Tender Document

LUMS

TENDER NO. LUMS/320/2026 DATED: 19.11.2026 for "YHS Zoom-Enabled Basic Hybrid Classrooms and CS Labs AV"

Last Date for submission of bids	**2/12/2026 till 03:00 Pm**
Opening of bids	**2/12/2026 at 03:30 Pm**

Lahore University of Management Sciences (hereinafter called LUMS) invites sealed bids for the supplies as per attached BOQ on Single stage two envelope basis.

If you have doubt as to the meaning of any portion of the specification or other terms and conditions, you may seek clarification of the same in writing from us.

You are required to submit your bid, which will bear words "CONFIDENTIAL" and

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Description

YHS Zoom-Enabled Basic Hybrid Classrooms & CS Labs Tender Document

1. General Specifications:

1. Far-site participants should be able to participate in class via Zoom, Skype, MS Teams, or any other video conference platform.
2. Far-site students should be able to see the Instructor during the lecture.
3. Far-site participants should be viewable on the back wall screen/LED/Video Wall with a properly visible image size.
4. One camera should track the instructor during the class/session.
5. The instructor should have an option/control to show different layouts to the far-site participants.
6. Auto-tracking buffer time settings should be adjustable.

7. System availability logs to resolve any dispute that arises for the far-site participant(s).
8. Far-site participants should get HD video and good-quality audio.
9. Overall, IP-based system management and operation monitoring and reporting capability.
10. Local Audio Reinforcement is mandatory and should be adjustable.
11. The system features a reconfigurable architecture with flexible options for future expansion, technology integration, and upgrades.

2. Consolidated Technical Specifications

The bidder shall design, supply, install, configure, integrate, test, and commission a complete turnkey Hybrid Classroom solution that is fully compatible with Zoom Rooms. The solution shall include:

1. Professional Instructor Auto-tracking PTZ camera with a minimum 20x optical Zoom (10) for the instructor and Professional Instructor Auto Tracking PTZ camera with a minimum 12x or 15x optical Zoom (4)for the instructor, speaker/presenter tracking, 4K resolution, and IP/USB/HDMI connectivity, night imaging in monochrome, audio input, POE, HDMI out, Noise Reduction, apart from IR, should support the required serial protocols, compatible with Android and IOS devices, mountable type (no tabletop versions), and should be capable of IP streaming as well.
2. Professional wireless Lapel microphone system for instructor (14), including compatible receiver and required accessories having dual-channel option with provision for future expansion, AES-128 encryption, rechargeable batteries, hot-swappable transmitters, software management and external networked antennas.
3. Professional wireless handheld microphone system (Dual Channel) for student Q&A (14 sets), including compatible receiver and required accessories with provision for future expansion, AES-128 encryption, rechargeable batteries, hot-swappable transmitters, software management and external networked antennas.
4. Wired gooseneck microphone for instructor table at instructor desk, including base/connector and required accessories (14 sets).
5. Professional DSP supporting Acoustic Echo Cancellation (AEC), automatic mixing, noise reduction, feedback suppression, AGC, USB audio, camera triggering, Ethernet management, Zoom/MS Teams integration. It should also be configured as a mix-minus setup.
6. Commercial-grade 4K displays (8x 85 inch), slim/bezel-less design, commercial duty, 500 nits, 24/7 rating, video management/control capability.
7. Commercial-grade 4K displays (2x 75 Inch), slim/bezel-less design, commercial duty, 500 nits, 24/7 rating, video management/control capability.
8. Commercial-grade 4K display (1x 65-inch), slim/bezel-less design, commercial duty, 500 nits, 24/7 rating, video management/control capability.
9. Professional ceiling/pendant/wall mount speakers, digital amplifiers, and complete audio distribution.
10. Wireless presentation system supporting HDMI, USB-C, and BYOD content sharing;

11. Centralized AV control processor, cameras, microphones, audio, source selection, and Zoom control; Lecture recording and live streaming capability on the instructor table. Wall keypad with different options and AV control on the back via X-panel.
12. Complete AV racks, structured cabling, HDMI fiber, accessories, programming, testing, commissioning, user training, as-built documentation, and a minimum one-year comprehensive warranty. Equivalent or higher specifications shall be acceptable. The bidder shall be an OEM-authorized AV System Integrator with at least 10 years' experience and at least 5 similar completed projects.
13. The bidder shall be responsible for providing comprehensive training to designated LUMS staff as required, to ensure effective operation, configuration, and maintenance of the installed system.
14. The proposed solution shall be fully compatible with Zoom Rooms and Microsoft Teams Rooms. It shall support seamless hybrid teaching and learning, enabling simultaneous participation of in-room and remote attendees with integrated audio, video, content sharing, collaboration, and lecture delivery capabilities.
15. Any civil work, conduits, cabling, and their cost will be borne by the vendor.

3. Bill of Quantities (BoQ)

1	Commercial 4K display, 85-inch; slim/bezel-less design, commercial duty, 500 nits, 24/7 rating, video management/control capability	8
2	Commercial 4K display, 75-inch; slim/bezel-less design, commercial duty, 500 nits and video management/control capability	2
3	Commercial 4K display, 65-inch; commercial-grade display with centralized management/control capability	1
4	Multimedia 3 LCD laser projector; WUXGA 1920 × 1200; 4,600 lumens; 20,000-hour light-source life; LAN control; 4K input acceptance; throw ratio 1.36–1.64:1; contrast 3,000,000:1; 4k, with two-year warranty	13
5	Multimedia 3 LCD laser projector; WUXGA 1920 × 1200; 6,200 lumens; 20,000- hour light-source life; LAN control; 4K input acceptance; throw ratio 1.09–1.77:1; HDBaseT; contrast 3,000,000:1; 4k, with two-year warranty. Bidder to confirm the light-source life stated in the original specification.	7
6	Multimedia 3 LCD laser projector; WUXGA 1920 × 1200; 7,300 lumens; 20,000-hour light-source life; LAN control; 4K input acceptance; throw ratio 1.09–1.77:1; HDBaseT; contrast 5,000,000:1; two-year warranty	3
7	Projection screen, 92-inch wide; groove/recess approx. 105.5" diagonal approx. Black drop, 21" and 7" additional black drop	2
8	Projection screen, 116-inch wide; groove/recess approx. 133 inches diagonal. Black drop, 15" additional black drop	11
9	Projection screen 140-inch wide; diagonal 160 inches. Black drop, 7" additional black drop required	7
10	Tab-Tensioned 160 inches wide image, 184 inches diagonal, Black drop, 7" additional black drop required	3
11	Professional instructor auto-tracking camera; minimum 20× optical zoom; AI auto-tracking; IP/HDMI/USB/NDI connectivity or documented equivalent	10
12	Professional instructor auto-tracking camera; minimum 12× or 15× optical zoom as required by room; AI auto-tracking; IP/HDMI/USB/NDI connectivity or documented equivalent	4
13	6.5-inch ceiling speaker, 60 W, high-quality speech/music reproduction, 8-ohm low-impedance support	40
14	Wall-mounted loudspeaker with 8-inch LF driver and 1-inch HF driver; 8-ohm low-impedance support	99
15	Wireless lapel microphone system for instructors, including compatible receiver and required accessories with external antennas for CS labs for wireless microphones	14
16	Two-channel wireless handheld microphone system for student Q&A, including receiver and required accessories	32
17	Wired gooseneck microphone for instructor table, including base/connector and required accessories	14
18	Ceiling microphone for coverage of the front instructor/green-board area, or approved provision for future expansion; coverage and quantity to be validated	25
19	Four-channel low-impedance amplifier; 4 × 150 W at 4 ohms and 4 × 90 W at 8 ohms	1
20	Eight-channel low-impedance amplifier; 8 × 80 W at 8 ohms and 8 × 150 W per channel at 4 ohms	6
21	Sixteen-channel low-impedance amplifier; stated requirement: 12 × 75 W at 8 ohms and 150 W/channel at 4 ohms; two bus inputs/outputs. Bidder to clarify channel/power details in the compliance response.	7
22	Audio DSP/mixer, 12 × 8 minimum, with AEC, USB audio, mix-minus routing and feedback suppression; AEC tail length greater than 250 ms, ideally 300 ms	16
23	Enterprise-grade wireless presentation system; dual-band; Windows/macOS/iOS/Android support; native application-free workflow where available; 3.5 mm analog audio output	14

24	4K video routing and switching system with dual-display UC/Zoom capability; supports resident computer, instructor USB-C laptop and AV control-room operator computer; USB-C video/audio/data and suitable power delivery; camera, microphone and speaker peripherals available to supported conferencing computers	14
25	Room AV and lighting control system with Wall keypad interface; sufficient ports/relays for AV equipment, projection screen(s), motorized blinds and lighting per room	14
26	Complete AV accessories lot: 16U rack, two PDUs, shelves/trays, 16-port PoE+ switch, gigabit Wi-Fi router where approved, floor/wall/table AV plates, XLR/RJ45/HDMI/dual USB-C, camera USB cables, patch cords and all required interconnects	14 lots
27	Installation, integration, programming, testing, commissioning, training and documentation, including as-built drawings and configuration handover	As required
28	PVC conduits, civil works and cabling required to deliver the approved solution	As required

Note: The quantities specified in the Bill of Quantities (BoQ) are indicative only and may be increased or decreased based on the final approved design, site conditions, detailed engineering, and the proposed solution. The bidder shall be responsible for providing a complete, fully functional, and integrated solution in accordance with the technical requirements of this RFP.

4. Vendor evaluation & responsibilities:

1. The bidder shall provide a complete turnkey solution covering the design, supply, installation, integration, programming, testing, commissioning, training, warranty, and support of the proposed Hybrid Classroom solution. Partial or incomplete solutions shall not be considered and may result in disqualification.
2. Before submitting the proposal, bidders shall conduct a detailed site survey and requirement gathering exercise to validate the University's requirements and existing infrastructure. The technical and commercial proposal shall be based on the findings of this assessment. Any incompatibility, integration issues, omissions, or additional components required to deliver a fully functional solution shall be the sole responsibility of the bidder at no additional cost to LUMS.
3. The proposed solution shall be officially supported and verified by the respective Original Equipment Manufacturer (OEM). The bidder shall submit valid OEM Authorization Letters and supporting documentation confirming compatibility and support for the proposed solution.
4. The bidder shall provide documentary evidence of the technical competence of the proposed deployment team, including the profiles, certifications, and relevant experience of the Project Manager, Design Engineers, Implementation Engineers, and Technical Support Engineers assigned to the project.
5. The bidder shall clearly specify the product release date, End-of-Sale (EOS), End-of-Support (EOL), and expected product lifecycle for all major hardware and software components proposed under this project.
6. The quantities and/or models specified in the Bill of Quantities (BoQ) are indicative only. They may be increased, decreased, or substituted with equivalent or higher models based on the approved design, budget availability, product availability, and project requirements.

7. LUMS expects bidders to offer their best educational pricing and discounts applicable to higher education institutions. The commercial proposal should clearly identify any educational, academic, or institutional discounts offered.
8. The contract shall be awarded to the lowest evaluated responsive bidder whose proposal substantially complies with the technical specifications, functional requirements, compatibility, solution quality, warranty, support commitments, and commercial terms specified in this RFP. LUMS reserves the right to reject any proposal that does not fully meet the mandatory technical requirements, irrespective of its commercial value.
9. Bidders may seek technical clarifications regarding this RFP from the Information Systems & Technology (IST), LUMS, before the proposal submission deadline. No clarification requests shall be entertained after the prescribed deadline.
10. The selected vendor must provide the complete documentation of the proposed/installed solution, including general configuration and technical details. The vendor must also provide the program/configuration file to LUMS for future reconfiguration needs.
11. The bidder shall be fully responsible for carrying out all civil works and PVC conduit installations required for the project, including the provision of necessary materials, labor, installation, and finishing.

TERMS AND CONDITIONS

1. Instruction to Bidders:

a) **General:** Bids are invited through Sealed Envelope for the purchase of supplies and other related items from the authorized distributors and manufacturers on delivery Ex-LUMS.

b) **Bill of quantities:** The bidder may quote for one or more items showing description and specification of offered items.

c) **The vendor is required to quote in PKR currency and delivery is on Ex-LUMS(DDP) basis.**

2. Date &Time of Submission of Tenders:

The interested bidders may submit their bids on the prescribed form, available on written request on the firm / company letter pad from the Procurement office located, Lahore University of Management Sciences, at Opposite Sector U, DHA Lahore along with a postal order/pay order/bank draft / amounting to Rs. 2,000/- (Non-refundable) drawn in favor of Lahore University Of Management Sciences.

All bids must be delivered in procurement office on or before the prescribed deadline of 03:00 pm on the date already mentioned above.

Any Bid received by LUMS after the prescribed deadline for submission of bids will be returned unopened to the Bidder.

3. Sealing and Marking of Bids:

The bids shall comprise in a Single package containing two separate envelopes each envelope shall contain separately, duly sealed, the "Financial Proposals" and "Technical Proposals". The envelopes shall be marked as "Financial Proposals" and "Technical Proposals" in bold and legible letters to avoid any confusion.

The envelop will be addressed to;
Manager Procurement
Lahore University of Management Sciences,
Opposite Sector U, DHA,
Lahore
TEL: (042)35608246

The envelopes shall also bear the word "CONFIDENTIAL" and following identifications: -
If the envelope is not marked, as instructed above, LUMS will assume no responsibility for the misplacement or premature opening of the bid.

4. Bid Opening:

LUMS will open the bids, in the presence of Bidder's representatives who choose to attend at 03:00 pm on the date already mentioned above, in the Procurement office.

5. Evaluation:

a) After opening of bids, LUMS will examine the bids for technical evaluation and completeness of the bids as per tender document.

b) The bids shall be evaluated on the basis of "Technical proposals" and "Financial Proposals" as under:

(i) The envelope for "Technical Proposals" will be opened initially in the presence of the bidders.

(ii) The envelope for "Financial Proposals" will be retained unopened.

(iii) The "Financial Proposals" envelope of technical responsive bidders will be opened in front of technically qualified bidders after the technical evaluation. The "Financial Proposals" envelope of technically non-qualified bidders will be returned unopened to the bidder.

c) Bidder(s) who do (es) not qualify cannot challenge the findings of the evaluation or ask for reasons of disqualification.

6. Earnest Money:

The bidder must enclose 2% of the total quoted amount as earnest money in shape of pay order/bank draft in favor of Lahore University of Management Sciences. The tenders without earnest money or containing less earnest money will not be accepted. Earnest money of the successful bidder will be refunded after the delivery of the goods.

7. Change in Quantities:

LUMS reserves the right to increase/decrease quantities and it will be the responsibility of the supplier/contractor to deliver the item on time and change defective items.

8. Mode of Payment:

a) Payment terms will be credit basis.

b) In case of advance payment first class bank guarantee or mutually accepted collateral will be provided by the bidder.

9. NTN/GST Certificate:

Bidder must mention their National Tax Number (NTN) and General Sales Tax (GST) number (if sales tax registered) and furnish a copy of NTN and GST certificate along with tender.

10. Tax Deduction:

Income Tax as per government tax rules will be deducted from the total amount unless an exemption certificate is provided from the income tax department.

11. Specification Criteria:

All bids must be submitted according to specification given in the BOQ.

12. Delivery Time:

a) Validity period of the tender will be mutually decided from the date of placement of order. During this period successful bidders will be bound to supply the items on the rates they quoted.

b) In case the supplier fails to supply the agreed material in time, LUMS reserves the right to reject its offer and confiscate the earnest money deposited.

c) Delivery will be on Ex-LUMS

d) Pre-shipment inspection will be done by LUMS if required.

13. Inspection and Testing

a) LUMS representative shall have the right to inspect and / or test the Goods to confirm their conformity to the Purchase order(s) Specifications.

b) Should any inspected or tested goods fail to conform to the specifications, LUMS may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet specification of LUMS. All costs incurred on such replacements / alterations shall be entirely borne by the supplier, failing to do so, the purchase order(s) will be cancelled and all retained values will be forfeited in favor of LUMS.

14. Quality of items:

All item(s) supplied by successful bidder should be wholesome and include all the basic accessories. The additional accessories may be included separately. The offered items(s) should not be of substandard nature.

15. Warranty:

As mentioned against each item or for the given period starting from the date of supply.

16. Penalty:

For failure to comply with delivery schedule of Purchase Order(s) penalty will be imposed on defaulting bidder as under:

a) 1% of the cost of entire order or of such items/job as remains un-supplied/not-completed for every day up to maximum of 5% for 10 days exceeding the delivery period unless mutually agreed in writing.

b) If the material is not supplied even after payment of penalty for 10 consecutive days LUMS reserves the right to cancel the purchase order and to obtain the required

items/get the job done from elsewhere at risk and cost of the defaulting contractor. In this scenario the Earnest money will be confiscated.

17. Grievance Committee

Supplier can contact the grievance committee of LUMS if required.

18. Rejection of Bids:

LUMS reserves the right to reject any or all bids or proposals without assigning any reason.

19. Other Instructions:

a) Bid Prices shall be quoted on Annexure-"A" and also on letter Head duly filled in, stamped and signed by the authorized representative of Bidder.
b) Bidding Form Annexure-"B" must also be duly filled in, stamped and signed by authorized representative of Bidder.
c) Quoted price shall be valid for three months from the opening date of the Tender, for placing order however, any subsequent change in taxes and duties as notified by government will be given due consideration

I/We hereby agree to abide by and fulfill all the terms and conditions of the contract.

The sum of Rs._____ is herewith forwarded in the shape of _____as 2% earnest money.

Name and Address of the Firm **Company's Stamp**

_____

_____

_____

Name and Signature of company's Representative

_____

_____

CNIC: _____

ANNEXURE "A"
FINANCIAL PROPOSALS

S. No.*	**Name of Item**	**Qty**	Ex-LUMS(DDP)	**Total Price**	**Remarks**

* S.NO as mentioned on BOQ

Authorized Signature of Bidder with seal stamp_____

Full name of firm _____

N.I.C. No. _____

Phone no. _____ Mobile No._____

ANNEXURE-"B"

TECHNICAL PROPOSALS

S. No.*	Name of Item(s)	Specifications / Brand	Qty

* S.NO as mentioned on BOQ

Authorized Signature of bidder with seal stamp

_____

Full name of firm _____

N.I.C. No. _____

Phone no. _____ Mobile No._____

Note: Attach technical brochure producing detailed specifications for all the offered items(s).

BIDDING FORM

Date: _____

Lahore University of Management Sciences.
Lahore

Gentleman

1. Having examined the conditions to Tender and Specifications of Tender No LUMS/320/2026 DATED: 19.11.2026, the receipt of which is hereby acknowledged. We the undersigned, offer to supply and deliver in conformity with specifications mentioned in BOQ and conditions of Tender for the sum of Rs._____ (Rupees _____) or such other sums as may be ascertained in accordance with the said Conditions.

2. If our Bid is accepted, we shall deliver the required supplies mentioned in the tender documents within _____ days from the date of receipt of your firm Purchase Order.

3. We agree to abide by the terms and conditions of the Tender for the period of _____ from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

4. Until a formal Purchase order(s) is placed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

5. We understand that you are not bound to accept the lowest or any proposal you may receive or to inform us of the rejection of our bid or to give any reasons thereof.

Dated this _____ day of _____ 2026.

Signature _____ in the capacity of _____ duly authorized to sign Tender for and on behalf of

_____
(NAME OF FIRM IN BLOCK CAPITALS)

Complete Address: _____

Fax No._____ Telephone No._____

(SIGNATURE)
Witness :-1. _____ 2_____