



INSTITUTIONAL DEVELOPMENT PLAN

National Agricultural Higher Education Project Sri Karan Narendra Agriculture University

Jobner-303329, Distt. Jaipur (Rajasthan)

Phone: 01425-254022; Email ID: pi.nahep@sknau.ac.in

No: SKNAU/NAHEP/Proc./2021-22/ 14/2 Date: 01 02 202

Activity No.: IN-SKNAU-JOBNER-179211-GO-RFQ/ Components for Video Conferencing Rooms

To

Prospective Suppliers	
t rospective suppliers	

SUBJECT: INVITATION FOR QUOTATIONS FOR THE SUPPLY OF COMPONENTS FOR VIDEO CONFERENCING ROOMS

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods: -

S. No.	Brief Description of the Goods	Specifications	Quantity (No.)	Delivery Period	Place of Delivery	Installation Requirement if any
1.	Components for Video Conferencing Rooms	Annexure -1	01	30 Days	SKNCOA, Jobner, Jaipur	Yes

2. Government of India has received a financing from the International Bank for Reconstruction and Development (IBRD) in various currencies towards the cost of the National Agricultural Higher Education Project (NAHEP) and intends to apply part of the proceeds of this Loan to eligible payments under the contract for which this invitation for quotations is issued.

3. Bid Price

- a) The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.
- b) All duties, taxes and other levies payable on the raw materials and components shall be included in the total price.
- c) GST in connection with the sale shall be shown separately.
- d) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- e) The Prices shall be quoted in Indian Rupees only.
- 4. Each bidder shall submit only one quotation.

5. It is a single envelope system in which both technical and financial bid will be submit in the same.

6. Validity of quotation

Quotation shall remain valid for a period not less than 45 days after the deadline date specified for submission.

7. Evaluation of quotations

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e., which

- a) are properly signed; and
- b) Conform to the terms and conditions, and specifications.

The Quotations would be evaluated for all the item together at the office of IDP-NAHEP, SKNAU, Johner.

GST in connection with sale of goods shall not be taken into account in evaluation.

8. Award of contract

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

- 8.1. Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 8.2. The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
- 8.3. The successful bidder shall furnish the Performance Security of Rs 5% of the contract value without tax to the purchaser in the form of Demand Draft (DD) after the receipt of acceptance letter.
- 8.4. If the supplier fails to deliver the desired goods within period specified in the purchase order, liquidated damages will be applicable @ 0.07% per week and maximum deduction is 10% of the contract price.
- 9. Payment will be released only on receipt of complete satisfactory supply, installation and demo of ordered goods.
- 10. Three years warranty/guarantee shall be applicable to the supplied goods.
- 11. Bidder must have valid MAF/Authorization from OEM or it must be OEM.
- 12. Bidder should have a valid ISO 9001 & 14001 Certification.
- 13. Bidder must have past experience of supplying and installing such components for Video conferencing rooms setup and related documents must attached (Order Copies).
- 14. All quoted products must be available on OEM/manufacturer website and bidder must give technical catalogue/brochures of all quoted products.
- 15. The firm should provide proof of GST registration no. /PAN no.
- 16. Onsite installation should be provided by the supplier in consultation with the office.
- 17. The installation of the products will be done at the buildings located in the campus of SKNAU, Johner.

- 18. The rates/price should be FOR, SKNAU, Jobner-Jaipur, Rajasthan. Offer should clearly mention the locations for which rates are quoted.
- 19. You are requested to provide your offer latest by 11:00 AM on 11.02.2022 in the name of Principal Investigator, IDP-NAHEP, SKN Agriculture University, Johner 303 329.
- 20. Envelop should be super scribed as "Quotation for Supply of Components for Video Conferencing Rooms".

21. We look forward to receiving your quotations and thank you for your interest in this Project.

PI, IDP-NAHEP

Sri Karan Narendra Agriculture University,

Johner, Jaipur -303329

FORMAT FOR QUOTATION (ON COMPANY LETTER HEAD)

Sri K Jobne Sub.:	To PI, IDP-NAHEP, Sri Karan Narendra Agriculture University, Jobner, Jaipur - 303 329 Sub.: Quotation for supply of Components for Video Conferencing Rooms						
Ref.:	Your invitation no.	No: SKNAU/NAH	EP/Proc./2	2021-22/	Dated	•••••	
	Sir, n response to above re ideo Conferencing Ro				er for supply o	f Components	
1	. Name of the Bidder						
2	2. Address of the Bidder:						
Sr.	Goods Description	Specifications	Quantity	Quoted Unit	Total A	Amount	
No.		-	(No.)	Rate in Rs.	In Figures	In Words	
	-						

Grand Total Cost. 13	Grand	Total	Cost:	Rs.		
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TOTAL

Tax @

We also confirm that the normal commercial warranty/guarantee of months shall apply to the offered goods.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Annexure 1

Name of Work: Supply and installation of different components for video conferencing rooms

Sr. No.	Product	Qty
	A. For video conference room -1	
1	86-Inch Interactive Flat panel display with 600 nits Mini PC- i5, 8 GB RAM, 1 TB HDD, 512 GB SSD	1
2	Electronic Lectern with i5 mini PC, 8 GB RAM, 512 GB SSD, motorized, Multimedia controller, Gooseneck Mic, One Hand Held and one lapel Wireless microphone, Audio amplifiers and 4 wall mount speaker of 100 watt each	1
3	86-Inch Professional Display (Non Touch)	1
4	65 inch Professional Display with Tilted Floor Mount stand for 65-inch Display	1
5	Pre-set Full HD PTZ USB 3.0 based Camera -with Optical Zoom- 10x, Digital Zoom - 12x, with Hand held Remote Control, for Software based VC with ceiling mount kit	1
6	Pre-set Full HD PTZ USB 3.0 based Camera -with Optical Zoom- 5x, Digital Zoom - 10x, with Hand held Remote Control, for Software based VC	1
7	Wired Boundary layer Microphone	3
8	3-KVA Online UPS with 30 minutes backup	1
9	1x4 HDMI Distribution Amplifier Switch	1
10	HDMI Tx-Rx Set with up to 30 Meter Transmission range	2
11	10-Port Audio Mixer	1
12	HDMI Cable 1 Meter	5
13	USB 3.0 Extender booster cable (15 Meter)	1
14	Cat-6 Ethernet Cable (Meter)	60
15	12U - Wall mount Rack	1
16	Cat-6 Ethernet Cable (Meter)	30
	B. For video conference room - 2	
Sr. No.	Product	Qty
1	86-Inch Interactive Flat panel display	1
2	Electronic Lectern with i5 mini PC, 8 GB RAM, 256 GB SSD, motorized, Multimedia controller, Gooseneck Mic, One Hand Held and one lapel Wireless microphone, Audio amplifiers and 4 wall mount speaker of 100 watt each	1
3	Floor Mount stand for 86-inch Display	1
4	Pre-set Full HD PTZ USB 3.0 based Camera -with Optical Zoom- 10x, Digital Zoom - 12x, with Hand held Remote Control, for Software based VC with ceiling mount kit	
5	Pre-set Full HD PTZ USB 3.0 based Camera -with Optical Zoom- 5x, Digital Zoom - 10x, with Hand held Remote Control, for Software based VC	1
6	Wired Boundary layer Microphone	1
7	3-KVA Online UPS with 30 minutes backup	1
8	HDMI Cable 1 Meter	3
9	USB 3.0 Extender booster cable (15 Meter)	1
10	Cat-6 Ethernet Cable (Meter)	30

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DETAILED SPECIFICATIONS OF INDIVIDUAL COMPONENTS

1. 86-Inch Interactive Flat panel display with Mini PC

Parameter	Specifications
Technology	DLED Backlight (IPS)
Display size (Diagonal)	86 inches or higher
Aspect Ratio	16:9 or better
Resolution	3840 X 2160 or higher
Contrast Ratio	5000:1 or higher
Brightness	600 cd/m ² or higher
Display colour	8 bit-16 million colours or better
Input Ports (Minimum)	HDMI x 3, RGB/VGA x 1, Audio x 1, PC slot x 1, RS232x1
Output Ports (Minimum)	Audio(Earphone out) x 1, SPDIF x1
USB Ports (Minimum)	USB 2.0 Type A x 3, USB 3.0 Type A x 4, USB 2.0 Type B for Touch x 2
Smart USB Port	All USB ports should support sharing Mode with Android, Internal PC or other External PC / Device
Camera Plate	Camera Plate on top for screw-in web cam installation
Communication port	RJ45 x 1 Gigabit LAN Port
Built In Speakers	2.1 Stereo Sound with in-built 20 Watt x 2 speakers and 15 Watt x 1 Sub-Woofer or better
Viewing Angle	Horizontal 178 degrees, Vertical 178 degrees or better
Touch Technology	IR Recognition or better
Touch Points	10 Points or Higher
Writing Points	10 Points with automatically detect pen
Pen Recognition	Dual Pen recognition with 2mm tipped pens at real-time lag free response rate.
Split Screen	4 Way Split Screen content sharing software
Touch on/Off	Should have touch on/off functionality
Touch Response Time	15 Ms or better
OS Support/Embedded Player	Windows 10/ Windows 8/ Windows 7/Linux/Mac/Android Embedded Player CPU Inbuilt.
Stylus/Pen Holder	Frame/Structure of IFPD should have inbuilt magnetic mechanism
Networking	DHCP (Auto identification) and Static IP supported
Hardness, Anti Scratch, Anti-Glare	Minimum 9H hardness, scratch resistant, anti-glare, anti-crack resistant
Software Features	Marker, Paint Brush, Highlighter, Laser Pen, Artificial intelligent Pen, Shape Pen, Magic Line Pen, Different sizes available with Region eraser, Shapes, Text, Generic consist of (shapes,3DShapes, Arrows & Tables), Integrated image search from internet, Search Light, Screen Curtain, inbuilt browser, screenshot, magnifier, calculator, soft keyboard, Clock, Stop Watch, Geometry Tools, Screen recording, integrated webcam, Desktop Annotation, White board with different backgrounds and colors, Cloud storage, Cloud Download, Page management system. Multiple numbers of images available with internet like nature, sport, Daily necessity, animals. ort documents/contents. Annotation of on video, PPT, PDF. Annotate on PC/ Laptop with the help of smart phone, New, Open, Save, Save as, Import & Export (PNG, JPG, PDF, PPTX, IWB), Print, YouTube Drag & Drop, Magnifier, YouTube integration, Canvas moving,

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	Inbuilt Animation libraries, Follow me AI, Complete
,	
	Ecosystem om mobile, web & PC, Google for Education
	partner, Casting in & Casting out from Remote locations via
	browser, Android & iOS Apps
Save Option	Should have option to save directly to Google Drive and One
	Drive Line Line Line Line Line Line Line Lin
Screen Mirroring,	Data from Mini PC should be shared wirelessly on multiple
Wireless content sharing	Phones/Tablets without any other hardware requirement.
Quiz	Should have in built tool to allow participants to submit
	answers from their Smart Phones
	(Answering/Voting/Messaging)
QR Code Scan	Should have file download feature in smart phone just by
	scanning the QR code
Video Conferencing	Should support USB based PTZ cameras allowing Software
Interface	based Video Conferencing
Integrated Wireless and	It should be dual band (2.4Ghz and 5Ghz). It should deliver
Bluetooth Module	fast wireless internet connection for interactive displays. It
	should supports dual frequency of 2.4GHz and 5.0GHz
	bandwidth, along with the newest 802.11AC standard to
	provide up to 433Mbps transmission. It should also fast
	Bluetooth 4.0 connection
Certifications	BIS,CE & RoHS, FCC
Accessories	AC Power cord, User Manual, Remote control, USB interface
	cable, Two Stylus, Wall mount bracket
In-Built Android Hardwa	ire
Android Resolution	3840 X 2160 or higher
CPU	Quad Core 1.2 GHz or Higher
Memory	3 GB or Higher Storage
Storage	32 GB eMMC or Higher
Android Version	8 or higher
Mini PC	
Form Factor	Mini PC should be of 2 litres Volume or less
CPU	Intel Core i5 (10th Gen or better processor)
RAM	8 GB RAM
Hard Disk	512 GB SSD and 1 TB or better
In-Built Wi-Fi / Wireless	Should have a inbuilt Wi-Fi / Wireless LAN Card
LAN Card	
Ports (Minimum)	HDMI x 1, DP(Display Port) x 2, USB ports x 6, LAN Port x 1
Standard Keyboard	Wireless Keyboard
Optical Mouse	Wireless Mouse
Operating System	Windows 10 Pro upgradable to Windows 11 Pro
Operating bystein	ii mao iio 10 110 appraadote to ii mao iio 11 110

2. Electronic Lectern

Type/Mounting	Free Standing
Construction	The Podium shall be wheel mounted capable of moving in all
	directions with a facility of lock them while the Electronic
	podium is in use. The enclosure shall be made of Polymer
	Powder Coated Steel Body with wooden top panels, designed
	to work in suitable environmental conditions. The wooden top
	shall have lock and key and should have a sliding cover for
<u> </u>	opening/closing easily. The Podium should have housing and



X1 1	and not in use.
Display	Built-in highly sensitive Interactive Panel with adjustable Motorized tilt & a mechanism to make the Panel stable so that it does not shake while writing with following minimum.
	features:
Screen Type	LED
Size	53.0 cm (21 inches) or higher
Resolution	1920 x 1080 or higher
Aspect ratio	16:9/16:10
Computer interface	One USB, One VGA/DVI/HDMI Port
Interactive Resolution	4000 LPI (lines per inch)
Response Time	5 Ms
Viewing Angles	170(H); 160(V)
Touch	Finger and Stylus
System Details	
Processor	Intel Core i5 (10th Gen or better processor)
Small Form Factor	Computer should be of 2 liters Volume or less
In-Built Wi-Fi /Wireless LAN Card	Should have a inbuilt Wi-Fi / Wireless LAN Card
RAM	8 GB
Hard Disk	512 GB SSD or better
Ports (Min.)	HDMI x 1, DP(Display Port) x 2, USB ports x 6, LAN Port x
Keyboard & Mouse	Wireless
Operating System	Windows 10 Pro
Antivirus	Norton Anti-Virus/McAfee or equivalent with 1 year license
Controller	THE
Ports on front Panel of Controller (Minimum)	VGA, HDMI, USB3.0 x 2, Audio IN or more
Buttons on front Panel of Controller (Minimum)	Push buttons to control Volume Up & Down, Volume Mu and to switch sources of HDMI Visual Presenter, VGA Visu Presenter, HDMI Laptop, PC HDMI,VGA Laptop, VGA F and Controller Power On/Off, Display Power On and Pow Off or more
Ports on Rear Panel of Controller (Minimum)	USB 3.0 X 2,VGA Input x 2, VGA Output x 2, RCA Audio X 1,RCA Audio Output x 2,HDMI Inputx2,HDMI Outputx2
Built in HDMI Repeater	Yes (HDMI Output port should support 15mtr HDMI cable)
Controller Resolution	4K (3840 x 2160) Native
Output	
Power	5 V DC (Suitable Adaptor should be supplied with controlle
Built in devices	
Gooseneck Microphone	Gooseneck Microphone with XLR output. It should Phantom powered so that there is no requirement of batter thereby eliminating consumable cost. The gooseneck leng should be at least 21.5 cm with ON/OFF switch and with LI light indicating ON/OFF status.
Built in Amplifier Power	500 Watts minimum
	Four speakers of Minimum 100 W each shall be a part
Speakers	standard supply. Wireless Hand Held & Lapel microphone with receiver.

Sliding Trays	Provision for keeping laptop and Keyboard & Mouse			
Power Supply	180 -240V, 50Hz, AC Supply			
Security	Integrated authentication System having RFID, Password protection & Physical Key for secure access to system.			
Fans	Suitable cooling fans to be provided in the lower body.			
Logo	Should be provided with Acrylic logo.			

3. 86-Inch Professional Display (Non Touch)

Technology	DLED Backlight (IPS)
Display size (Diagonal)	86 inches or higher
Aspect Ratio	16:9 or better
Resolution	3840 X 2160 or higher
Contrast Ratio	5000:1 or higher
Brightness	600 cd/m ² or higher
Display colour	8 bit-16 million colours or better
Input Ports (Minimum)	HDMI x 3, RGB/VGA x 1, Audio x 1, PC slot x 1, RS232x1
Output Ports (Minimum)	Audio(Earphone out) x 1, SPDIF x1
USB Ports (Minimum)	USB 2.0 Type A x 3, USB 3.0 Type A x 4
Smart USB Port	All USB ports should support sharing Mode with Android, Internal PC or other External PC / Device
Camera Plate	Camera Plate on top for screw-in web cam installation
Communication port	RJ45 x 1 Gigabit LAN Port
Built In Speakers	2.1 Stereo Sound with in-built 20 Watt x 2 speakers and 15 Watt x 1 Sub-Woofer or better
Viewing Angle	Horizontal 178 degrees, Vertical 178 degrees or better
Split Screen	4 Way Split Screen content sharing software
OS Support/Embedded Player	Windows 10/ Windows 8/ Windows 7/Linux/Mac/Android Embedded Player CPU Inbuilt.
Networking	DHCP (Auto identification) and Static IP supported
Hardness, Anti Scratch, Anti-Glare	Minimum 9 H hardness, scratch resistant, anti-glare, anti-crack resistant
Screen Mirroring, Wireless content sharing	Data from Mini PC should be shared wirelessly on multiple Phones/Tablets without any other hardware requirement.
Video Conferencing Interface	Should support USB based PTZ cameras allowing Software based Video Conferencing
Certifications	BIS,FCC, CE & RoHS
In-Built Android Hardwa	are
Android Resolution	3840 X 2160 or higher
CPU	Quad Core 1.2 GHz or Higher
Memory	3 GB or Higher Storage
Storage	32 GB eMMC or Higher
Android Version	8 or higher
Accessories	AC Power cord, User Manual, Remote control, USB interface cable, Wall mount bracket



4. 65 inch Professional Display with Tilted Floor Mount stand for 65-inch Display

Technology	DLED Backlight (IPS)
Display size (Diagonal)	65 inches or higher
Aspect Ratio	16:9 or better
Resolution	3840 X 2160 or higher
Contrast Ratio	5000:1 or higher
Brightness	600 cd/m ² or higher
Display colour	8 bit-16 million colours or better
Input Ports (Minimum)	HDMI x 3, RGB/VGA x 1, Audio x 1, PC slot x 1, RS232x1
Output Ports (Minimum)	Audio(Earphone out) x 1, SPDIF x1
USB Ports (Minimum)	USB 2.0 Type A x 3, USB 3.0 Type A x 4
Smart USB Port	All USB ports should support sharing Mode with Android, Internal PC or other External PC / Device
Camera Plate	Camera Plate on top for screw-in web cam installation
Communication port	RJ45 x 1 Gigabit LAN Port
Built In Speakers	2.1 Stereo Sound with in-built 20 Watt x 2 speakers and 15 Watt x 1 Sub-Woofer or better
Viewing Angle	Horizontal 178 degrees, Vertical 178 degrees or better
Split Screen	4 Way Split Screen content sharing software
OS Support/Embedded Player	Windows 10/ Windows 8/ Windows 7/Linux/Mac/Android Embedded Player CPU Inbuilt.
Networking	DHCP (Auto identification) and Static IP supported
Hardness, Anti Scratch, Anti-Glare	Minimum 9 H hardness, scratch resistant, anti glare, anti- crack resistant
Screen Mirroring, Wireless content sharing	Data from Mini PC should be shared wirelessly on multiple Phones/Tablets without any other hardware requirement.
Video Conferencing Interface	Should support USB based PTZ cameras allowing Software based Video Conferencing
Certifications	BIS, FCC, CE & RoHS
In-Built Android Hardwa	are
Android Resolution	3840 X 2160 or higher
CPU	Quad Core 1.2 GHz or Higher
Memory	3 GB or Higher Storage
Storage	32 GB or Higher
Android Version	8 or higher
Accessories	AC Power cord, User Manual, Remote control, USB interface cable, Wall mount bracket

5. Pre-set Full HD PTZ USB 3.0 based Camera -with Optical Zoom- 10x, Digital Zoom - 12x, with Hand held Remote Control, for Software based VC with ceiling mount kit

Camera		
Sensor	1/2.8", CMOS, Effective Pixel: 2.07M	
Scanning Mode	Progressive	
Lens	f3.5mm ~ 42.3mm, F1.8 ~ F2.8	
Optical Zoom	10x or higher	
Digital Zoom	12x or higher	
Minimal Illumination	0.5 Lux @ (F1.8, AGC ON)	

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Musical

Shutter	$1/30s \sim 1/10000s$		
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR(2500K ~ 8000K)		
Backlight Compensation	Support		
Digital Noise Reduction	2D&3D Digital Noise Reduction		
Video S/N	≥55dB		
Horizontal Angle of View	72.5 degrees ~ 6.9 degrees or better		
Vertical Angle of View	44.8 degrees ~ 3.9 degrees or better		
Horizontal Rotation Range	±170 degree		
Vertical Rotation Range	Minus 30 degrees ~ Plus 90 degree		
Pan Speed Range	2.7 degrees ~ 37.5 degrees per second or better		
Tilt Speed Range	2.7 degrees ~ 31 degrees per second or better		
H & V Flip	Support		
Image Freeze	Support		
Number of Preset	255		
Preset Accuracy	0.1°		
Video System	1080P, 720P, 540P, 480P, 360P, 240P		
USB Featured	10001, 7201, 3101, 1001, 3001, 2101		
Operate System	Windows 7, Windows 8, Windows 10, Mac OS X, Linux,		
Operate System	Android		
Colour System /	YUV 4:2:2 / H.264 / MJPEG		
Compression			
Video Format USB 3.0	1080P@60fps		
Audio on USB	Support		
Operational Requiremen			
Audio Encoding	Device should Support AAC audio encoding, better sound quality and smaller bandwidth.		
Low Light	Device Should support High SNR of CMOS sensor, even under low illumination conditions, picture can still keep clean and clear.		
Remote Control	All the parameters of the camera can be remote controlled by the high-speed communications		
Low power Operation	Device Should support Power through USB to functunate all		
Innut/Outnut Intarfoca	the parameters		
Input/Output Interface USB Interface	1xUSB3.0: Type B female jack		
Audio Interface	1-ch: 3.5mm Audio Interface Line In		
Network Interface	1xRJ45: 10M/100M Ethernet Interface		
	TAICJ43. TOWN TOOM Editerriet litterrace		
Generic Specification	CE Paus ECC		
Certifications	CE, RoHS, FCC		

6. Pre-set Full HD PTZ USB 3.0 based Camera -with Optical Zoom- 5x, Digital Zoom - 10x, with Hand held Remote Control, for Software based VC

Camera		
Sensor	1/2.8", CMOS, Effective Pixel: 2.07M	
Scanning Mode	Progressive	
Lens	f3.5mm ~ 42.3mm, F1.8 ~ F2.8	
Optical Zoom	5x or higher	



Minimal Illumination 0.5 Lux @ (F1.8, AGC ON) Shutter 1/30s ~ 1/10000s White Balance Auto, Indoor, Outdoor, One Push, Manual, VAR(2500K ~ 8000K) Backlight Compensation Support Digital Noise Reduction ≥55dB Horizontal Angle of View 2.55dB Horizontal Rolation Range of View 44.8 degrees ~ 6.9 degrees or better Vertical Angle of View of Vertical Rotation Range 4170 degree Pan Speed Range 2.7 degrees ~ 19us 90 degree Pan Speed Range 2.7 degrees ~ 31 degrees per second or better H & V Flip Support Image Freeze Support Number of Preset 255 Preset Accuracy 0.1° Video System 1080P, 720P, 540P, 480P, 360P, 240P USB Featured Windows 7, Windows 8, Windows 10, Mac OS X, Linux, Android Colour System / Compression Windows 7, Windows 8, Windows 10, Mac OS X, Linux, Android Video Format USB 3.0 1080P@60fps Audio on USB Support Operate System of Compression Device Should Support AAC audio encoding, better sound quality and smaller bandwidth. Low Light Device Should Support High SNR of CMOS sensor, even under low illuminat	Digital Zoom	10x or higher	
White Balance Auto, Indoor, Outdoor, One Push, Manual, VAR(2500K ~ 8000K) Backlight Compensation Digital Noise Reduction Video S/N ≥55dB Horizontal Angle of View Vertical Angle of View Vertical Angle of View Horizontal Rotation Range Vertical Rotation Range V		0.5 Lux @ (F1.8, AGC ON)	
Backlight Compensation Support Digital Noise Reduction Digital Noise Reduction 2D&3D Digital Noise Reduction Video S/N ≥55dB Horizontal Angle of View Vertical Angle of View 44.8 degrees ~ 6.9 degrees or better Vertical Angle of View 44.8 degrees ~ 3.9 degrees or better 170 degree Range Vertical Rotation Range Vertical Rotation Range Minus 30 degrees ~ Plus 90 degree Pan Speed Range 2.7 degrees ~ 37.5 degrees per second or better Tilt Speed Range 2.7 degrees ~ 31 degrees per second or better H & V Flip Support Number of Preset 255 Preset Accuracy Video System 1080P, 720P, 540P, 480P, 360P, 240P USB Featured Operate System Video System Video Format USB 3.0 Video Format USB 3.0 Video Format USB 3.0 Video Format USB 3.0 Operational Requirement Audio Encoding Device should Support High SNR of CMOS sensor, even under low illumination conditions, picture can still keep clean and clear. Remote Control All the parameters of the camera can be remote controlled by the high-speed communications Low power Operation Device Should support Power through USB to functunate all the parameters Input/Output Interface USB Interface 1xUSB3.0: Type B female jack Audio Interface 1xCSB.0: Audio Interface 1xCSB.0: Type B female jack	Shutter	1/30s ~ 1/10000s	
Digital Noise Reduction 2D&3D Digital Noise Reduction Video S/N ≥55dB Horizontal Angle of View 72.5 degrees ~ 6.9 degrees or better Vertical Angle of View 44.8 degrees ~ 3.9 degrees or better Horizontal Rotation ±170 degree Range 2.7 degrees ~ 31.9 degrees per second or better Pertical Rotation Range Minus 30 degrees Plus 90 degree Pan Speed Range 2.7 degrees ~ 31.5 degrees per second or better Tilt Speed Range 2.7 degrees ~ 31.5 degrees per second or better We V Flip Support Image Freeze Support Number of Preset 255 Preset Accuracy 0.1° Video System 1080P, 720P, 540P, 480P, 360P, 240P USB Featured Operate System Operate System Windows 7, Windows 8, Windows 10, Mac OS X, Linux, Android Colour System / Compression YUV 4:2:2 / H.264 / MJPEG Operational USB 3.0 1080P@60fps Audio on USB Support Operational Requirement Audio Encoding Device should Support AAC audio encoding, better sound quality and smaller bandwidth. <th< td=""><td>White Balance</td><td></td></th<>	White Balance		
Video S/N ≥55dB Horizontal Angle of View 72.5 degrees ~ 6.9 degrees or better Vertical Angle of View 44.8 degrees ~ 3.9 degrees or better Horizontal Rotation ±170 degree Range Range Vertical Rotation Range Minus 30 degrees ~ Plus 90 degree Pan Speed Range 2.7 degrees ~ 37.5 degrees per second or better Tilt Speed Range 2.7 degrees ~ 31 degrees per second or better H & V Flip Support Image Freeze Support Number of Preset 255 Preset Accuracy 0.1° Video System 1080P, 720P, 540P, 480P, 360P, 240P USB Featured Operate System Operate System Windows 7, Windows 8, Windows 10, Mac OS X, Linux, Android Colour System / Compression YUV 4:2:2 / H.264 / MJPEG Video Format USB 3.0 1080P@60fps Audio on USB Support Operational Requirement Audio Encoding Low Light Device should Support AAC audio encoding, better sound quality and smaller bandwidth. Low Light Device Should support High SNR of CMOS sensor, even under low illumination conditions, picture can still keep clean and clear. Remot	Backlight Compensation		
Horizontal Angle of View 72.5 degrees ~ 6.9 degrees or better	Digital Noise Reduction	2D&3D Digital Noise Reduction	
Vertical Angle of View 44.8 degrees ~ 3.9 degrees or better Horizontal Rotation #170 degree Pan Speed Range 2.7 degrees ~ Plus 90 degree Pan Speed Range 2.7 degrees ~ 31 degrees per second or better Tit Speed Range 2.7 degrees ~ 31 degrees per second or better H & V Flip Support Image Freeze Support Number of Preset 255 Preset Accuracy 0.1° USB Featured Operate System Windows 7, Windows 8, Windows 10, Mac OS X, Linux, Android Colour System / YUV 4:2:2 / H.264 / MJPEG Compression Video Format USB 3.0 1080P@60fps Audio on USB Support Operational Requirement Audio Encoding Device should Support AAC audio encoding, better sound quality and smaller bandwidth. Low Light Device Should support High SNR of CMOS sensor, even under low illumination conditions, picture can still keep clean and clear. Remote Control All the parameters of the camera can be remote controlled by the high-speed communications Device Should support Power through USB to functunate all the parameters Input/Output Interface USB Interface 1.vuSB3.0: Type B female jack Audio Interface 1-ch: 3.5mm Audio Interface Line In Network Interface 1xRJ45: 10M/100M Ethernet Interface Generic Specification	Video S/N	≥55dB	
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Generic Specification	Audio Interface		
	Network Interface	1xRJ45: 10M/100M Ethernet Interface	
	Generic Specification		
		CE, RoHS, FCC	

7. Wired Boundary layer Microphone

Microphone	Boundary Layer Microphone	
Polar Pattern	Omnidirectional	
Output	Individual Channel: XLR, Mix out: 1/4" Jack	*



8. 3-KVA Online UPS with 30 minutes backup

9. 1x4 HDMI Distribution Amplifier Switch

Inputs	1 HDMI connectors
Outputs	4 HDMI connectors
Bandwidth	2.5Gbps or better
Compliance with HDMI	Supports HDMI and HDCP
Standard	
Output Resolutions	Up to 1080p
INDICATOR LEDs	OUTPUT STATUS 1 to 4

10. HDMI Tx-Rx Set with up to 30 Meter Transmission range

Transmitter (Tx)	
Inputs	1 HDMI connectors
Outputs	1 HDBT on RJ45 Connection
Receiver (Rx)	
Inputs	1 HDBT on RJ45 Connection
Outputs	1 HDMI connectors
Transmission up to	minimum unto 30 meter
Compliance with HDMI	Supports HDMI and HDCP
Standard	
Output Resolutions	Up to 1080p

11. 10-Port Audio Mixer

No of Channel	10-Channel Mixing Console	
Input Port	4 Mic / 10 Line Inputs (4 mono + 3 stereo), 1 Stereo Bus, 1	
•	AUX (incl. FX)	
Output	XLR balanced outputs	
Sound effects	High-grade effects: SPX with 24 programs	
USB audio Function	24-bit / 192kHz 2in / 2out USB Audio functions	
Phantom Power	+48V phantom power	

12. 12U- Wall mount Rack

Type of Racks	Rack Enclosures
Size of Server Rack	12U
Enclosure	
Depth of the Rack (mm)	Up to 500
Mount Type	Wall mount
Front glass Door	Should Available
Type of glass used in front	Transparent Toughened Glass or better
door	
Material used for rear door	CRCA Steel or better
Secure Locks	Should Available
Cable channel in rear side	Should Available
for cable management	
Load Bearing	55 kilogram or better
Capacity (Kgs)	

B

Minary

PDU Power Strips	Should Available	

Additional Parameters:

1. All Quoted active Products (Product 1 to 7 and 11) must be from single OEM/Make for better integration and smooth operations.

2. Bidders also have to integrate existing audio-conferencing setup at both location and single place all controls must require for ease of use. Both audio in and out working with existing and new items required from single PC.

3. Bidder must give solution diagram 3D/2D of quoting solution with all connections and devices placements.

4. If any item/product or accessory required during the installation for completion of project like cabling, networking, power cable, finishing etc. it will be borne by bidder and no additional payment will give.

