Goa University invites quotations (through e-tender mode only) for Supply and installation of Audio-Video Production Equipment from eligible suppliers and manufacturers under a two-bid system comprising a Technical Bid and a Financial Bid.

Interested suppliers/parties are requested to visit <a href="https://eprocure.goa.gov.in">https://eprocure.goa.gov.in</a> to participate in the tender/bidding process. The detailed Tender Notice is provided below.



ताळगांव पठार, गोंय - ४०३ २०६ फोन : + ९१ - ८६६९६०९०४८



**Goa University** 

Taleigao Plateau,Goa - 403 206
Tel: +91-8669609048
Email: registrar@unigoa.ac.in

Website: www.unigoa.ac.in

Date: 14/11/2025

(Accredited by NAAC with Grade A+)

GU/DDLI/AV/25-26/14

# TENDER DOCUMENT

(E-Tendering mode only)

# **Supply and installation of Audio-Video Production Equipment**

Goa University invites quotations (e- tender mode only) for the items detailed below. Interested bidders may apply through e-tender process only.

Sr. No.	Name of the item	Earnest Money deposit	Tender Processing fee Non- Refundable
		Mode of payment: E-Payment only	
1	4K Up Down Cross Converter		
2	Audio Interfaces		
3	a) 4K Digital Recorder with Audio Inputs		
3	b) Audio Delay Box		
	a) 15.6 inch 4K monitor with LUTS and HDR		
4	and its accessories	₹27,800.00	₹3,000.00
4	b) 12.5 inch 4K monitor with LUTS and HDR		
	and its accessories		
	Camera-Mount Digital Wireless Handheld		
5	Microphone System and its accessories, Plug-on		
	Transmitter/recorder and Speakerphone		
	Detailed description of the items and quantities	may be referred a	at Annexures

#### **Tender Schedule**

- 1. The last date of online submission of tender is <u>04/12/2025</u> up to <u>12:00</u> hrs.
- 2. The date and time of online opening of Technical Bid is <u>05/12/2025</u> after <u>10:00</u> hrs.
- 3. Price Bid will be opened after completion of administrative and technical procedure.

Mode of Payment towards e-Tender Processing Fee (TPF) & Earnest Money Deposit (EMD) to be paid online through e-Payment mode via:

1) National Electronic Fund Transfer (NEFT) / Real-Time Gross Settlement (RTGS). Tenderer requires downloading the pre-printed Challan on e-tender website and making its payment through any of their Bank.

Note: Any Payments made through NEFT/RTGS will take 24 hours for its reconciliation. Hence the payments through NEFT/RTGS should be made at least TWO BANK WORKING DAYS in advance before any due date.

2) Net Banking: Payment can be made through the Internet Banking of Any Bank.

### **Important Notes to the Bidder:**

- 1. The duly constituted committee appointed by the competent authority of Goa University reserves the right to select certain items (in single or multiple units) or reject any or all mentioned in the schedule.
- 2. The Bid shall be treated as a 2 Bid System. The Technical Bid will be considered only for applicants whose Earnest Money Deposit (EMD) is found in order. Price Bid shall be opened for only those bidders who have qualified in Technical Evaluation.
- 3. For technical related queries, interested bidders may contact <u>Directorate of Digital</u> <u>Learning and Initiatives (DDLI)</u> on phone no. <u>8669609039</u>. For other queries may contact Purchase Section on phone nos. 8669609072/24.
- 4. The Vendor should clearly state the make/brand, model and the year of manufacturing of the items proposed to be supplied in response to the tender.
- 5. Vendor shall enclose the list of accessories to be provided with the equipment in the Technical bid.
- 6. Bidders seeking exemption from payment of EMD under MSME scheme must ensure that their company/organisation is registered with the Directorate of Industries, Trade and Commerce (DITC), Goa, in accordance with the provisions of Notification No. 3/40/2003-IND(Pt.II)(Vol.III)/132 issued by the Department of Industries, and published in the Official Gazette of Goa, Series I No. 13, dated 30/06/2022, under the Preferential Purchase Incentives for Micro, Small and Medium (MSME) Enterprises Scheme, 2022.
- 7. For assistance on e-Tender please contact Support Helpdesk- 91-7972854213, 91-7822039673, 91-7972871944 Email: e-tender.goa@gov.in

Sd/-

(Prof. S. N. Dhuri) REGISTRAR

#### TERMS AND CONDITIONS OF THE TENDER:

#### 1) Price /Taxes:

Prices stated in this tender are firm and shall remain firm until required deliveries have been completed unless otherwise expressly agreed to, in writing by both parties.

### 2) Delivery:

The equipment should be delivered to Goa University within 30 days of placing of order & installation be completed within next 15 days. If any material is not delivered by the date specified therein, the University reserves the right, without liability, to cancel the order for undelivered material not yet supplied and to purchase the same from another vendor and to charge the defaulting Vendor for any loss incurred in this transaction. Any provisions thereof for delivery by installment shall not be construed as obligatory unless agreed upon by both the parties.

# 3) Reproduction of Documentation:

The University shall have the right at no additional charge to use or incorporate all or portions of material found in the Vendor's literature and/or reproduce the Vendor's applicable literature such as operating and maintenance manuals, technical publications, prints, drawings, training manuals and other similar supporting documentation and sales literature.

### 4) Shipping, Packaging and Labelling:

All Material purchased hereunder must be packed and packaged to ensure its safe delivery in accordance with good commercial practices. It shall be the sole responsibility of the vender to provide/replace the item/goods, if it is lost or broken during the shipping or transportation due to whatever may be the reason. Vendor is responsible to ensure, by contacting the University, that the shipping has been properly done i.e., all the items/goods have properly reached the University.

#### 5) A) Terms of Payment and Conditions:

- i) For Indigenous/Indian equipment/stores on DDP Destination basis: -100% of the total payment shall be released on submission of proof of delivery and on certification of satisfactory installation of the equipment at the University premises.
- ii) **For Foreign Equipment on CIP GOA**: If preferred mode is Letter of Credit (LC), the payment will be through Bank on receipt of documents. In case of credit payment, 100% will be made by Telegraphic Transfer (TT) after receipt and successful installation/demonstration of the equipment.

#### **B) Price Fall Clause: -**

If at any time prior to delivery of the equipments/stores, the bidder/supplier reduces the sale price of such equipments/stores as covered under this tender enquiry, to any organization (including Central/State/Deemed university) at price lower than the price quoted under this contract, he shall forthwith reduce the price payable under this tender for the equipments/stores being supplied after the date of coming into force of such reduction, the price of equipments/stores shall stand correspondingly reduced.

#### 6) **SPECIFICATIONS:**

- i) Specifications are the basic essence of the item/contract. It must be ensured that the offers strictly adhere to our specifications. A tender has to be supported with the printed technical leaflet/literature of the quoted model of the item.
- ii) In case of authorized dealers/distributor certificate in prescribed format from Original Equipment Manufacturers (OEM), on the same should be enclosed for participation in the said tender.
- iii) It is only when the information about the company/Goods in quotation in technical bid is found satisfactory; the commercial part will be opened.

#### 7) Price Bid:

- a) The Cost of the equipment should be inclusive of all taxes and statutory levies. Labour/installation charges, packing, insurance, freight etc. should be mentioned separately (inclusive of all taxes leviable on them). For imported/indigenous goods price to be quoted FOR Goa University. Unit price of each product and accessories should be quoted separately.
- b) In case of receipt of the material in short supply or damaged condition the supplier will have to arrange the supplies/ replacement of goods free of cost pending the settlement of the insurance case wherever applicable on FOR at the University or CIF basis for satisfactory installation of the system.
- c) No commitment to accept lowest or any bid: University shall be under no obligation to accept the lowest or any other offer received in response to this tender notice and shall be entitled to reject any or all offers including those received late or incomplete offers, without assigning any reason what so ever. University reserves the right to make any changes in the terms and conditions of the bid. University will not be obliged to meet and have discussion with any vendor and or to listen to any representations.
- d) Short listing of Vendors: University will create a shortlist of technically qualifying vendors and the financial bid of only these vendors will be opened. University reserves the right to decide whether the items being quoted are as per the requirement of the University and are of standard/leading brands in the market. University reserves the right to decide which offer best suits the requirement of the University.

- e) Installation and Commissioning: Free of cost at University. The OEM must ensure timely installation of the complete unit with necessary support to the indenters.
- f) Conditional Offer will not be accepted and technical/financial bids in such cases may be rejected.
- g) Past Performance of the Vendors will be judged at the time of Technical Evaluation.
- h) All items proposed to be supplied should be of recent manufacture, preferably manufactured in the last three months, and not exceeding six months.
- 8) **Insurance:** In case of item requiring import kindly note the following:
  - a) Please quote CIP value for clearance up to Dabolim Airport, Goa, India.
  - b) Item must be insured from warehouse of manufacturer to warehouse of Goa University, Taleigao, Plateau, Goa, India.
  - c) Vendors are advised to declare the commission if any, so that the same shall be paid to the party in Indian currency after successful installation/demonstration of the equipment.

### 9) Rejection of Bids:

- a) If bidders give wrong information in their bid, University reserves the right to reject such bids at any stage and forfeit the Earnest Money Deposit / Performance Bank Guarantee and cancel the order, if awarded.
- b) Incomplete bids are liable to be rejected.
- c) If the technical offer contains any price information, the offer is liable to be rejected.
  - All annexures to the tender document should be duly stamped and signed by the bidder and submitted along with the tender bid.
- d) The bidder shall provide a self-attested certificate stating that, they have not been disqualified/debarred from submission of tender/quotation under Rule
   151 of GFR 2017 by any Government/Ministry/any organisation like University etc. who is funded by State or Central Government.

# 10) Warranty:

May refer the annexures for warranty clause. Statement of warranty of goods against any manufacturing defects and also give the warranty declaration that everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship, transportation hazards, and shall be of the highest quality

and material of the type ordered, shall be in full conformity with the specifications. During the warranty period, replacement of any part of equipment's or rectification of defects of works will be free of cost.

#### 11) Performance Security:

- (a) The successful bidder who has been awarded the contract shall submit a performance security of 5% of the Contract Value.
- (b) The performance security shall be deducted from the invoice payable.
- (c) The Performance security shall be returned to the bidder within 60 days after completion of contractual obligations and warranty period.
- 12) Consumables/spares: All hardware & software including drivers, device interface cards/network adaptor card must be pre-configured in the computer equipment provided. Licensed version of system software should be provided in CD (with up gradable version). Manual Hard copies of instruction/operation/service manuals should be supplied. List of important Consumables/ Spares and parts having sufficient shelf life for trouble free operation of four years should also be provided.

# 13) Training/installation:

- a) Installation testing: suppliers of the instrument must provide free installation, commissioning and testing of the equipment in the laboratory at the current temporary site and thereafter at permanent site.
- b) Comprehensive training of faculty & staff after installation should be provided, wherever deemed appropriate and an update in every six months (3-4 days) for the first two years and every year (1 week) for the next three years.
- **14) A.M.C.**: A separate annual maintenance contract may be executed after completion of the warranty period.
- **15)** Law of the Contract: The agreement entered with vendor shall be governed by and interpreted in accordance with the laws in existence and within the Jurisdiction of the court of Panaji, Goa.

### **16)** Site preparation:

The supplier shall inform the University about the site preparation, if any, needed for installation, along with the technical bid. Suppliers must provide complete details regarding space and all infrastructural requirements needed for the equipment, which University should arrange before the arrival of equipment to ensure its early installation and smooth operation thereafter. The supplier may offer his advice and render assistance to University in the preparation of the site and other pre-installation requirements.

- 17) The successful bidder has to communicate the acceptance of the purchase order within five days of the receipt of the order.
- **18)** The quantity of items in the tender form may increase or decrease as per requirement.
- 19) Vendors may quote all/Any Items.

# **Certified that:**

I/We have read all the enclosed Terms and Conditions carefully and ready to accept and according to that I/We are submitting herewith the tender.

Date: Seal & Signature of Vendor

# TECHNICAL BID FORM

# I. Addressed to:

a.	Name of the Bidding authority	Registrar, Goa University
b.	Address	Goa University,
		Taleigao Plateau, Goa
		- 403 206
c.	Telephone	8669609072/24

# II. Other related details:

1.	Name of Bidder/Party					
2.	Name & Designation of					
	Authorized Signatory					
3.	Year of Establishment					
4.	Type of Firm	Public Ltd.	Private Ltd.	Partnership	Proprietary	
	Put Tick (√) mark					
5.	Telephone Number (s)/ Mobile					
6.	Website URL					
7.	Fax No.					
8.	Email Address					
9.	GST number and					
	validity					
10.	Pan card number					
11.	Registered Office	Address				
	Address in Goa					
		Phone		Fax:		
		Contact				
		Person				
12.	Service Centre (s) in	Address				
	Goa					
		Phone		Fax:		
		Contact				
		Person				
(Enc	close list of Service Centre of	consisting n	ame of contact	person, telepho	one	
num	number, e-mail address, office address.)					

- **III.** Clientele list: List of the institutes/organizations, where the similar order has been executed during the last three years, and work done list should be enclosed.
- **IV.** The rates quoted are applicable up to 3 months from the date of opening of bid. The validity period can be extended with mutual agreement. Following documents are attached towards the proof of earnest money deposited in favour of ITG.

Sr. No.	Earnest Money deposited through	Number	Dated
1.	E-payment mode		

**V.** We agree to abide by all the conditions mentioned in this Bid Document issued by the Bidding Authority.

Signature:		
Name:		
Designation:_		
Place:		
Date:		

<u>Note:</u> If the Technical offer contains any price information, the offer is liable to be rejected.

# Annexure I

Sr. No.	Item	Specification	Qty.
1	Up, Down and Cross	1) Video Inputs - VGA x 1 , HDMI x 1 , HD/SD-SDI x 1 Reference Input x 1	2
	Converter	2) Audio Inputs – RCA x 2 (Unbalanced Audio L/R), 2 x SDI/HDMI Audio embedded	
		3) Video Outputs - SDI x 1, HDMI x 1	
		4) Audio Outputs – SDI embedded audio 8CH, 48kHZ, PCM audio HDMI embedded audio 8CH, 48kHZ, PCM audio	
		5) Supported Video Input Formats – 2160p(23.98/24/25/29.97/30/50/59.94/60Hz), 1080p(23.98/24/25/29.97/30/50/59.94/60Hz), 1080psf(23.98/24/25/29.97/30Hz), 1080i (50/59.94/60Hz), 720p (50/59.94/60Hz), 625i, 576p, 576i, 525i, 480p, 480i, 1920x1080(60Hz), 1280x720(60Hz), 1600x1200(60Hz), 1400x1050(60Hz), 1366x768(60Hz), 1280x1024(60Hz), 1024x768(60Hz), 800x600 (60Hz)	
		6) Supported Video Output Resolutions – 2160p(23.98/24/25/29.97/30/50/59.94/60Hz), 1080p(23.98/24/25/29.97/30/50/59.94/60Hz), 1080psf(23.98/24/25/29.97/30Hz), 1080i (50/59.94/60Hz), 720p (50/59.94/60Hz), 625i, 576p, 576i, 525i, 480p, 480i	
		7) Conversion - VGA/HDMI/SDI to 4K HDMI/3G-SDI Multi-format Up/Down/Cross	
		8) Indicator – Power LED x 1 Source LED x 3 (VGA, HDMI, SDI) Output Format LED x 3 (4K, 3G, HD, SD)	
		9) Built in Equalizer	
		10) Built in Relock	
		11) Update and configuration via USB	

<sup>\*</sup> Make, Model No. and year of manufacture of the item quoted shall be specified.

<sup>\*</sup> Company Warranty shall be specified.

# Annexure II

Sr. No.	Item	Specification	Qty.
1	Stereo Bluetooth	1) Audio circuit type – Active audio Line Driver	1
_	Direct Box	2) Frequency Response – 20Hz to 20KHz	_
		3) Dynamic range – 90dB or more	
		4) Total Harmonic Distortion – 0.05% or less	
		5) Output impedance -150 ohms or less	
		<ul> <li>Signal to Noise - 90dB or more</li> <li>Bluetooth compliance - Bluetooth 5.0 or better</li> </ul>	
		8) Bluetooth reception – 100 feet or more	
		9) Output connectors – 2 x balanced XLR male, 3.5mm Headphone out	
		10) Support for Ground Lift and Momo Sum	
		11) Level Control	
		12) USB-C connector for power	
		13) Included power supply	
2	Passive Line-Level	1) Audio circuit type – Passive, Transformer based	1
	Splitter &	2) Input connector - Combo XLR / 1/4"	
	Attenuator	3) Output Connectors - isolated XLR, direct XLR	
		4) Frequency Response – 20Hz to 20KHz +/-0.5dB	
		5) Dynamic range – 140dB or more 6) Total Harmonic Distortion – <0.001%	
		<ul><li>Total Harmonic Distortion - &lt;0.001%</li><li>Input Impedance - 700 ohms or more</li></ul>	
		8) Output impedance -120 ohms or less	
		9) Gain1.5dBu	
		10) Noise Floor120dBu or less	
		11) Support for Ground Lift	
		12) Level Control	
3	4-Channel CAT 5	1) Audio circuit type – Passive splitter	1
	Audio Snake	2) Frequency response – 7Hz to 20kHz	
		3) Dynamic Range – 140dB or more	
		4) Total Harmonic Distortion – 0.0005% or less @1kHz	
		5) Common Mode Rejection Ratio - > 103dB	
		6) Input Connectors – 4 x XLR female, each connected to min. 2 ft. cable	
		7) Output connector – RJ45	
		Audio circuit type – Passive splitter	1
		2) Frequency response – 7Hz to 20kHz	1
		3) Dynamic Range – 140dB or more	
		4) Total Harmonic Distortion – 0.0005% or less @1kHz	
		5) Common Mode Rejection Ratio - > 103dB	
		6) Input Connectors – RJ45	
		7) Output connector – 4 x XLR male, each connected to min. 2 ft. cable	
		1) Audio circuit type – Passive splitter	1
		2) Frequency response – 7Hz to 20kHz	
		<ul> <li>3) Dynamic Range - 140dB or more</li> <li>4) Total Harmonic Distortion - 0.0005% or less @1kHz</li> </ul>	
		4) Total Harmonic Distortion – 0.0005% or less @1kHz  5) Common Mode Rejection Ratio - > 103dB	1
		6) Input Connectors – RJ45	•
		7) Output connector – 4 x TRS male, each connected to min. 2 ft.	1
		cable	
4	2-Channel Dante	1) Audio circuit type – High current balanced active input device	1
_	Network	2) No. of channels – 2 or more	_
	Transmitter	3) Frequency Response – 20Hz to 20KHz	
		4) Dynamic range - > 100dB or more	
		5) Total Harmonic Distortion – 0.008% or less	
		6) Intermodulation Distortion – 0.0017% -10dBfs	-
		7) Input impedance -40 kOhm or more 8) Sample rate – 44.1kHz, 48kHz, 96kHz	-
		9) Input pad support	1
		10) Input Connectors - 2x XLR/TRS combo, 3.5mm TRS	1
		11) Output connectors – RJ45 Ethernet with Locking EtherCON	
		12) Adjustable Trim controls for Input levels	1
		13) Bit Depth – 24 bit	
		14) Support for Power Over Ethernet (PoE)	
		15) Power – 15VDC or PoE	
		16) Included power supply	

5	2-Channel Dante	1) Audio circuit type – High current balanced active Output device	1
3	Network Receiver	2) No. of channels – 2 or more	1
	THE THE THE SELVE	3) Frequency Response – 20Hz to 20KHz	
		4) Dynamic range - > 100dB or more	1
		5) Total Harmonic Distortion – 0.007% or less @ -6dBfs	1
		6) Gain – 8dBu max @ -6dBfs	1
		7) Output impedance – 150 Ohm or less	
		8) Sample rate – 44.1kHz, 48kHz, 96kHz	
		9) Input Connectors – RJ45 Ethernet	
		10) Output connectors – 2 x XLR male (Balanced), 3.5mm headphone	
		11) Headphone amplifier for personal monitoring	
		12) Bit Depth – 24 bit	
		13) Support for Power Over Ethernet (PoE)	
		14) Power – 15VDC or PoE	
		15) Included power supply	
6	Dante USB I/O	1) Audio Channels: 2 in, 2 out	2
	adapter	2) Connectors – RJ45 and USB Type-A	
		3) Power – PoE or USB	
		4) Bit depth – 24 bit	
		5) Sample Rate – 48kHz	
		6) Dante Device Latency - < 5ms	
		7) Network Transport Dante Audio over IP, AES67 RTP	
		8) Class compliant USB 2.0 device	
7	Dante Virtual	1) Supported sample rates - 44.1kHz, 48kHz, 96kHz, 192kHz	2
	Soundcard	2) Supported encoding PCM 16-bit, 24-bit, 32-bit	
		3) Channels – 64 x 64 or more @ 48kHz	4
		4) Dante Flows – 16 or more	
		5) Latency buffer – 4 ms, 6 ms, 10 ms	
		6) OS supported – Windows , Mac	-
		7) Standard Transferable License	

<sup>\*</sup> Make, Model No. and year of manufacture of the item quoted shall be specified.

<sup>\*</sup> Company Warranty shall be specified.

# Annexure III

Sr. No.	Item	Specification	Qty.
1	4K Digital Recorder with Audio Inputs	1) Video Inputs - HDMI 2.0 Type A x 1 or more  2) Audio Inputs - 3 pin XLR x 2, 1 x Stereo RCA  3) Video Outputs - HDMI 2.0 Type A x 2 or more	1
2	Audio Delay box	SDXC card (UHS-I)  8) Encode supported - H.264, H.265  9) Video Bitrate - 50Mbps or more  10) Built in Preview display  11) Support for powering the device using external portable USB power supply  12) Remote Control options - DVIP, RS-422/RS-232, GPI  1) Audio Inputs - 3 pin XLR and 1/4" combo Socket x 3, Stereo RCA Sockets - x 2	1
		2) Audio Output – XLR Connectors x 2 3.5mm earphone jack x 1 Stereo RCA Sockets – x 2  3) Audio delay – 0 to 3000 ms or more 4) Audio Sample Rate – 48 KHz or more 5) Support for Phantom Power of +48V 6) Built in LCD screen 7) Built in Audio Processors – Compressor,, Limiter, Gate, Expander, Equalizer, Filter, Delay  8) Power – DC 12V with included power supply	- - - - - -

<sup>\*</sup> Make, Model No. and year of manufacture of the item quoted shall be specified.

<sup>\*</sup> Company Warranty shall be specified.

# Annexure IV

No.	Qty.
1 = 1 = 7	
1 15.6 inch 4K 1) Screen Size – 15.6 inch or higher	1
monitor with 2) Aspect Ratio – 16:9	•
LUTS and HDR  3) Native Resolution – 3840 x 2160 or higher	
4) Viewing Angle – Horizontal 176°, Vertical 1	76 <sup>0</sup>
5) Brightness – 330 nits or higher	
6) Contrast Ratio – 1000:1 or better	
7) Backlight - LED	
8) Video Inputs - 3G-SDI x 1, HDMI x 4 (1 x HD HDMI 1.4 - 4K at 30Hz), DV	
9) Video Outputs – 3G-SDI x 1	
10) Audio Input – 2 x RCA	
11) Audio Outputs - Speaker, 3.5mm Jack	
12) Support for 3D LUTS and HDR	
13) Support for image Flip mode	
14) 6U Rack Mount support	
15) Support for 4 way split screen display	
16) Carry-on suitcase (Flight case)	
17) VESA Mounting Hole Pattern	
18) Image Control – Color Space, Color Temper	
Peaking, Histogram, Expos	sure, Audio Level meter,
Underscan, Centre marker, Screen Marker	
2 Accessories for 1) V-mount battery plate with 15mm dual Rod of	clamp and Rods (2 pairs) 2
above monitor 2) V-mount battery of 190W for the above mo	onitor 2
3) Dual charger for above V-mount battery	1
4) Tripod base plate for the V-mount battery p	olate 2
5) D-TAP cable	2
3 1) Screen Size – 12.5 inch or higher	
2) Aspect Ratio – 16:9	
3) Native Resolution – 3840 x 2160 or higher	
4) Viewing Angle – Horizontal 176°, Vertical 1	76 <sup>0</sup>
5) Brightness – 400 nits or higher	
6) Contrast Ratio – 1500:1 or better	
12.5 inch 4K 7) Video Inputs - 3G-SDI x 1, HDMI x 4 (2 x H x HDMI 1.4b - 4K at 30Hz), DVI x 1, VGA x	
monitor with  8) Audio Input – 2 x RCA	1
LUTS and HDR  9) Video Outputs – 3G-SDI x 1	
10) Audio Outputs - Speaker, 3.5mm Jack	
11) Support for 3D LUTS and HDR	
12) Support for 4 way split screen display	
13) Carry-on suitcase (Flight case)	
14) Image Control – Color Space, Color Temper	rature, False Color,
Peaking, Histogram, Expos	
Underscan, Centre marker, Screen Marker	·
4 Accessories for 1) DC power adapter for above monitor	1
<b>above monitor</b> 2) V-mount battery for the above monitor	2
<b>at Sr. No. 3</b> 3) Gan 100W fast charger with Type C ports for	

 $<sup>\</sup>ensuremath{^{*}}$  Make, Model No. and year of manufacture of the item quoted shall be specified.

<sup>\*</sup> Company Warranty shall be specified.

# Annexure V

Sr. No.	Item	Specification	Qty.
1	Camera-Mount Digital Wireless	System Specifications	2
	Handheld Microphone System	1) Audio Link Frequency Ranges – 470 MHz to 526 MHz/ 520 MHz to 576 MHz/ 552 MHz to 607 MHz / 606 MHz to 662 MHz/ 630 MHz to 662 MHz / 662 MHz to 693 MHz / 823 MHz to 831 MHz & 863 MHz to 864 MHz / 925 MHz to 937 MHz / 1785 MHz to 1799 MHz	
	-	2) Integrated Bluetooth for Synchronization and control	
		3) Bluetooth Low Energy Frequency range – 2402 MHz to 2480 MHz	-
		4) Audio THD < -60dB for 1kHz @ -3dBfs input level or better	-
		<ul><li>5) Dynamic Range - 134 dB or more</li><li>6) System Latency - 1.9 ms or less</li></ul>	
		7) Audio Freq. response – 20Hz to 20kHz (-3 dB) @3 dBfs	
		8) Android and iOS mobile App compatible	
		9) Up to 56 MHz RF Bandwidth	
		10) Magnetically stackable components for versatile	
		mounting Receiver Specifications	
		1) Receiver Type – Camera Mount	
		2) 2 Nos. Antenna	
		3) Audio Output – 1 x 3.5mm TRS female Output	
		1 x 3.5mm TRS female Headphone	
		Output	
		4) Audio Output power - < 2dBV max.	
		5) USB-C Connectivity	
		6) Transmitted power – max. 10mW EIRP	
		7) Power Supply – 2 x AA 1.5V batteries, Li ion Rechargeable	
		battery, USB-C	
		8) Backlit OLED Display	
		Transmitter Specifications	
		1) Transmitter type - Handheld	
		2) Transmit power – 10 mW ERP or better  3) Mute Switch	
		Mute Switch     Power Supply – 2 x AA 1.5V batteries, Li ion	
		Rechargeable	
		battery	
		5) Occupied Bandwidth – 200kHz or better	
		Microphone module Specifications	
		1) Transducer principle - dynamic	
		2) Pick-up pattern - cardioid	4
		3) Maximum SPL - 154 dB SPL  4) Sensitivity = 2.1 mV/Pa	-
		<ul><li>4) Sensitivity - 2.1 mV/Pa</li><li>5) Compatible with above microphone</li></ul>	1
2	Rechargeable Lithium ion Battery pack	Compatible with above receiver	4
3	Charger for above battery	USB charger with dual slots for above battery	1
4	Plug-on	Frequency band compatible with above receiver	1
	Transmitter/recorder	2) Up to 56 MHz RF Bandwidth	

		3) Transmitter Type – Plug-On	
		4) Built in recorder	
		5) Bluetooth	
		6) Latency – 1.9 ms or better	
		7) Input – 1 x XLR 3-pin female input	
		1 x 3.5 mm Locking TRS female input	
		8) Phantom power - +48V	
		9) microSD memory Card Support for recording	
		10) Power Supply – 2 x AA 1.5V batteries	
5	Speakerphone	1) No. of microphones – 4 or more beamforming	1
	-	microphones	_
		2) Microphone Type – Digital MEMS	
		3) Microphone Frequency range – 150Hz – 14kHz or better	
		4) Microphone Pick up range – 8 feet or more	
		5) Full Duplex audio support	
		6) Signal to Noise Ratio – 72 dB or better	
		7) Peak audio output – 85 dBspl @0.5m or better	
		8) Speaker bandwidth – 80Hz – 20kHz or better	
		9) Built in Echo Cancellation	
		10) Built in Reverberation reduction	
		11) Built in Noise reduction on calls	
		12) Built in Automatic Gain control	
		13) Super wideband – 14kHz or more	
		14) IP rating – IP64 or better	
		15) Connectivity – USB A, USB C, Bluetooth	
		16) Bluetooth version – 5.2 or later	
		17) Included with USB adapter for wireless connectivity to	
		Computer System	
		18) Certifications - Microsoft Teams, Microsoft Teams	
		Rooms, Microsoft Swift Pair, Cisco, Unify, Zoom Rooms,	
		Zoom, Google Meet,	
		19) Built in Rechargeable Lithium-ion battery	
		20) Talk time- 30 hours or more	
		21) USB Corded charging	

<sup>\*</sup> Make, Model No. and year of manufacture of the item quoted shall be specified.

<sup>\*</sup> Company Warranty shall be specified.