY	
36	Minimum 3 (Three) years warranty should be provided for this unit from the date of successful commissioning
37	Manufacturer warranty part number should be quoted


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Pre-qualifying Condition:

The pre-qualifying condition is that the vendor should have previous experience of having sold and installed at least **three similar video conference units** to Premier Educational Institutions / MNCs / Governmental bodies / reputed broadcasting companies within the last five financial years. The necessary proofs such as copy of purchase order and installation report should be submitted in this regard failing which the bid will be disqualified.

Terms & Conditions:

1. Please note that a 2 bid system as mentioned below should be followed:
 - **Technical bid and Commercial bid have to be submitted in separate sealed envelopes with clear indications on each envelope.**
 - **Both of these separately sealed bids should be enclosed in a larger envelope superscribed with tender number and vendor details indicated on them.**
2. **The technical bid should not contain any commercial terms failing which the bidder will be disqualified.**
3. **All technical details including specifications of the make and model with datasheet of the product that you are proposed to supply, prequalification conditions indicated above must be clearly given in the technical bid. Compliancy certificate is to be provided indicating conformity to the technical specification.**
4. Type of warranty without indication of commercial terms should also be mentioned in the technical bid.
5. The commercial bid should contain all commercial terms including, delivery of equipment at CCE office, IIT Madras. Installation and those related to warranty and other costs.
6. The bidders should comply with all specifications. A separate compliance sheet indicating whether each specification mentioned in Table 1 is met. This is to be indicated point by point for all the specifications mentioned in Table 1. A table to this effect should be enclosed duly attested by the bidder in **the Technical Bid**.
7. **Do not quote for any optional items or additional items.**
8. **Last date for receiving of the bids at the address mentioned below is 27th March 2020 (5 PM).**
9. **All the technically qualified bidders should provide a fully integrated demonstration of the equipment that is being offered and also show the capability of their equipment to integrate and function properly as per the specification.**

Period of validity of Bids

Bids should remain valid for a period of 60 days after the last date for submission. A bid valid for a shorter period will be rejected by IIT Madras; However, IIT Madras may seek extension of the validity of the bid, if required.

Delivery Schedule:

The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.

Payment:

No Advance payment will be made for Indigenous purchase. In case of import of supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done).

On-site Installation:

The equipment has to be installed or commissioned by the successful bidder within 20 days from the date of receipt of the item at site of IIT Madras.

Vendor Details:

Vendors should provide their full contact details including: Name of the Contact Person, Postal address, Tel. No., Mobile No., Email and FAX Nos., in both the bids. **In addition these contact details also should be indicated on the outer surface of the main envelope that contains the Technical and Financial Bids.**

Onsite Warranty:

The Supplier should confirm that the Products supplied under this tender are new, unused, of the most recent or current models and those they incorporate all recent improvements in design and materials unless provided otherwise in the Tender.

Warranty for the supplied product should remain valid for a minimum period of 36 months after installation. In case of failure in functionality of the supplied equipment the warranty should ensure that alternate equipment is made available by the supplier at no cost within one working day of notification if the existing supplied equipment requires warehouse service.

In addition upon receipt of registering a complaint, the Supplier should with all reasonable speed, repair or replace the defective Product or parts thereof, without any additional costs within 7days of notification.

Clarifications:

If bidders need any further information, they may contact CCE office at the address given below from 10.00 AM to 04.00 PM on all working days- Monday to Friday (except Public Holidays).

The bidders can communicate for any clarifications required through email

With the subject given as "Tender for HD Video conference system - IITMadras. The following is the email address:

cceoffice@iitm.ac.in

Acceptance and Rejection:

IIT Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or rejects it in full without assigning any reason.

Disputes and Jurisdiction: Settlement of Disputes:

Any dispute, controversy or claim arising out of or in connection with this tender including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. The seat of arbitration should be at IIT Madras, Chennai.

All Amendments, time extension, clarifications etc., will be uploaded on the website only and will not be published in newspapers. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.

Address to which the bids have to be delivered:

**The Chairman,
Centre for Continuing Education,
3rd Floor, IC & SR Building,
Indian Institute of Technology Madras,
Chennai – 600 036**