



University of Ruhuna
Wellamadama
Matara

18.08.2022

The Manager,
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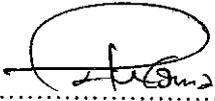
Invitation for Bids (IFB)

Contract: Supply, Delivery, Installation, Commissioning and Testing of Audio Visual Equipment for Department of Management & Finance, University of Ruhuna

IFB No - AHEAD/RA2/ELTA-ELSE/RUH/MGT/GOODS/2022/NS-212

The Chairman, Department Procurement Committee on behalf of the University of Ruhuna invites sealed bid from you for **Supply, Delivery, Installation, Commissioning and Testing of Audio Visual Equipment** indicated in the annexed bid document.

01. Bidding will be conducted through National Shopping method of procurement.
02. You may obtain further information if any from the **Deputy Director- Procurement (AHEAD Project) Supplies Branch, University of Ruhuna, Wellamadama, Matara. (T.P 041- 2227027/ Fax No. 041 – 2227027)**
03. Bids must be delivered by mail in sealed envelopes addressed to **Director/OTS, AHEAD Project-OTS Office, University of Ruhuna, Wellamadama, Matara before 02.00 p.m. on September 01, 2022.** Late bids will be rejected.
04. This contract is subject to,
 - Providing of performance security of 10% of the total contract price in accordance with the format attached and issued with this in favor of the Vice Chancellor, University of Ruhuna.
 - Entering in to the formal agreement with the University of Ruhuna.


..... 18/08/2022
Deputy Director - Procurements,
University of Ruhuna,
Wellamadama,
Matara.


.....
Wellamadama, Matara.



UNIVERSITY OF RUHUNA

**PROCUREMENT OF GOODS UNDER
NATIONAL SHOPPING PROCEDURES**

**INVITATION FOR QUOTATIONS
FOR**

**Supply, Delivery, Installation, Commissioning and Testing of
Audio Visual Equipment for Department of Management & Finance,
University of Ruhuna**

IFB No - AHEAD/RA2/ELTA-ELSE/RUH/MGT/GOODS/2022/NS-212

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Section I. Instructions to Vendors (ITV)

A: General	
1. Scope of Bid	1.1 The Purchaser named in the Data Sheet invites you to submit a quotation for the supply of Goods as specified in Section III Schedule of Requirements.
B: Contents of Documents	
2. Contents of Documents	<p>2.1 The documents consist of the Sections indicated below.</p> <ul style="list-style-type: none"> • Section I. Instructions to Vendors (ITV) • Section II. Data Sheet • Section III. Schedule of Requirements • Section IV. Technical Specifications & Compliance with Specifications with price schedule • Section V. Quotation submission Form(s)
C: Preparation of Quotation	
3. Documents Comprising your Quotation	<p>3.1 The Quotation shall comprise the following:</p> <ul style="list-style-type: none"> (a) Quotation Submission Form and the Price Schedules; (b) Technical Specifications & Compliance with Specifications
4. Quotation Submission Form and Price Schedules	<p>4.1 The vendor shall submit the Quotation Submission Form using the form furnished in Section V. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.</p> <p>4.2 Alternative offers shall not be considered. The vendors are advised not to quote different options for the same item but furnish the most competitive among the options available to the bidder.</p>
5. Prices and Discounts	<p>5.1 Unless specifically stated in Data Sheet, all items must be priced separately in the Price Schedules.</p> <p>5.2 The price to be quoted in the Quotation Submission Form shall be the total price of the Quotation, including any discounts offered.</p>

The Government of Karnataka
 Department of Public Works
 Bangalore
 Karnataka
 India

	<p>5.3 The applicable VAT shall be indicated separately.</p> <p>5.4 Prices quoted by the vendor shall be fixed during the vendor's performance of the Contract and not subject to variation on any account. A Quotation submitted with adjustable price shall be treated as nonresponsive and may be rejected.</p>
6. Currency	6.1 The vendors shall quote only in Sri Lanka Rupees.
7. Documents to Establish the Conformity of the Goods	<p>7.1 The vendor shall furnish as part of its quotation the documentary evidence that the Goods conform to the technical specifications and standards specified in Section IV, "Technical Specifications & Compliance with Specifications".</p> <p>7.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods, demonstrating substantial responsiveness of the Goods to the technical specifications, and if applicable, a statement of deviations and exceptions to the provisions of the Technical Specifications given.</p> <p>7.3 If stated in the Data Sheet the vendor shall submit a certificate from the manufacturer to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in Sri Lanka.</p>
8. Period of Validity of quotation	8.1 Quotations shall remain valid for the period of sixty (60) days after the quotation submission deadline date.
9. Format and Signing of Quotation	9.1 The quotation shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the vendor.
D: Submission and Opening of Quotation	
10. Submission of Quotation	<p>10.1 Vendors may submit their quotations by Registered post in sealed envelopes addressed to the Purchaser and bear the specific identification of the quotation number.</p> <p>10.2 If the quotation is not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the quotation.</p>
11. Deadline for Submission of Quotation	11.1 Quotation must be received by the Purchaser at the address set out in Section II, "Data Sheet", and not later than the date and time as specified in the Data Sheet.

12. Late Quotations	12.1 The Purchaser shall reject any quotation that arrives after the deadline for submission of quotations, in accordance with ITV Clause 11.1 above.
13. Opening of Quotations	13.1 The Purchaser shall conduct the opening of quotation in public at the address, date and time specified in the Data Sheet. 13.2 A representative of the bidders may be present and mark his attendance.
E: Evaluation and Comparison of Quotations	
14. Clarifications	14.1 To assist in the examination, evaluation and comparison of the quotations, the Purchaser may, at its discretion, ask any vendor for a clarification of his quotation. Any clarification submitted by a vendor in respect to his quotation which is not in response to a request by the Purchaser shall not be considered. 14.2 The Purchaser's request for clarification and the response shall be in writing.
15. Responsiveness of Quotations	15.1 The Purchaser will determine the responsiveness of the quotation to the documents based on the contents of the quotation received. 15.2 If a quotation is evaluated as not substantially responsive to the documents issued, it may be rejected by the Purchaser.
16. Evaluation of quotations	16.1 The Purchaser shall evaluate each quotation that has been determined, to be substantially responsive. 16.2 To evaluate a quotation, the Purchaser may consider the following: (a) the Price as quoted; (b) price adjustment for correction of arithmetical errors; (c) price adjustment due to discounts offered. 16.3 The Purchaser's evaluation of a quotation may require the consideration of other factors, in addition to the Price quoted if stated in Section II, Data Sheet. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods.

17. Purchaser's Right to Accept any Quotation, and to Reject any or all Quotations	17.1 The Purchaser reserves the right to accept or reject any quotation, and to annul the process and reject all quotations at any time prior to acceptance, without thereby incurring any liability to bidders.
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F: Award of Contract	
18. Acceptance of the Quotation	18.1 The Purchaser will accept the quotation of the vendor whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the documents issued.
19. Notification of acceptance	19.1 Prior to the expiration of the period of validity of quotation, the Purchaser will notify the successful vendor, in writing that his quotation has been accepted.
20. Signing of Contract	20.1 Within (14) days after notification, the Purchaser shall complete the Agreement, and in form the successful Bidder have to sign it. 20.2 Within fourteen (14) days of receipt of such information, the successful Bidder shall sign the Agreement.
21. Performance Security.	21.1 Within fourteen (14) days of the receipt of notification of award from the Purchaser, the successful Bidder is required furnish the Performance Security in accordance with the CC, using for that purpose the Performance Security Form included in Section VII contract forms, The Employer shall promptly notify the name of the winning Bidder to each unsuccessful Bidder and discharge the Bid Security of the unsuccessful bidders. 21.2 Failure of the successful Bidder to submit the above mentioned Performance Security or sign the contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security or execution of the Bid-Securing Declaration. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose offer is substantially responsive and is determined by the purchaser to be qualified to perform the contract satisfactorily.

Section II: Data Sheet

ITV Clause Reference	
1.1	The Purchaser is: Vice Chancellor Address : University of Ruhuna, Wellamadama Matara.
5.1	If the bidder is allowed to quote for lesser number of items than the total number of items specified, indicate the details.
7.3	Manufacturer's Authorization is required.
11.1	Address for submission of quotations is Director/ OTS, AHEAD Project, University of Ruhuna, Wellamadama, Matara. Deadline for submission of quotations is at 2.00 P.M. on September 01 2022.
13	The Quotations shall be opened at the following address: AHEAD PROJECT, OTS-Office, University of Ruhuna, Wellamadama, Matara.
16	Other factors that will be considered for evaluation are (List and describe the methodology):
Additional Clause	
17. Payment	Payment shall be made within eight weeks after receiving the invoice and other required documents to the Office for each item supplied.
19. Liquidated Damages	The supplier should deliver the items within the delivery period stipulated in the schedule of requirements. The supplier should make payment to the purchaser for each week of delay in delivery, at the rate of 0.5% of the contract sum per each week of delay, up to a maximum of 10% of the contract sum.
21. Performance Security	If required, the supplier should forward performance security of 10% of the total contract price. This should be issued in favor the Vice Chancellor, university of Ruhuna, valid for 365 days from the date of acceptance of the order.

Section III: Schedule of Requirements

- Note:
1. Bidders a) May quote whole item.
 2. Evaluation will be based on: a) as a package

Item No.	Brief Description of the Goods	Specification and Requirements	Quantity	Delivery Period	Bidder's offered Delivery Date
1.	85" 4k Antiglare glass smart panel	Annexure I	3	2 weeks	
2.	65" 4K Antiglare glass Screen	Annexure II	6	2 weeks	
3.	Lecture Capturing System with Auto Tracking PTZ camera	Annexure III	1	2 weeks	
4.	EIGHT Channel Wireless microphone with receiver including Lecturer's Microphone	Annexure IV	1	2 weeks	
5.	Media Station 4 HDMI inputs 1 Audio in 1 Audio out	Annexure V	1	2 weeks	
6.	75" 4k Antiglare glass smart panel	Annexure VI	1	2 weeks	
7.	Smart Podium	Annexure VII	3	2 weeks	
8.	External Speaker Set	Annexure VIII	4	2 weeks	

Place of Delivery: Faculty of Management & Finance, University of Ruhuna, Wellamadama, Matara.

Section V Quotation Submission Form

[The Vendor shall fill in this Form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions will be accepted.]

Date:

To:.....

[insert complete name of Purchaser]

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the document issued;
- (b) We offer to supply in conformity with the documents issued and in accordance with the Delivery Schedules specified in the Schedule of Requirements, the following Goods [insert a brief description of the Goods];
- (c) The total price of our quotation including any discounts offered is: [insert the total quoted price in words and in figures];
- (d) Our quotation shall be valid for the period of time specified in ITV Sub-Clause 8.1, from the date fixed for the quotation submission deadline in accordance with ITV Sub-Clause 11.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (e) We understand that this quotation, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us.
- (f) We understand that you are not bound to accept the lowest evaluated quotation or any other quotation that you may receive.

Signed:.....
[insert signature of Person whose name and capacity are shown]

Name:
[insert complete name of person signing the Bid Submission Form]

Dated:

ITV
INTEGRATED TRANSPORT VEHICLES
S.A.
RUE DE LA LIBERTÉ, 10
1050 BRUXELLES
BELGIUM
TEL: 02 234 11 11
FAX: 02 234 11 12
E-MAIL: info@itv.be

PRICE SCHEDULE –IV

Contract: Supply, Delivery, Installation, Commissioning and Testing of Audio Visual Equipment for Department of Management & Finance, University of Ruhuna

IFB No - AHEAD/RA2/ELTA-ELSE/RUH/MGT/GOODS/2022/NS-212

Item No.	Description	Qty.	Unit Rate. (Without VAT) (Rs. & Cents)	VAT (Rs. & Cents)	Total Amount (With VAT) (Rs. & Cents)
1.	85" 4k Antiglare glass smart panel	3			
2.	65" 4K Antiglare glass Screen	6			
3.	Lecture Capturing System with Auto Tracking PTZ camera	1			
4.	EIGHT Channel Wireless microphone with receiver including Lecturer's Microphone	1			
5.	Media Station 4 HDMI inputs 1 Audio in 1 Audio out	1			
6.	75" 4k Antiglare glass smart panel	1			
7.	Smart Podium	3			
8.	External Speaker Set	4			

We agree to supply and delivery the above goods in accordance with the technical specifications for a total contract price of Rupees (amount in figures) (amount in words) within the period specified in the Invitation for Quotations.

We also confirm that the warrantee/guarantee specified shall apply to the offered goods.

.....
Signature of the Bidder

.....
Name of the Bidder

.....
Date

01. Technical Specification for Smart Interactive Panel/ 85" – 03 Nos

Specifications	Requirements	Bidders Compliance	
		Yes/No	If "No" indicate your offer
Brand	Please Specify		
Model	Please Specify		
Country of Origin & Country of Manufacture/ Assembly	Please Specify		
DISPLAY	Panel size:	85" or more	
	Type/tech	IR touch	
	Aspect ratio:	16:9 or better	
	Native resolution:	UHD 3840x2160 (4K) or above	
	Brightness:	350 nits (minimum)	
	Contrast ratio:	4000: 1 or above	
	Response time	<8 ms	
	Colors:	1.07 billion colors or more	
	Backlight life:	50,000 Hours or more	
	Surface	4mm Thickness Anti-Glare glass	
Viewing Angle	Please Specify		
TOUCH SCREEN	Technology	IR Recognition	
	Touch capability	Multi touch 40 points and writing 20 points or more	
OPERATION SYSTEM	Embedded OS:	Capability of Shifting from android to windows without restart the machines. Boot up facility with both windows and android. [without depending each other(Windows and Android)]	

PLATFORM	Windows	Processor	Intel Core i7 4 th Generation 3.00GHz Base frequency or higher		
		Ram	8GB DDR4 or above		
		Storage	1 TB (minimum) or more		
	Android	Processor	Cortex A53*4 1.5GHz or higher		
		Ram	3GB DDR4 or above		
		Storage	32 GB (minimum) or more		
		Version	Android version 8 or 9		

CONNECTIVITY	Input / Output	USB 2.0, VGA in, HDMI 2.0 Out, Display port, VGA audio in, AV out, AV in, Earphone, YPBPR, RS232, Touch out USB, RJ45 in & out, TF card slot, Windows OPS Slot		
	WIFI, Bluetooth	Please Specify		
SPEAKERS	SPEAKERS:	15W*2 or better		
USB SUPPORTED FILE FORMAT	Picture	BMP, JPEG, PNG, JPG, TIF, [Please Specify]		
	Video	MPEG I&2, MPEG2-PS, MPEG4, MKV MPG, MP4, MOV, VOB, DAT [Please Specify]		
	Audio	MPEG I&2, HEAAC, AAC MP3 , M4A [Please Specify]		
ACCESSORIES	Connectivity	IWB Pen without ink 2pcs, Remote Control, 1.5m Power cable, 1.5m HDMI Cable, USB Extension Cable		
	Holders / Stands	Manual height-adjustable mobile cart		
	User's manual	Should be supply		
POWER	Power Supply	100-240V AC		
	Power Consumption	< 290W Eco<75W		
OS	Build in windows Operating system	Genuine Microsoft Windows 10 Pro with License		
Microsoft Office	Application Software	Microsoft Office 2019 with Academic License		
OTHERS	Moveable Stand	should be stable with the weight of the panel well finished and powder coated four Caster Wheel		
	Certificates	Please Specify		
	Warranty	3 Years Comprehensive onsite Warranty		

02. Technical Specification for Smart Interactive Panel/ 75” – 01 Nos

Specifications		Requirements	Bidders Compliance	
			Yes/No	If “No” indicate your offer
Brand		Please Specify		
Model		Please Specify		
Country of Origin & Country of Manufacture/ Assembly		Please Specify		
DISPLAY	Panel size:	75” or more		
	Type/tech	IR touch		
	Aspect ratio:	16:9 or better		
	Native resolution:	UHD 3840x2160 (4K) or above		
	Brightness:	350 nits (minimum)		
	Contrast ratio:	4000: 1 or above		
	Response time	<8 ms		
	Colors:	1.07 billion colors or more		
	Backlight life:	50,000 Hours or more		
	Surface	4mm Thickness Anti-Glare glass		
	Viewing Angle	Please Specify		
TOUCH SCREEN	Technology	IR Recognition		
	Touch capability	Multi touch 40 points and writing 20 points or more		
OPERATION SYSTEM	Embedded OS:	Capability of Shifting from android to windows without restart the machines. Boot up facility with both windows and android. [without depending each other(Windows and Android)]		

PLATFORM	Windows	Processor	Intel Core i7 4 th Generation 3.00GHz Base frequency or higher		
		Ram	8GB DDR4 or above		
		Storage	1 TB or more		
	Android	Processor	Cortex A53*4 1.5GHz or higher		
		Ram	3GB DDR4 or above		
		Storage	32 GB or more		
		Version	Android version 8 or 9		

CONNECTIVITY	Input / Output	USB 2.0, VGA in, HDMI 2.0 Out, Display port, VGA audio in, AV out, AV in, Earphone, YPBPR, RS232, Touch out USB, RJ45 in & out, TF card slot, Windows OPS Slot		
	WIFI, Bluetooth	Please Specify		
SPEAKERS	SPEAKERS:	15W*2 or better		
USB SUPPORTED FILE FORMAT	Picture	BMP, JPEG, PNG, JPG, TIF [Please Specify]		
	Video	MPEG I&2, MPEG2-PS, MPEG4, MKV MPG, MP4, MOV, VOB, DAT [Please Specify]		
	Audio	MPEG I&2, HEAAC, AAC MP3 , M4A [Please Specify]		
ACCESSORIES	Connectivity	IWB Pen without ink 2pcs, Remote Control, 1.5m Power cable, 1.5m HDMI Cable, USB Extension Cable		
	Holders / Stands	Manual height-adjustable mobile cart		
	User's manual	Should be supply		
POWER	Power Supply	100-240V AC		
	Power Consumption	< 290W Eco<75W		
OS	Build in windows Operating system	Genuine Microsoft Windows 10 Pro with License		
Microsoft Office	Application Software	Microsoft Office 2019 with Academic License		
OTHERS	Moveable Stand	should be stable with the weight of the panel well finished and powder coated four Caster Wheel.		
	Certificates	Please Specify		
	Warranty	3 Years Comprehensive onsite Warranty		

03. Technical Specifications for 65" Display screens without OPS – 06 Nos

Specifications	Requirements	Bidders Compliance	
		Yes/No	If "No" indicate your offer
Make	Please Specify		
Model	Please Specify		
Country of Origin	Please Specify		
Country of Manufacture	Please Specify		
Type	New Edge		
Aspect Ratio	16:9 or better		
Pixel Pitch (mm)	0.372x0.372		
Brightness (typical)	320 cd/m ² or more		
Contrast Ratio (typical)	4000:1 or better		
Refresh Rate	60Hz or better		
Orientation	Landscape/Portrait		
Diagonal Size	65 " or more		
Native Resolution	3840*2160 or above		
Backlight Type	LED Edge-lit		
Brightness	Please Specify		
Viewing Angle (typical)	Please Specify		
Active Screen Area	1428.48 (H)x 803.52 (V) or better		
Displayable Colors	16.7 M or above		
Dynamic C/R	Please Specify		
H-Scanning Frequency	30-81 kHz		
V-Scanning Frequency	48-75 Hz		
Maximum Pixel Frequency	594 MHz or better		
Speaker Type	Built in Speaker (10W+10W) or more		
Response time (G-to-G)	8 ms or less		
Haze	Please Specify		
Color gamut	Please Specify		
Operation hours	24/7		

VGA, HDMI, USB	Should be available		
Power consumption [W/h]	Please Specify		
Power Supply	Ac 100-240V-50/60Hz		
Prior visits	Supplier should visit the place before the submit the quotation.		
Installation	Should be done with necessary cables		
User training	Required		
Manufacturer Authorization letter	Required		
Warranty	3 Years Comprehensive onsite Warranty		

04. Technical Specifications for Educational intelligent Auto-Tracking Camera – 01 NOS

Specifications	Requirements	Bidders Compliance	
		Yes/No	If "No" indicate your offer
Make	Please Specify		
Model	Please Specify		
Country of Origin	Please Specify		
Country of Manufacture	Please Specify		
Tracking Camera and Lens Parameter			
Sensor	1/2.8-inch-high quality HD CMOS sensor or better		
Effective Pixels	2.07 megapixel; 16:9 or higher		
Video Signals	1080P60/50/30/25/59.94/29.97, 1080I60/50/59.94, 720P60/50/30/25 / 59.94 / 29.97		
Optical Zoom	Please Specify		
View Angle	Please Specify		
Iris	Please Specify		
Digital Zoom	X10		
Minimum Illumination	0.5Lux (F1.8, AGC ON)		
Digital Noise Reduction	2D & 3D digital noise reduction		
White Balance	Manual/Auto/One Push/ 3000K/ 4000K/5000K/6500K		
Focus	Auto/Manual		
Aperture	Auto/Manual		
Electronic Shutter	Auto/Manual		
BLC	ON/OFF		
WDR	OFF/Dynamic Range adjustment		
Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, Gamma curve		

SNR	>55dB		
Panoramic Camera			
Sensor	1/3-inch-high quality HD CMOS sensor or better		
Effective Pixels	2.1 megapixel or more		
Lens	Manual Focus		
View Angle(D/H/V)	122°/98°/73° Please Specify		
Input/Output Interface and Protocols			
Video Interface	3G-SDI		
Network Interface	100M network interface (10/100BASE- TX) – should be available WIFI – Please specify, Support VISCA protocol control through IP port		
Network Protocol	RTSP, RTMP, ONVIF, GB/T28181 Please Specify		
Compress Image Code Stream	Dual stream output		
Video Compress Format	H.264, H.265 Please Specify		
Control Signal Interface	RS-232		
Control Protocol	VISCA/Pelco-D/Pelco-P Baud Rate:115200/9600/4800/2400bps		
Audio Input Interface	Dual audio channel 3.5mm linear input		
Audio Compress Format	AAC, MP3, PCM Please Specify		
Power Interface	HEC3800 power jacket (DC12V)		
Pan Tilt Parameter			
Pan Rotation	-170°~+170°		
Tilt Rotation	-30°~+90°		
Pan Control Speed	0.1 ~100°/s		
Tilt Control Speed	0.1~45°/s		
Preset Speed	Pan: 100°/s,Tilt:45°/s		

Preset Number	up to 255 presets (remoter 10 presets)		
Other Parameters			
Supply Adapter	Input AC110V-AC220V to DC12V/2.5A		
Input Voltage	Output DC12V±10% POE power supply optional		
Input Current	1.5A(Max.)		
Consumption	18W(Max.)		
Remote Maintenance (LAN)	Remote Update, Remote Reboot, Remote Reset		
Accessory	12V/2.5A power supply adapter, RS232 control cable, Remote Controller, User Manual, Brackets		
Store Temperature	-10°C~+60°C		
Store Humidity	20%~95%		
Working Temperature	-10°C~+50°C		
Working Humidity	20%~80%		
Dimension(WxHxW)	254mmX144mmX174mm (Approx.)		
Weight (appr.)	Please Specify		
Application	Indoor		
User training	Required		
Warranty	3 Years Comprehensive onsite Warranty		

05. Technical Specifications for UHF Eight Channels Wireless Microphone with Receiver- 01 NOS

Specifications	Requirements	Bidders Compliance	
		Yes/No	If "No" indicate your offer
Make	Please specify		
Model	Please specify		
Country of Origin	Please specify		
Country of Manufacture	Please specify		
Receiver Unit			
System	Eight or more channels receiver		
Frequency band	UHF 610-670MHz; UHF 730-790 MHz		
Receiver type	PLL UHF Synthesized		
Frequency response	50Hz-18KHz (-3dB)		
T.H.D	<0.5% 1KHZ		
Modulation mode	FM (F3E)		
S/N ratio	>105dB		
Dynamic range	>105dB		
Audio output	Balanced:600mV; Unbalanced: 2V		
Power supply	DC12V 110-230Vca adaptor		
Power consumption	Please Specify		
Dimensions (WxDxH)	483x81x44mm 1U Rack standard 19" Please specify		
Transmitter unit			
System	Wireless Microphone Unit		
Transmission mode	PLL Multi-channels, up 200 frequency preset for each frequency band		
Frequency band	UHF 10-670MHz; UHF 730-790Hz		

Frequency response	50Hz-18KHz (-3dB)		
Modulation mode	FM (F3E)		
RF Output power	High level: 10 dBm; Lower level: 5 dBm		
Max deviation	+45KHz		
Power supply	Battery: 2xAA 1.5V		
Microphone type	Cardioid electret condenser		
Gooseneck length	400mm		
Dimensions (WxDxH)	Please specify		
Warranty	3 Years Comprehensive onsite Warranty		

**06. Technical Specifications for Media Station (Multi-format Video Mixer/Switcher) –
01 NOS**

Specifications	Requirements	Bidders Compliance	
		Yes/No	If "No" indicate your offer
Make	Please Specify		
Model	Please Specify		
Country of Origin	Please Specify		
Country of Manufacture	Please Specify		
Screen	5.5" LCD Touch Screen or higher		
Input	4xHDMI-A or more		
Output	1xHDMI-A or more		
	USB 3.0 WEBCAM/OBS*1 or more		
Communication	LAN 1*RJ45 or more		
Audio	3.5MM*1 Input, should be connect to microphone		
	3.5MM*1 Output, should be connect to loudspeaker or headphone		
Power	1×DC Jack		
Input Resolutions	HDMI		
	SMPTE 720p@50/60 1080i@50/60 1080p@23/24/30/50/60		
	VESA 1024X768@60 1280 X 720@60 1280 X 768@60 1280X1024@60 1360X768		
	1366x768@60 1440x900 @60 1600x1200@60 1680x768@60 1920X1080@60 1920 X 1200@60		
Output	HDMI		

Resolutions (choose standard)	SMPTE 720p@50/60 1080p@24/25/30/50/60		
	VESA 1024X768@60 1280x720@60 1280 X 768@60 1280X1024@60 1360x768@60		
Supported Standards	HDMI 1.3		
	USB 3.0		
Input Voltage	DC 12V/2A		
Power	≤ 21W		
Working Temperature	0°C ~ 50°C		
Humidity	5%~85%		
Unit Size	please specify		
Unit Weight	please specify		
Warranty	3 Years Comprehensive onsite Warranty		
Features:			
Touch screen operation, easy to use			
Real-time 6-picture preview (4 inputs sources + PST preview + PGM output picture) or better			
USB 3.0 fast to live streaming			
Audio input allowing connect to microphone and audio out allowing connect to loudspeaker or headphone			
15 transition effects and 9 PIP modes, the live picture more vivid Please specify			
PTZ camera control, Chroma key, LOGO overlay Please specify			
Remote control via PC/smartphone APP Please specify			

Acquisition software : AMCap, ECap, Potplayer, etc Please specify		
Meeting software: Skype, ZOOM, Tencent ,Yealink Please specify		
OBS software Please specify		
Live platform: Facebook, YouTube, Tik Tok, DouyuTV etc. Please specify		

07. Technical Specification for Smart Podium– 03 NOS

Specifications	Requirements	Bidders Compliance	
		Yes/No	If “No” indicate your offer
Make	Please specify		
Model	Please specify		
Country of Origin	Please specify		
Country of Manufacture	Please specify		
Warranty	3 Years Comprehensive onsite Warranty		
Podium Body			
Combination of plastic, steel and other materials. ABS plastic is used for the front face of the table Please specify			
The top sliding cover is attached with wooden grain boards Please specify			
Expand IC card system with electronic lock, and open the lock by swiping the card Please specify			
Desktop tilting design, easy to place laptop or speech manuscript			
Electric lifting for wide screen LCD up to size 22”			
The table body adopts the size design of the dismounting standard cabinet			
Built in 8 ports PDU(industrial PDU special for Rack usage)			
Standard cover plate open-type laptop interface cable box on the top of the table body			
HDMI cable 3-meter x1; USB cable 2-meter x2			
Directly inserted lotus head gooseneck microphone anti-vibration plastic rubber ring base			
Movable casters are provided at the bottom			
Product size	Please Specify		

Built-In Speaker		
special full-frequency speaker *2		
speakers are built in the face of the speaker		
4.5-inch *2 or higher		
90-channel speakers or better		
8 ohms or better		
30W*2 or better		
Rfid Lock		
Electronic code lock + power adapter +IC card electronic lock card reader		
Gooseneckmic		
Gooseneck microphone with plastic shock mount		
Dual flexible metal rod microphone		
80CM custom lengthening		
Gooseneck microphone with switch indicator		
Copper double hose		
Aluminum rod body		
Tap plug		
Condenser microphone		
Frequency response: 100hz-15khz		
Cardioid direction		
Output impedance: 600 ohms		
Sensitivity -36DB		
Pickup distance: 20-50cm		
Power supply: DC12V / 1 a		
Amplifier & Wireless		
Channel 8 ohm stereo mode: 150W or more		
Output x4		
Voltage gain: 37db		
Damping coefficient: >, 500		
Dynamic range: > 90dbA		

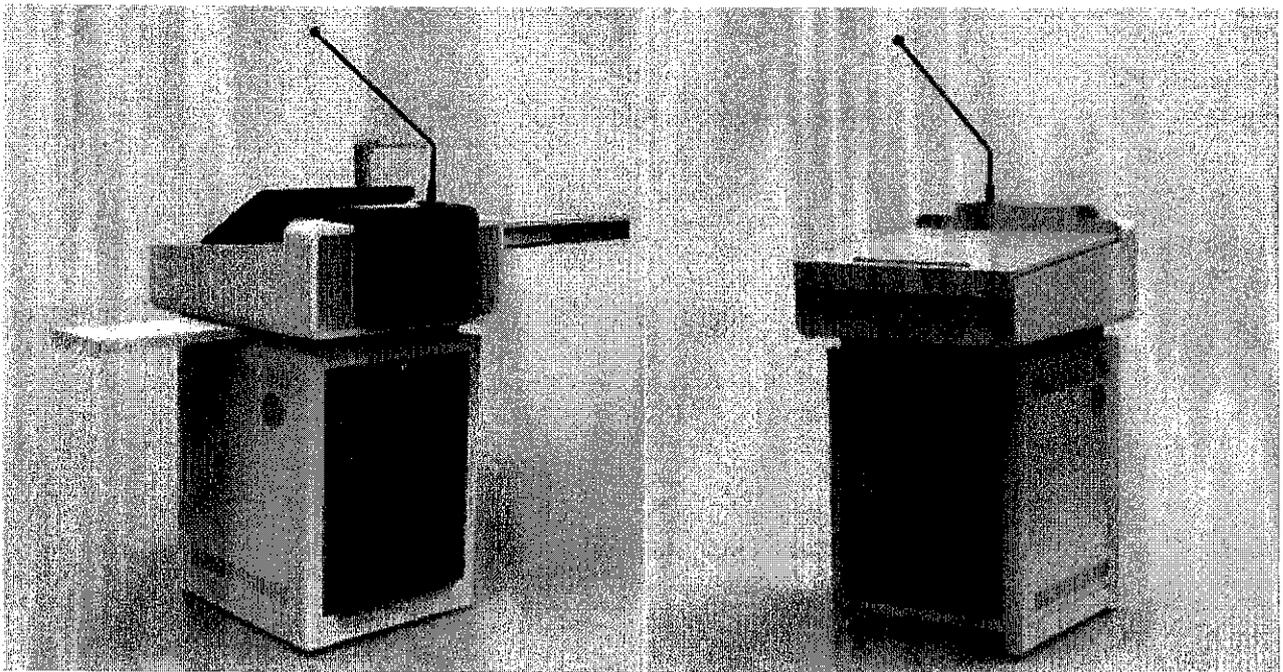
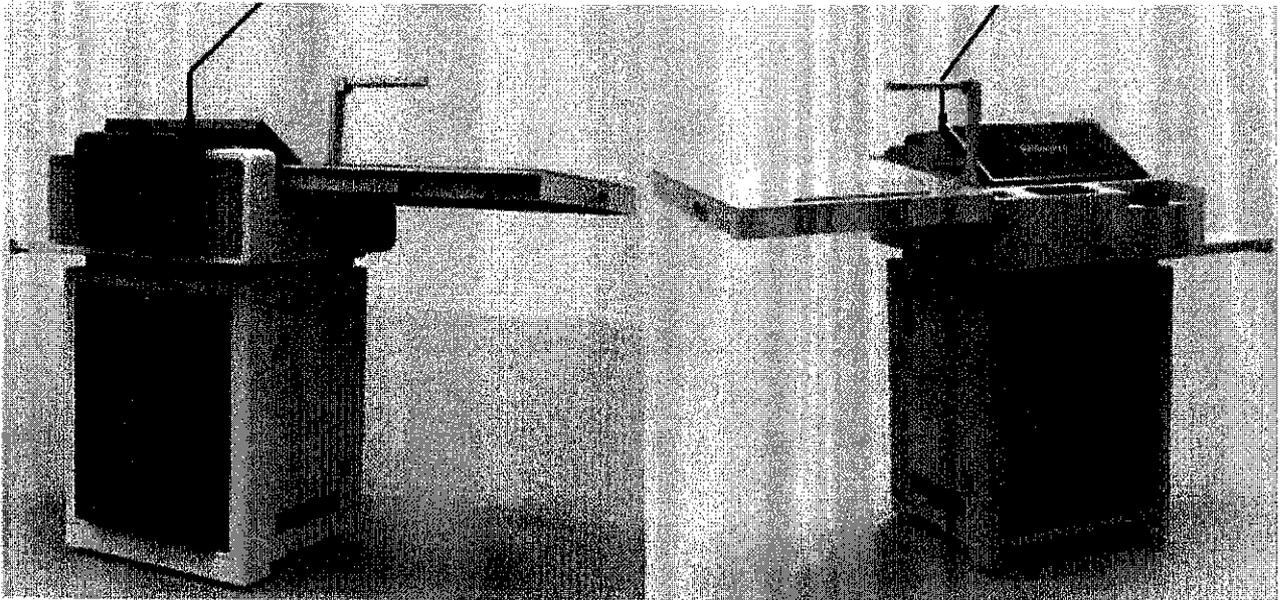
SNR: > 101dba			
Protection function: dc/short circuit/high temperature/overload/distortion pressure limit/high frequency noise/power soft start /VHF high frequency protection			
Output level circuit type: super H			
Grid requirements: 220v-15a			
Dual wireless hand metal handle voltage microphone			
Frequency: 730-790mhz in U segment; Dual channel reception			
Frequency band width: 30MHZ or better			
Power supply: DC-12v-16v			
Power: Please specify			
Main Controller			
Control panel	The control panel adopts touch mode and button design		
	The control panel should have system switch, computer switch, signal switch, main volume and microphone		
Controller host:	Built-in 2 x 2 HDMI signal switching matrix, supporting the function of desktop and laptop signal switching. Support HDMI 4K*2K resolution		
	Support 2 channels of audio input, 2 channels of MIC input and 1 channel audio output. Volume output can be adjusted through the control panel "volume up" and "volume down". The input volume of microphone can be adjusted independently through the control panel "microphone up" and "microphone down"		
	Control the projector switch. The projector writing code adopts unique dial code design and integrates the overhead brand projector switch control code		
	Support projector power delay protection		

function, automatic delay power cut, better protect projector life		
Built-in infrared learning function, no need to configure professional learning device, easier to use and more reliable to store		
One channel independent programmable rs-232 control interface and one channel infrared control interface		
One power supply control of built-in electric screen and one power outlet of 220V		
Support the connection of IC card reader system, and truly realize the function of card reader		
Safe voltage, with 220V to 12V power supply, safer operation		

Document Scanner

Product structure: built in and fixed for installation, folded twice upright, no need to put it down		
Image resolution: 3264x2448 8MP or better		
Image color: 24 bits or more		
Scanning speed: with one touch, scanning immediately		
Scanning media: physical objects, papers, documents, books, magazines, certificates, business CARDS, etc		
Scanning element: 1/2.5CMOS photosensitive chip		
Image control: adjust brightness, contrast, saturation, color selection and automatic exposure		
Interface: USB2.0 data cable interface power supply, without external power supply		
Working voltage: 4.75V-5.25V		
Light source: natural light and LED light supplement.		
Computer imaging software: Please specify		

Sample Pictorial View for Smart Podium:



THE UNIVERSITY OF TEXAS AT AUSTIN
LIBRARY
1000 EAST BRICKENRIDGE DRIVE
AUSTIN, TEXAS 78712
512.475.1234

08. Technical Specification for External Speakers Set – 04 NOS

Specifications	Requirements	Bidders Compliance	
		Yes/No	If "No" indicate your offer
Make	Please Specify		
Model	Please Specify		
Country of Origin	Please Specify		
Country of Manufacture	Please Specify		
Enclosure	2-way bass-reflex type		
Rated Input	30 W or better		
Rated Impedance	8 Ω or better		
100 V line	330 Ω (30 W), 500 Ω (20 W), 670 Ω (15 W), 1 k Ω (10 W), 2 k Ω (5 W)		
70 V line	170 Ω (30 W), 250 Ω (20 W), 330 Ω (15 W), 500 Ω (10 W), 1 k Ω (5 W)		
Sound Pressure Level	90 dB (1 W, 1 m)		
Frequency Response	80 Hz – 20 kHz		
Speaker Component	12 cm cone-type + dome-type or higher		
Speaker Cord	2-core cabtyre cord with diameter of 6 mm		
Operating Temperature	-10°C to +50 °C		
Water Protection	IPX4 (can be installed vertically or horizontally. *)		
Finish Enclosure	ABS resin, white (RAL9010 PURE WHITE), paint		
Net	Surface treated steel plate, white (RAL9010 PURE WHITE), powder coating		
Bracket	Surface treated steel plate, white equivalent to RAL9010 PURE WHITE, powder coating		
Dimension	Please Specify		
Warranty	3 Years Comprehensive onsite Warranty		
Installation	Should be done		