



**UNIVERSITY OF KERALA**

**Tender Document**

*for*

**Supply, Installation, Testing and Commissioning of interactive displays and PTZ cameras for UGC-Human Resource Development Centre, University of Kerala, Kariavattom Campus**

Bidder Details

Registered Name and Address of bidder	
Address for communication	
<u>Other contact information</u>  Telephone Office :  Mobile :  Email :  FAX :	

## **1. Tender Notice**

Sealed quotations are invited from reputed firms for Supply, Installation, Testing and Commissioning of interactive displays (3No.) and PTZ cameras (6no.) for UGC-Human Resource Development Centre, University of Kerala, Kariavattom Campus as per the minimum specification, scope of work and terms of condition mentioned in the document.

1.	Name of work /Items	Supply and Installation of interactive displays (3No.) and PTZ cameras (6no.) for UGC-Human Resource Development Centre, University of Kerala, Kariavattom Campus
2.	Tender No.	No. 28095/Ad B IV A/UGC-HRDC/IDS_PTZCamera/2023
3.	Cost of tender form/ Tender Submission Fee	Rs. 2,500/-
4.	Earnest Money Deposit	10,000/-
5.	Period of Completion	45 days
6.	Start Date of issue	27.07.2023
7.	Last Date of receipt of Tender/ Bid closing	14.08.2023 5.00 P.M.
8.	Date and time of Opening of tender	16.08.2023 10 A.M.

## **2. General Tender Terms & Conditions for technical verification**

1. Bidders who are black listed by State / Central Government departments and organizations are not eligible to participate in this tender and such bids will be summarily rejected.
2. The bidder shall be OEM or Distributor of the Schedule of Items quoted. In the case of Distributor / Dealer the bidder should attach an **authorization letter from OEM for Interactive display and PTZ Camera to participate in the tender.**
3. The bidder should have registered office/Own service centre in Kerala preferably in Thiruvananthapuram.
4. Compliance statement should be submitted
5. All equipments should be from a reputed OEM of non Chinese origin as per MHA guide lines
6. Detailed **equipment data sheet** should be submitted
7. All the items must have a warranty period of 3 years

## **3. Technical Specification and compliance statement**

### **1. Interactive Display- 3No.**

<b>SL NO</b>	<b>Parameter</b>	<b>Specification</b>	<b>Compliance (Yes/No)</b>
1	Panel Size:	86" or better	
2	Panel Type:	TFT LCD Module with DLED Backlight.IPS or better	
4	Aspect Ratio:	16:9	
5	Resolution:	UHD 3840x2160(Pixels)	
7	Brightness:	350 nits (typ.) or better	
8	Contrast Ratio:	4000:1 or better	
9	Response Time:	8ms or better	
10	Viewing Angles:	H=178 ± 5, V=178±5 typ.	
11	Backlight Life:	50,000 Hours (Min)	
12	Hardness	9H Anti-glare coating or better	
13	Orientation:	Landscape	
	<b>PLATFORM</b>		
14	Processor:	Quad-core or better	

15	RAM:	Minimum 4GB DDR4	
16	Storage:	Minimum 32 GB	
	<b>TOUCH</b>		
17	Type/ Tech:	Ultra Fine Touch Technology/Equivalent	
18	Touch Point:	Minimum 20 points touch, 10 points writing	
	<b>INPUT</b>		
19	HDMI:	HDMI 2.0 x 2 (3840x2160 @60Hz) or more	
20	RGB / VGA:	x1 or more	
21	Audio:	x1 or more	
22	RS232:	x1 or more	
23	OPS Slot	x1	
24	WiFi:	x1	
	<b>OUTPUT</b>		
25	Audio:	x1 or better	
	<b>LAN</b>		
26	RJ45:	x1	
	<b>USB</b>		
27	Type A:	USB2.0 Front x2; Side x2	
28	Type B:	x1 for HDMI/VGA touch	
	<b>SPEAKERS</b>		
29	SPEAKERS	10W x 2	
	<b>TOP CAMERA PLATE</b>		
30	TOP CAMERA PLATE	Yes	
	<b>EMBEDDED OS</b>		
31	EMBEDDED OS	Android 9 or higher	
	<b>Features</b>		
32	Features	Flicker Free Display	
33		Anti-glare coating	
34		Dual Pen	
35		IR Recognition	
37	Whiteboard software	Should work in Windows, Android, and Web & Google Classroom	

#### PTZ Camera - 6No.

Sl.No	Parameter	Specifications	Compliance (Yes/No)
1	Sensor	The camera sensor should be high quality 2MP HD CMOS sensor or better.	
2	White Balance	The camera should have an Option of Auto or Manual White Balance.	
3	Gain	The camera should have an auto Gain Control	

4	Back Light Compensation	The camera should have a selectable Back-light compensation	
5	Noise Reduction	2D & 3D or better	
6	S/N ratio	The camera should have a S/N Ratio of >55db.	
7	Zoom	The camera should have a 12x optical zoom	
8	Interface	The camera should have a standard Video Output and should support HDMI/DVI Ports so that Camera can be integrated with standard End Points. Apart from that , It should be supplied with USB 3.0 based Capture card or should have native USB 3.0 support along with HDMI/DVI support so that it can also be connected with Software based VC Solution.	
9	RJ-45	It should have at least 1 RJ-45 Port for IP Camera functions.	
10	Signal Support	The camera should support 1080p@60fps or better	
12	Presets	The camera should have at least 30 Position Presets or above	
13	Field Of View	The camera should have 72.5 Degree or better field of view	
14	Pan Range	The camera should have a Pan Rotation Angle of -170 degrees to +170 Degrees or better	
15	Tilt Range	The camera should have a Tilt Rotation Angle of -30 degrees to + 90 degrees or better	
16	Accessory	The camera should be supplied with IR remote control as an included accessory. Along with ceiling mount kit.	

#### Additional items

SL.No	Item	Specifications
1	External USB expansion device - 3 Nos	Type C, input X1 , 4 USB output, Type A/C according to camera cable connection
2	Cables and Connectors as per actual length (Branded) - 3 set	4K HDMI Active USB 3.0

The above items are minimum set of equipment required. The Bidder shall install and integrate the entire devices with the existing audio system as well as to perform meeting through software based video conferencing such as google meet, zoom meeting. The camera inputs shall be integrated through software like OBS studio. The bidder can add additional devices required for the satisfactory completion of the project without additional cost. The bidder shall visit the site if needed.

#### **4. Terms and conditions**

1. The Bidder shall quote price in clear terms. The rates quoted must be inclusive of all taxes, cost of supply at site, warranty and installation charges etc...
2. The price should be quoted only in Indian rupees. The bid shall be typed and signed by the bidder.
3. All the documents mentioned shall be submitted without fail.
4. All the documents must be typed and clear.
5. **Validity:-** The Bid will be valid for 120 days from its date of opening. Further extension can be done by mutual consent.
6. **Delivery :-** The item should be delivered at UGC-HRDC, University of Kerala Kariavattom Campus.
7. **Installation and commissioning:-** The items shall be installed and commissioned at UGC-HRDC, University of Kerala, Kariavattom Campus.
8. **Period of Completion:-** The work shall be completed within a period 45 days from date of agreement.
9. **Payment:** - The University will release the payment only after inspecting the work and satisfy that the supply is as per the requirements and on the basis of actual quantity executed. The payment will be made after successful completion of the supply on producing invoice in triplicate. The final bill shall be based on the actual quantity of supply made.
10. The undersigned reserves the right to reject or accept any or all the tenders received fully or partly without assigning any reason thereof.
11. General rules relating to purchase of materials/equipments will also applicable to this tender.

Date: 27.07.2023  
Place : Palayam

Sd/-

**University of Kerala**