

	<p>भारतीय प्रौद्योगिकी संस्थान पालक्काड  <b>Indian Institute of Technology Palakkad</b>  अहलिया एकीकृत कैम्पस, कोझिपारा  Ahalia Integrated Campus, Kozhipara  पालक्काड- 678557  Palakkad – 678 557</p>	<p>दूरभाषसंख्या/ Phone no:  04923 – 226300/590/586</p> <p>ईमेल/ Email :  purchase@iitpkd.ac.in</p>
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Ref No: IITPKD/ACAD/ 023 / 2017

Date: 04.07.2017

Due Date of the tender: 14.07.2017 @3.30 PM

**TENDER FOR INVITING QUOTATIONS**

Dear Sirs,

On Behalf of Indian Institute of Technology Palakkad quotations are invited for **“Supply, Installation, Testing of Projectors, Motorized Screens and PA Systems for Class Rooms”** confirming to the specification in the Annexure.

1. **Preparation of Bids:** - The tenders should be submitted **under two-bid system** (i.e.) Technical bid and Financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. No prices should be included in technical bid. Financial Bid should indicate item – wise prices for the items mentioned in the technical bid. The technical bid and the Financial should be put in separate cover and sealed. Both sealed covers should be put into a bigger cover
2. The Quotations duly sealed and superscribed on the envelope **with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above. Fax and Email quotation are not acceptable.**
3. The price should be quoted per unit and packing and delivery charges should be indicated separately. The offer/bids should be exclusive of Taxes and Duties, which will be paid by the purchaser as applicable. However the percentage and of taxes and duties as on date should be clearly indicated.
4. The Quotations should be valid for **sixty days** from the due date and the period of delivery required should also be clearly indicated.
5. 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.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
7. **Outside Palakkad:** Quotations should be for **F.O.R. at IIT Palakkad**. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.

Supplier should be registered under GST, PAN and TIN. A copy of the same should be submitted along with tender, failing which the tender will be treated as invalid

9. Goods shall not be supplied without an official supply order.
10. **Excise Duty & Custom Duty:** IIT is exempted from payment of Excise Duty. Excise duty certificate will be issued after receipt of Proforma Invoice and the Custom Duty which will be paid at a concessional rate against duty exemption certificate.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later. No advance payment will be made. The Tenderer have to furnish the bank details along with tender like Account No, Account Name, IFSC Code, Bank address etc.
12. **Submission of Bids:** Quotation should be sent to the following address "The Registrar, Indian Institute of Technology Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad -678 557, Kerala", Phone No: 04923 226 586/590, Email: [purchase@iitpkd.ac.in](mailto:purchase@iitpkd.ac.in).
13. **Delivery Period:** The quotation should indicate clearly when delivery and installation will be made.
14. **Delay in Supply or Liquidate damages:** If the supplier fails to deliver the stores within the time specified in the purchase order, the purchaser will recover from the supplier as liquidated damages a sum of one- half of one percent (0.5%) of the P.o value of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed five percent (5%) of the P.o price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.
15. **Late offer:** The quotation received after due date will not be considered. Please ensure that your offer is sent well in advance to reach the Institute by the due date.
16. **Warranty:** Warranty Clause should be indicated clearly.
17. **Acceptance and Rejection:** I.I.T Palakkad has the right to accept the whole or any parts of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

Yours faithfully,



Registrar, IIT Palakkad

Encl: Specifications

  
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### TECHNICAL SPECIFICATIONS

Technical Specification for "Design, Supply, Installation, Testing & Commissioning of Projectors, Motorized Screens and PA system for classrooms 2, 18, 33 and 117 at IIT Palakkad".

#### I. Projector

S.No	Description	Specification Parameter	Quantity
1	Projection System	LCD - WXGA	4 Nos
2	Brightness	Minimum 5000 Lumens	Location Room No. 2, 18, 33 and 117
3	Projection Method	Ceiling Mount/ FLOOR	
4	Pixel Number	WXGA (1280 x 800)	
5	Aspect Ratio	16:10	
6	Native Resolution	WXGA (1280 x 800)	
7	Lamp Life	Minimum 4000 Hours	
8	Contrast Ratio	10000 : 1	
9	Interfaces	HDMI (2) ; RGB (2); Audio IN & Out (1); LAN (1); RS-232 (1)	
10	Built-In Speaker	10 Watts	
11	Mounting Kit	Ceiling Mount	
12	Vertical Lens Shift	48%	

## II. Projection Screen

S.No	Description	Specification Parameter	Quantity
1	Type	Electric Motorized Screen with Remote	4 Nos Location Room No. 2, 18, 33 and 117
2	Size	128 Inch	
3	Ratio	16 : 10	
4	Viewing Area	1480 X 2370	
5	Height and Width	1560 x 2450	

## III. Projection Mount Kit

S.No	Description	Specification Parameter	Quantity
1	Type	Aluminum / Steel	4 Nos Location Room No. 2, 18, 33 and 117
2	Capacity	Holding Maximum	
3	Height	6 Feet maximum	

**IV. VGA TO HDMI ADAPTOR (Scaler)**

S.No	Description	Specification Parameter	Quantity
1	Max. Resolution	WXGA ; 1080p	6 Nos (5nos. for install and 1no stand by)  Location Room No.Computer Lab 2, 18, 33, 117 and Computer lab 1
2	Built-In ProcAmp	Color, hue, sharpness, contrast, and brightness controls	
3	Input	1 PC/HD (RGBHV/YPbPr) on a 15pin HD connector, 1 HDMI connector, 2 unbalanced stereo audio connectors on 3.5mm mini jacks	
4	Output	1 PC (RGBHV) on a 15pin HD connector, 1 HDMI connector. 1 unbalanced stereo audio connector on a 3.5mm mini jack	
5	INDICATORS	ON, HDMI and PC LEDs	

**V. HDMI Matrix Switcher**

S.No	Description	Specification Parameter	Quantity
1	Connectivity	4 x 4	1 No.  Stand by for Room No. 18 and 33
2	Video Resolution	HDTV resolution upto 1080p , computer resolution upto WXGA	
3	BANDWIDTH	Up to 6.75Gbps data rate (2.25Gbps per graphic channel).	
4	Connectors	HDMI In: 4 x HDMI Type A Female HDMI out: 4 x HDMI Type A Female	
5	Switches	4 x push Buttons	

**VI. Wireless Dual Handheld Microphone Transmitters**

S.No	Description	Specification Parameter	Quantity
1	operating range (line of sight)	300 feet (91 m)	4 SETS  Location Room No. 18 and 33
2	Microphone Frequency	60Hz – 15Khz	
3	Polar Pattern	Cardioid	
4	Microphone Type	Dynamic	
5	adjustable gain control	Yes	
6	quick & easy frequency matching	Yes	
7	Power and battery status	LED	
8	2 AA batteries up to 14 hours of continuous use	Yes	

**VII. Receiver for Dual Handheld Transmitters**

S.No	Description	Specification Parameter	Quantity
1	Output Impedance XLR connector	200Ω	4 Nos  Location Room No. 18 and 33
2	6.35 mm (1/4") connector	50Ω	
3	Audio Output Level XLR connector	-27 dBV (into 100 kΩ load)	

4	Audio Output 6.35 mm (1/4") connector	-13 dBV (into 100 kΩ load)
5	Image Rejection	>50 dB, typical
6	RF Sensitivity	-105 dBm for 12 dB SINAD, typical

#### VIII. Speakers SET/ PAIR

S.No	Description	Specification Parameter	Quantity
1	Frequency Range	80 Hz - 20 KHz	2 Nos Location Room No. 117
2	Maximum SPL Per Pair	115 dB or better	
3	Maximum SPL Master Only	111 dB or better	
4	LF Transducer	135 mm (5.25 in) low frequency loudspeaker	
5	HF Transducer	19 mm (0.75 in) polycarbonate dome tweeter	
6	Crossover Frequency	4.2 KHz	
7	Input Sensitivity	+4 dBu XLR 1/4"; 0 dBu RCA	
8	Signal Input Connectors (x 2)	Balanced Neutrik®*Combo XLR 1/4" TRS; Unbalanced RCA	
9	Amplifier Power	35 Watts continuous per-channel	

10	Power Requirements	19 V DC / 3.42 A - use only supplied power supply	
11	Headphone Jack	3.5 mm (1/8")	

#### IX. Wireless Microphone with Receiver and Mic

S.No	Description	Specification Parameter	Qty
1	Receiver	Single Channel Diversity	1No Location Room No. 117
2	Frequency response	50 – 15KHz	
3	Polar Pattern	Cardioid	
4	Output	Balanced XLR/ Unbalanced ¼"pack	
5	Power Req. (Lapel Mic)	2 x 1.5v AA Pencil Cells	
6	Power Req. (Receiver)	240V AC 50Hz for AC Adaptor	
7	UHF Channels	8	

#### X. HDMI Cable

as per actuals

S.No	Description	Specification Parameter
1	HDMI Cable	Fully HDCP compliant to provide highest level of signal quality. 3D over HDMI, 2K resolution support, Supports 480p, 720p, 1080p resolution
2	Gender	Male-Male
3	Version	1.4
4	Cable length	As per actuals required



**XI. VGA cable****as per actuals**

S.No	Description	Specification Parameter
1	VGA cable with audio	<p>Conductor: 26 AWG 7/34 tinned copper.</p> <p>Pre-terminated with molded 15-pin HD connectors (male to male), gold-plated pins and thumbscrews for easy connection and a 3.5mm stereo mini jack.</p> <p>All Pins Connected for DDC2 and EDID Support</p>
2	Impedance	75 Ω
3	Gender	Male-Male
4	Cable length	As per actuals required

**XII. 6U Rack with PDU for classroom 118****1 No.****Terms and Conditions:**

1. In classroom 18 and 33, Projector and dual band wireless microphone should be connected to existing Video conferencing system, there shouldn't be any loss, noise or echo in both audio and video.
2. In classroom 118 the Projector should connected to Scaler and PA System has to be installed using item No VIII and IX.
3. Rack should be installed for fixing Scaler and Audio receiver in class room 117.
- 4.
5. Projector and screen should be installed in a such a way that viewer has a clean view with maximum area of visibility.
6. Projector screen should be installed in such a way that it shouldn't struck on green/white board behind it.
7. Room No 118 PA System should work without any Echo or noise.
8. HDMI and VGA cables are as per actuals (number and length)
9. Installation includes Electrical wiring with fire retardant cables and power points for equipment in all the 4 rooms. Power cable, power socket, plug points, audio cable etc are scope of vendor.
10. All tools/ ladder for erection should be brought by the vendor/contractor.
11. No damage should be done to the floor or walls for laying the cables, necessary/casing/capping should be done. Reversible changes are allowed.
12. No cable should be exposed in moving space of the floor.
13. All materials used should be of good quality.
14. 3 Years onsite OEM Warranty should be clearly mentioned (Proof has to be submitted at the time of installation).

15. The product should match each and every specifications mentioned. The specification has to be mentioned clearly in the technical bid.
16. Compliance sheet for the specification & OEM Brochure has to be attached along with technical bid. Vendor has to fill the compliance sheet and mention page number or reference number in OEM brochure. Unfilled / partial filled sheets lead to disqualification.
17. Vendor has to highlight the specification in the OEM brochure.
18. All standard accessories to be supplied
19. The entire work has to be completed within 10 days from the date of receipt of Supply/Work Order.
20. Replacement or standby equipment should be installed within 24 hours after registration of faulty equipment during the warranty period.
21. Payment will be given only after successful installation & configuration.

**Note:**

Vendor should provide acceptance letter of above mentioned.

**Eligibility criteria:**

The vendor must have installed IP based HD Video conferencing setup in any Government / Educational institution in last 3 year. The Proof (Purchase Order/Performance Certificate) has to be attached with technical bid.



