

Public Tender No: ITTNiF/TEND-05

Due Date: 27/02/2024-15.00 Hrs

LIMITED TENDER

Dear Sir/Madam,

On behalf of the IIT TIRUPATI NAVAVISHKAR I-HUB FOUNDATION, TIRUPATI, Indian Institute of Technology Tirupati, Yerpedu -Venkattagiri Road, Tirupati 517619, quotations are invited for the supply of the following items.

Details of required items

Category	Parameters	Specifications	QTY
PANEL	Screen Size (Inch)	98"	1
	Panel Technology	IPS	
	Back Light Type	Direct	
	Aspect Ratio	16:9	
	Native Resolution	3840x2160 (UHD)	
	Refresh Rate	60Hz	
	Brightness (Typ.)	490nit(w/o Glass, max), 390nit(w/o Glass, typ)	
	Contrast Ratio	1,200:1	
	Color gamut	NTSC 72%	
	Viewing Angle(H x V)	178 X 178	
	Color Depth	1.07B(10bit)	
	Response Time	8ms (G to G)	
	Surface Treatment(Haze)	Haze 28%	
	Life time	≥30,000 Hrs	
	Operation Hours (Hours/Day)	16/7	
Connectivity (Jack Interface)	HDMI IN	Yes(3), HDCP2.2/1.4	



	RGB IN	Yes (1, VGA)
	Audio IN	Yes(1)
	RS232C IN	Yes(1)
	RJ45(LAN) IN	Yes(1)
	USB IN	USB3.0 Type A(4) USB2.0 Type A(1) USB Type-C(1, USB-PD, DP-Alt.)
	HDMI Out	Yes(1)
	Audio Out	Yes(1), Optical Yes(1, SPDIF)
	Touch USB	Yes(2)
	RJ45(LAN) Out	Yes(1)
Mechanical	Bezel Color	Black
	Bezel Width	29.6/26.6/26.6/44.5mm
	Weight (Head)	103.6Kg
	Packed Weight	126.5Kg
	Monitor Dimensions (W x H x D)	2244.7 × 1323.2 × 89.5mm
	Carton Dimensions (W x H x D)	2406 × 280 × 1474mm
	Handle	Yes
	VESATM Standard Mount Interface	800 × 600
HW Feature	Internal Memory (eMMC)	32GB
	Wi-Fi (Built-in)	Yes (Slot type)
	Auto-Brightness sensor	Yes
	Power Indicator	Yes
	Local Key Operation	Yes
	Speaker (Built-in)	Yes (16W x 2)
SW Feature	OS ver.	Android 9
	Bootimg Logo Image	Yes
	Screen Share	Yes (Screenshare pro)

SW Feature



	Crestron Inside	Yes
	Smart Energy Saving	Yes (Energy Saving)
	Wake on LAN	Yes
	HDMI-CEC	Yes
Environment Conditions	Operation Temperature	0 °C to 40 °C
	Operation Humidity	10% to 90%
POWER	Power Supply	AC 100-240V~ 50/60Hz
	Power Type	Built-In Power
	Power Consumption (Typ.)	460W
	Power Consumption (Max.)	630W
	Power Consumption (British Thermal Unit)	1570 BTU/Hr(Typ.), 2150 BTU/Hr(Max.)
	Power Consumption (DPM)	≤0.5W
	Power Consumption (Power Off)	≤0.5W
	CERTIFICATION	Safety
EMC		FCC Class "A" / CE
ERP / Energy Star		Yes/ No
OPS Compatibility	OPS type compatible	Yes (Slot)
	OPS Power built in	Yes
Software Compatibility	Connected Care	Yes
Language	OSD	English, Simplified Chineses, Catalan, Czech, Denmark, Arabic(Egypt), Finnish, French, German, Greek, Italian, Japanese, Korean, Netherlands (Dutch), Norwegian, Polski, Portugues(Europe), Portugues(Brazil) Romanian, Russian,



		Spanish, Swedish, Türkçe, Ukrainian, Traditional Chinese, Hungarian, Latvian, Thai	
Accessory	Basic	Power Cord 3 M*1, USB Cable (Type A-Type B) 5 M*1, HDMI Cable 3 M*1, Writing Pen*2pcs, User Manual, QSG, Carton Box, Remote Controller(include battery 2ea), Wifi module	
	Conformal Coating (Power Board)	Yes(Partial)	
Product Dedicated Feature	Available object size for touch	Ø2 mm ↑	
	Reponse Time(PC Win10, Education Mode)	≤12ms	
	Writing Height	≤3ms	
	Accuracy (Typ.)	±1.5mm	
	Interface	USB3.0	
	Protection Glass Thickness	4T(Anti-Glare)	
	Protection Glass Transmission	87%	
	Operating System Support	Windows 7/8/10/XP/Linux/Mac/Android (Windows XP/Linux/Mac Support one point touch)	
	Multi touch point	Max 20 points	
	CPU	Quad core A73	
	GPU	Mail G52 Multicore 2	
	Storage	32GB	
	Memory(RAM)	4GB	
Wi-Fi	802.11a/b/g/n/ac		



	LAN	Gigabit LAN	
	Bluetooth	Bluetooth 4.0	

Specifications for Speakerphone for Large Size Rooms : 1 Nos

Specification	Specification Name
Type	Professional Speakerphone that allows to connect easily via USB and Bluetooth
	Digital Signal Processing (DSP) technology
	5-inch color LCD (720 x 1280 pixel), 9:16 aspect ratio
Microphone	Number of Microphones : 3 cardioid microphones
	Type of Microphones : Omnidirectional
	Pickup range (feet) : 20ft/6m pickup range
	Two additional expansion microphones required from day one
Speaker	Frequency Response : 100 Hz to 22 KHz
	Volume : 92 dB at 0.5 m peak volume
Connectivity	1 x USB 2.0 Type A for Software upgrades
	1 x USB 2.0 Micro-B device port
	Integrated Bluetooth 5.0
Functionality	Touch-sensitive controls



	End Call
	Volume up and down
	Mute / Unmute Microphone
	3 illuminated mute buttons
Power	PoE Class 4
Safety Certification	UL, CE, IEC, ROHS compliant
Warranty	The complete solution should be from the same OEM with 1 year warranty from day one.

PTZ Camera For VC:1 No

Camera Parameter			
Model	UV430 E0	UV430 E2	UV430 E3
Optical Zoom	12X	25X	31X
Focal Length	f=3.85 mm~ 43.06 mm ±5%	f=7.1 mm~ 171.95 mm ±5%	f=6.91 mm~ 214.64 mm ±5%



Viewing Angle	Horizontal: 7.59° (N) ~ 80.4° (W)	Horizontal: 2.5° (N) ~ 59.2° (W)	Horizontal: 1.98° (N) ~ 59° (W)
	Vertical: 4.6° (N) ~ 50.0°	Vertical: 1.4° (N) ~ 34.6° (W)	Vertical: 1.12° (N)) ~ 34.14° (W)

	(W)		
Iris Value	F1.8 ~ F3.56±5%	F1.61 ~ F5.19±5%	F1.35 ~ F4.6±5%
Image Sensor	1/2.5 inch SONY CMOS sensor	1/1.8 inch SONY CMOS sensor	
Effective Pixels	8.29M megapixel	16: 9	

Video Format	<p>HDMI:</p> <p>3840*2160P60/50/25/59.94/29.97;1080P60/50/ 30/25/59.94/29.97;1080I60/50/59.94; 720P60/50/59.94;</p> <p>SDI:</p> <p>1080P60/50/30/25/59.94/29.97;1080I60/50/59.94; 720P60/50/59.94</p> <p>USB2.0:</p> <p>MJPG: 3840*2160/1920*1080/1280*720 /1024*768 /1024*576/800*600/720*576/720*480/704*576/640*4 80 /640*360 /352*288/320*240P30;</p> <p>H264: 3840*2160/1920*1080/1280*720 /1024*768 /1024*576/800*600/720*576/720*480/704*576/640*4 80 /640*360 /352*288/320*240P30;</p> <p>H265: 1920*1080/1280*720 /1024*768 /1024*576/800*600/720*576/720*480/704*576/640*4 80 /640*360 /352*288/320*240P30;</p> <p>YUY2: 800*448 /720*480P25; 640*360 /432*240P30</p> <p>NV12: 800*448P25; 640*480 /640*360 /432*240P30</p>
	Minimum



Illumination	
DNR	3D DNR
White Balance	Auto / Manual/ One Push/ Specified Temperature
Focus	Auto/Manual/One Push Focus
Exposure Mode	Auto/Manual/Shutter priority/Aperture priority/brightness priority
Aperture	F1.8 ~ F11, CLOSE
Shutter Speed	1/25~1/10000
BLC	ON/OFF
WDR	OFF/ Dynamic level adjustment
Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma Curve
SNR	≥50dB

AI Function	
Real-time Tracking	The longest tracking distance can reach 6-7 meters, which can support the speaker to walk at a speed of 5-6 mph



Mode	
Zone Tracking Mode	<p>4 tracking zones are available, which can be set within -110°</p> <p>~</p> <p>+110° in horizontal and 30°~+30°(430E0) in vertical or 27°</p> <p>~</p> <p>+27°(430E2,430E3) in vertical .</p>

Interface Parameter	
Video Interfaces	HDMI, SDI, LAN(Support POE), USB2.0, A-IN, RS232-IN, RS232-OUT, RS422 (Compatible with RS 485) , Rotary DIP

	switch, DC12V Power Supply, Power Switch
Video Compression Format	LAN: H.264, H.265 USB 2.0: MJPG, H264, H.265, YUY2, NV12
Audio Input	Double track 3.5mm linear input;
Audio Output	HDMI, LAN, USB2.0
Audio Compression Format	AAC



LAN Jack	10M/100M/1000M adaptive Ethernet port, support POE power supply, support audio and video output
Network Protocols	RTSP/RTMP,ONVIF,GBT28181 Support network VISCA control protocol; Support remote upgrade, remote restart, remote reset
Control Jacks	RS232-IN,RS232-OUT, RS422 compatible with RS485
Serial Port Communication Protocols	VISCA/Pelco-D/Pelco-P; Support Baudrate: 115200/38400/9600/4800/2400
USB Communication Protocol	UVC (Video Communication Protocol) , UAC (Audio Communication Protocol)
Power Supply	HEC3800 Outlet (DC12V)
Power Adapter	AC110V~AC220V to DC12V/2.5A
Input Voltage	DC12V±10%
Input	<1A
Consumption	<12W
Pan Move	-110°~+110°



Tilt Move	-30° ~ +30° °
Pan Speed	0.1°/s ~ 100°/s
Tilt Speed	0.1°/s ~ 70°/s
Preset Speed	Pan: 78.8°/s, Tilt: 31.7°/s
Preset Quantity	Up to 255 preset (10 via remote control)
Cables & Connectors	Installation & Required cables for Complete Solution

The detailed specifications of the equipment are given below.

Please ensure that the specification is the basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. The quoted model should not become obsolete for a minimum period of 5 years (this is for the availability of spares). Therefore, the model quoted should invariably be highlighted in the leaflet/literature enclosed with the quotation. Non-compliance with the above shall be treated as incomplete/ambiguous, and the offer can be ignored without giving the bidder an opportunity for clarification/negotiation, etc. to the bidder

Delivery schedule: The total ITEMS should be supplied within 7 days from the date of receipt of the purchase order, and installation and commissioning should be completed within 7 days from the date of supply of the item.

Instructions to the Bidder

Submission of the tender: The bids shall be submitted through online mode using the link provided on our website: <https://iitnif.com>

While submitting the bids, the bidders must sign all the tender documents as a token of acceptance of tender documents as well as terms and conditions stipulated therein. Tender documents without the signature of bidders or their authorized signatories will be treated

as invalid bids.

2.1 Preparation of Bids: The bidders must ensure that bids are submitted in two part bid system (i.e.) Techno-commercial bid and Financial bid in separate envelopes.

2.2 Techno-commercial bid: The technical bid should consist of all technical details / brochures along with commercial terms and conditions super-scribed as TECHNICAL BID with Tender No. and date and time of closing and the bidder's name and address. No prices should be included in technical bid.

2.3 Financial (Price) bid: This should indicate item-wise prices for the items with firm and fixed figures and words super-scribed with the Tender No. and date of closing of the Tender with bidder's Name and address. The price bid should not contain any conditional clauses. No price escalation for any reasons whatsoever is allowed. All prices should be given in Indian Rupees only.

2.4 The technical and the financial bids duly signed by the bidders or their authorised signatories with name and seal should be put in separate covers and sealed. Both sealed covers should be put into a bigger cover duly super-scribed with Tender No. and due date/time with name of supply /work. Technical bids must either be spiral bound / stapled together. No loose sheets will be accepted. All pages must be numbered.

2.5 Submission of the tender: The complete sealed bids in all respects shall be sent to the following address well in advance either by post or by courier so as to reach this office before the due date and time specified in the Schedule. The bids received after closing date and time shall not be considered.

The Project Director

IIT TIRUPATI NAVAVISKAR I-HUB FOUNDATION

Indian Institute of Technology Tirupati,

Yerpedu – Venkatagiri Road,

YERPEDU POST, TIRUPATI DISTRICT

Tirupati-517 619, Andhra Pradesh

While submitting the bids, the bidders must sign all the tender documents as a token of



accepting of tender documents as well as terms and conditions stipulated therein. Tender documents without signature of bidders or their authorised signatories will be treated as invalid bids. No conditional offer or terms and conditions will be entertained by the institute, and such bids will be treated as invalid.

2.6 Opening of the tender: The technical bids will be opened by the tender committee duly constituted in the presence of bidders or their authorised representatives on 28/02/2023 at 11.30 hours. The bids will be evaluated by the Technical Evaluation Committee which will decide the suitability of the technical bids as per our requirement and terms and conditions. Once the technical evaluation is completed, the price Bids of only those bidders who are found technically acceptable will be opened in the presence of Authorized Representatives of such bidder(s), if any on a date and at a venue to be intimated by IITTNI to the short listed bidders.

2.7 The bidder shall note that any unsolicited post-tender reduction by them would disqualify them from participating from the bidding and forfeit the security bid. 2.8 Incomplete bids are liable for rejection

Important Commercial terms and conditions:

3.1 The due date for the submission of the tender is Due Date: 27/02/2023 – 15.00 Hrs.

3.2 Late offer: The offers received after the due date and time of closing will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal, Courier or any other delay.

3.3 Delivery Schedule: Please note that delivery is the essence of the contract. In case there is any deviation in the delivery schedule, liquidated damages clause will be levied for the delayed supply period. Therefore, it should be ensured that all the ordered items should be supplied within 20 DAYS from the date of receipt of Purchase Order on door delivery basis at our Institute as per Purchase order terms securely and sufficiently packed by following standard packing procedure to withstand transit damages. The installation and commissioning should be completed as specified in our important terms and conditions.

3.4 Liquidated damages: If the Contractor fails to deliver the material within the time



specified in the Contract or any extension thereof, the Institute shall recover from the Contractor as Liquidated Damages a sum of one-half of one per cent (0.5 per cent) of the Contract Price of the undelivered material for each calendar week of delay. The total liquidated damages shall not exceed ten per cent (10%) of the Contract price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered

3.5 Guarantee/Warranty: The Contractor shall guarantee that the material supplied shall comply fully with the specifications laid down, for material, workmanship and performance after acceptance of the material. The tenderer should clearly mention in the bid the period of guarantee/warranty offered by him. If any defects are discovered therein or any defects therein found to have developed under proper use arising from faulty stores design or workmanship, the Contractor shall remedy / replace such defective items at his own cost. The Bidder should clearly categorize the Basic/Standard features as well as optional features of the system in order to have a clear cost comparison. Essential spares if any for maintenance to be quoted separately. The bidder should ensure continued supply of spares throughout the useful life of the equipment.

3.6 Payment terms: No Advance payment will be made for Indigenous purchase. Our normal payment terms are 100% within 30 days after receipt of complete supply at our site and acceptance. However in case of high value Purchase Orders, as a special case, payment of 90% of Order value will be made based on pre-inspection of material at supplier's site and also on receipt of goods at our site and clearance by inspection team. Balance 10% of PO value after completion of installation, inspection and acceptance formalities. For making payment original tax invoice in triplicate, delivery challan's, material test certificate, preinspection of material at factory, guarantee/warranty certificates must be sent along with material

IIT Tirupati Navavishkar I-Hub Foundation reserves the full right to accept/reject any tender or all tenderers at any stage without assigning any reason.

Terms and conditions:



1. Display OEM Should have a local office in the state operating for at least the last five years.[valid document should submitted]
2. Display OEM Should have Direct Service centres In the state.[valid document should submitted]
3. Bidder should have a Local Office in the state operating for at least the last three years. [Valid document should submitted]
4. Display OEMs should have their own manufacturing units in India to cater to spares after the warranty period. (Valid documents should submitted)
5. The bidder can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection
6. Wherever Authorised Distributors/service providers are submitting the bid, Authorisation Form /Certificate with OEM/Original Service Provider details such as name, designation, address, e-mail ID and Phone No. required to be furnished along with the bid

Yours sincerely,

IIT Tirupati Navavishkar I-Hub Foundation.