



ENQUIRY

Subject: Enquiry for the Supply and Installation of PTZ Cameras

Please let us have your Quotation for the following:

Sr. No.	Description	Qty.	UOM
1	Supply and Installation of PTZ Cameras (Details as mentioned below) NOTE: For further details please contact, email: purchase@icts.res.in	1	JOB

Approximate cost : Rs. 11.55 Lakhs
Due date for submission : June 12, 2019 till 15:00 hrs.
Date of opening tender : June 12, 2019 at 15:30 hrs.

Important Instruction: The bids shall be enclosed in an envelope and sealed duly marked “Tender for Supply and Installation of PTZ Cameras at ICTS Campus,” Ref No. **ICTS/TIFR/RFQ/IT/02/2019-20** and addressed and to be mailed to “Administrative Officer” at the address given below. The bids are liable to be rejected if the sealed envelope is not addressed to “Administrative Officer” with Tender Ref No. and Item Description. Offers delivered in person shall be deposited in the Tender Box kept in the Office. If the bids are sent through courier or mail, it should reach by submission Date and Time and ICTS will not be responsible for any delay.

Important Instruction for the bidders:-

- All queries related to tender should be emailed to purchase@icts.res.in
- Sealed tenders are invited under two bid system from reputed OEM (Original Equipment Manufacturer) / Registered and Licensed Vendors for Job Contract at International Centre for Theoretical Sciences, Tata Institute of Fundamental Research, Survey No. 151, Shivakote, Hesaraghatta Hobli, Bengaluru North - 560 089, India.
- The Technical and Price Bids shall be submitted simultaneously in two cover (sealed) system.

Please read carefully - instruction for the bidders and Scope of Work.

The prospective Vendors should note that high quality of service is the essence of this contract.

- A) Acceptance of Technical specifications, **Annexure- A** and terms and conditions. Tender document to be enclosed with Date, Signature and Seal in every Page.
- B) Complete Technical details should be provided for the Instrument offered (Specifications, Technical Parameters, Advantages, etc.,)
- C) MAF (Manufacturer's Authorization Form) Certificate
- D) Details of Warranty Services.
- E) Copies of the Purchase Orders for having supplied similar Instruments in India. **Annexure – B –** Schedule of Experience of last **5** years.
- F) Schedule of deviation from specifications / conditions – **Annexure C.**
- G) Any other information the bidder would like to provide with Date, Signature and Seal.
- H) **The tenders should be submitted in two sealed covers.**
 - a) The **First sealed cover - COVER I** should be superscribed “**Technical Bid**” and should contain Annexures A, B and C duly accepted, signed by authorised signatory with seal
 - b) **The cover shall also contain the following documents:**
 - 1. Company profile including previous experience. Please attach copies of Work Orders, Completion Certificates, etc.
 - 2. Complete tender document including **unpriced financial bid with proposed item make and model** duly sealed and signed.
 - 3. MAF (Manufacturer's Authorization Form) Certificate
 - 4. Solvency Certificate issued by your banker.
 - 5. Copy of valid PAN & GST number issued by the Income-Tax Authority, Registration Certificate of the firm /agency/Company and proof of 5 years’ experience.
 - 6. The copy of audited financial reports/IT returns of the bidder for the financial years 2017-18, 2016-17 and 2015-16 indicating the annual sales turnover required for eligibility criteria.
 - 7. Duly filled technical bid with proper seal and signature of the authorized person (with name, designation & contact no.)
 - 8. An authority letter issued by the competent authority authorizing the signatory to sign on behalf of the bidder.
 - 9. Supplier must describe in detail the technical support they will be able to provide in Bangalore. Only those companies will be considered who have engineers based in Bangalore, who have been trained on the machines being quoted for, prior to the date of installation.
 - 10. The bidder is to submit a CD/DVD containing all the technical specifications of the quoted equipment (to be submitted off-line, before the last date and time of submission)
 - c) The **Second sealed cover - COVER II** superscribed '**Price Bid**' should contain **Annexure D.**

THE ABOVE MENTIONED TWO COVERS i.e., COVER-I & COVER-II SHALL BE SEALED INDIVIDUALLY. THESE TWO COVERS SHALL BE AGAIN PUT INTO A SINGLE SEALED COVER superscribed “**Tender for Supply and Installation of PTZ Cameras at ICTS Campus**”. This should be addressed to Administrative Officer, International Centre for Theoretical Sciences, Tata Institute of Fundamental Research, S No. 151, Shivakote, Hessarghatta, Bangalore – North – 560 089. **The bid should be submitted before 15.00 Hrs on 12/06/2019. The Technical bids will be opened on 12/06/2019 at 15.30 hours.**

On the date of tender opening (i.e. on 12/06/2019), the bids shall be opened in the presence of attending bidders.

Since TIFR is a Deemed University and an Educational Institute, please consider us for the necessary educational discount if any.

Due Date for submitting your offer is 12/06/2019 (15.00hrs)

I. Preamble:

To augment the institute's information technology (IT) and Audio-Visual (AV) infrastructure we are floating this limited tender. This limited tender is for Supply and Installation of PTZ Cameras at ICTS campus, Shivakote, Bangalore – 560089.

II. Pre-qualification for bidder

Mandatory requirements for a bidder to qualify as a participant in this tender:

- a) The bidder should have executed at least 2 projects using architecture and technologies similar to those being proposed in their quotation against this tender. In addition, the following condition should also be satisfied.
 1. At least one order of 80% of tender value or
 2. At least two orders of 60% of tender value or
 3. At least three orders of 40% of tender valuePurchase order copies of the same must be submitted with the technical bid. The OEM or partner should have successfully executed projects at premier Indian Defence organizations or premier Indian Academic and Research institutions like IISc, TIFR, IISER, IIT, JNCASR or institutions of equivalent stature.
- b) The bidder should organize a technical inspection of similar installations at their clients' site.
- c) The bidder should produce any related documents for inspection for technical evaluation of the bid.
- d) All warranty and support must be serviced directly by the OEM. ICTS requires that there be a SPOC from OEM who is responsible for all issues between ICTS and the OEM.
- e) The bidder should have average annual sales turnover of at least 25 lakhs for the last three financial years.
- f) 3 years' warranty is required for all equipment proposed in the quotation. Warranty for years 4 and 5 are to be submitted as a separate line item.
- g) All quotations submitted must follow the prescribed format for technical compliance as in document below. Failure to do so will result in the quotation being summarily rejected.
- h) Product offered should not have end-of-life (for sales) for next three years.

III. Scope of Contract:

1. Scope of Contract

1.1. The following annexures are part of the tender documents under reference:

- a) Annexure – A – Scope of work
- b) Annexure – B (1) – Schedule of Experience of last 5 years
- c) Annexure – B (2) – Annual Turnover
- d) Annexure – C – Schedule of Deviations from specifications / conditions
- e) Annexure – D - **COVER – II - Price Bid**

The Tenderer shall fill in Annexures B, C & D completely and submit them along with their bids. All details and columns shall be filled, and if a particular column(s) in any annexure(s) does/do not apply, it may be indicated by saying why it is not filled (for e.g. 'no deviation', not applicable, not relevant, etc.) – leaving blank columns or a bare hyphenation will disqualify the bidders.

1.2. Once the Purchase order is issued, the Vendor will receive instructions from an Officer designated for this purpose (Officer-in-charge) or his authorized nominee and the Vendor thereby undertakes to abide by his/her suggestions/instructions, etc. as regards services in this agreement.

1.3. Addition/alterations in scope of work: Any alteration or addition to the scope of work will be communicated to the Vendor and the Vendor shall carry them out. For any reduction / increase in the Scope of work, the increase/decrease in the rates shall be negotiated and finalised simultaneously.

2. Quality and Scope of Services

2.1. It is normally understood and agreed between both the parties that the Centre will not be responsible or be liable for any laws that are in force/that may come into force from time to time in respect of personnel engaged by the Vendor and the Vendor alone will be solely responsible for the terms and conditions of their services, safety, health, statutory requirement, etc.

2.2. The successful Vendor shall indemnify/deemed to have indemnified the Centre for all claims/losses arising out of this tender. The Vendor is deemed to have indemnified the Centre against any claim by any authority once the work order is awarded. In the event the Centre has to pay any individual, statutory body or any agency for reasons directly or indirectly attributable to this tender, the Vendor only shall pay such claim/damages and even if the Centre is called upon to pay, such damages/penalties and or cost shall be recovered from the Vendor's dues/amount payable or shall be paid by the Vendor on a demand from ICTS.

2.3. The Vendor shall follow all rules as may be existing or may be framed from time to time at ICTS on all aspects covering this tender. Material movement, entry/exit of personnel, identity card, safety, etc. shall be according to procedures existing in ICTS as amended from time to time.

IV. Terms and conditions of the tender:

1. Quotations must be submitted giving complete details using enclosed tender papers.
2. **The rates quoted shall remain valid for a period of 180 days from the date of opening of Price Bids.**

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3. Bidder may quote in USD for better price benefit to ICTS.
4. **Bids in sealed envelopes duly superscribed in bold with the Tender Title, reference No. and due date, addressed to the Administrative Officer, International Centre for Theoretical Sciences, Survey No. 151, Shivakote, Hesaraghatta Hobli, Bengaluru North - 560 089, India. shall be sent by post/courier so as to reach before the prescribed time.**
5. This tender document/form is not transferable. Only the party to whom the tender documents have been issued shall be entitled to quote.
6. Bids containing erasures or alterations will not be considered, unless countersigned by the authorized signatory.
7. All rates and total amount should be written both in figures and in words and if there is any discrepancy between the two, the lowest amount will only be accepted.
8. Bids which do not comply with the above conditions will be rejected.
9. The Centre shall be under no obligation to accept the lowest or any tender received in response to this tender notice and shall be entitled to reject **any or all** tenders without assigning any reason whatsoever.
10. The Centre reserves the right to split the contract in parts and award them in pieces to the successful bidders or to delete the contract in parts after entering into the contract.
11. No questions or items in the Annexures shall be left blank or unanswered. Where you have no details or answers to be provided a '**No**' or '**NIL**' or '**Not Applicable**' statement shall be made as appropriate. Forms with blank columns or unsigned forms will be summarily rejected.
12. The Vendor chosen will have to deliver the equipment within 6 weeks of issuance of purchase order and commission them within 2 weeks from the date of delivery.
13. Tenders will be opened in the presence of attending bidders on **12/06/2019** at **15.30 hours**. In the event the due date is declared as holiday, the tender will be opened on the following working day.
14. If the item offered is to be imported, arrangements for import will be made by the bidder. Documents with regard to import duty exemption and customs clearance will be provided by the institute.
15. ICTS reserves the right to place order for part/reduced quantity than what is specified in the tender and also reserve the right to split the order to more than one supplier.
16. Any deviation/substitution in regard to the technical specification must be indicated in Annexure C of this tender document. Otherwise it shall be binding on the bidder to supply the items as specified in this tender specification.
17. Late and delayed tenders will not be considered. Therefore bidders shall ensure that the tender reaches the Purchaser on or before the due date and time stipulated for receipt of bids.

TENDERS RECEIVED LATE OR AFTER THE DUE DATE WILL NOT BE CONSIDERED. ICTS RESERVES THE RIGHT TO ACCEPT, REJECT ANY OR ALL TENDERS WITHOUT ASSIGNING ANY REASONS THERE OF.

18. The installation site will be ICTS campus, Shivakote, Bangalore-560089.
19. Individuals signing the bid form and other supporting documents must specify the capacity in which they sign, i.e
- Whether signing as a Sole Proprietor of the firm or his attorney.
 - Whether signing as a partner of the firm or his attorney
 - Whether signing for the firm as Agent.
 - Whether signing as Director of a Limited Company.

20. CATALOGUE/TECHNICAL LITERATURE

All necessary catalogue/drawing literature/data and details of item/s as are considered to be essential for full and correct evaluation of the bid shall invariably accompany the bid.

21. BID GUARANTEE / EARNEST MONEY DEPOSIT:-

Bid Guarantee amount details are as below:-

Sl. No.	Item Description	BGA/EMD Amount
1.	Supply and Installation of PTZ Cameras	Rs. 23,000/-

The EMD/BGA shall be submitted by a DD (for outstation firms) or Banker's cheque (in case of local firm) from a Commercial Bank/ Foreign Bank (First class Bank) along with the bid, drawn in favour of "International Centre for Theoretical Sciences, Bangalore". Alternatively, the EMD amount may be submitted by way of Bank Guarantee from a Nationalised/ Scheduled/ Commercial/ Foreign Bank (First class Bank) valid for 6 months (no other mode of payment will be accepted). The BGA amount will be forfeited if the successful bidder fails to accept the Letter of Intent/ Purchase order or withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender. The offers are liable to be rejected, at the discretion of the Centre, if they are not accompanied with EMD/BGA. No interest shall be payable by ICTS for BGA amount. The BGA shall be refunded to the unsuccessful bidders once the order is released on the successful bidder.

The EMD may be forfeited:

- If the bidder withdraws the bid during the period of bid validity specified in the tender.
- In case a successful bidder fails to furnish the Performance Bank Guarantee.
- If the bidder fails to furnish the acceptance in writing, within 7-days of award of contract/ order.

22. AUTHORITY OF AGENTS

In case where a bid is submitted by an Indian Agent on behalf of his foreign principal, such bid should be supported with a letter of Authority from the principal that the Indian Agent has been authorised to submit the bid on behalf of the principal. The indigenous manufacturers shall submit their bids directly.

23. PRICE

The price/s quoted shall be firm till the complete execution of the order. All details relating to price, price breakup, inland transportation, documentation, taxes and duties, levies, Road/AIR/Marine freight charges, delivery terms (ex-works/F.O.R/F.O.B/C.I.F.) mode of payment, mode of Dispatch, Insurance, Agency Commission, if any, should be clearly stated. The bidders must indicate (separately) the price in the following format:

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a) C.I.F. (cost of goods, packing & forwarding, documentation, freight, insurance, etc. all included). However, freight & insurance charges to be indicated separately.

24. TAXES, DUTIES AND LEVIES

Please specify all the taxes (State, Central, Turnover tax, Works Contract Tax, etc.) which are applicable. The duties and other levies, freight, insurance shall be stated clearly and separately. Also please mention whether the same is included in the price/s quoted.

25. VALIDITY OF BIDS

The bids should be valid for a period of 180 days from the date of opening of the Price bids. Bids with shorter validity period are liable for rejection.

26. DELIVERY

The tenderer should clearly mention the time required for supplying the item. The period of delivery will be counted (a) from the date of receipt of the order in case of Indian supplier and (b) from the date of opening of letter of credit/receipt of order (in the case of sight draft/advance draft) for foreign suppliers. The delivery date is the date by which the equipment should be delivered at ICTS, Shivakote.

27. PACKING

The item should be packed appropriately so that it can sustain transit hazards, multiple landing, warehousing, etc. during transit.

28. PLACE OF DELIVERY

In the case of items indigenously manufactured, ALL DELIVERIES shall be effected to the International Centre for Theoretical Sciences, Shivakote, Bangalore-560089, whereas the foreign suppliers shall effect delivery up to Bangalore Airport, India by AIR only unless otherwise specified.

29. GUARANTEE/WARRANTY

The item/s covered under this tender shall be subject to a guarantee for trouble free performance, workmanship, material etc., fulfilling the specifications mentioned in this tender for minimum 36/60 months from the date of commissioning (as per the ICTS order). If any defect is found in the material, workmanship or performance during the guarantee period the same may either be repaired/replaced by the supplier as the case may be free of charge. The guarantee period for replacement of parts or repair work shall be same as above. A guarantee certificate to this effect should be forwarded to us with your invoice. For order placed on foreign suppliers, the supplier shall specifically confirm that their Indian representatives, if any, will provide with after sales service and will attend to any repairs or technical problems that may arise.

30. PERFORMANCE B/G

The successful bidder shall have to execute a performance B/G in accordance with the guarantee/warranty for 10% value of the order. This B/G has to be executed on an appropriate value of stamp paper in terms of a bank guarantee drawn on any Nationalised Bank or first class Foreign Bank and shall remain valid till the completion of the Defect Liability period/warranty period, with **6 months** claim period.

31. TAXES AND DUTIES

The Centre shall deduct all taxes and duties, as applicable, from time to time from the bills payable.

32. PAYMENT TERMS

As per ICTS norms, **80%** of the payment shall be made through Sight Draft (documents through bank) and balance **20%** payable after installation, trial run and subject to acceptance by the group head through SAI and all other relevant documents, with Performance Bank Guarantee.

All claims shall cease as per the Limitation Act.

33. CLARIFICATIONS

After opening the bids, if it becomes necessary for the purchaser to seek clarifications from the bidders, the same will be sought from the bidders. In such an event, the bidders will furnish all technical information / clarifications to the purchaser to reach on or before the due date fixed for that purpose indicating the Purchaser's tender reference. If the technical clarifications sought do not reach on or before the date fixed, the bids shall be summarily rejected without any further notice.

34. RISK CLAUSE

Notwithstanding the other terms therein, the Centre at its option will be entitled to terminate the contract and to avail from elsewhere; at the risk and cost of contractor; either the whole of the contract or any part which the contractor has failed to perform within the time stipulated or if the same performance is not available, the best and the nearest available substitute thereof. The contractor shall be liable for any loss which the Centre may sustain by reason of such risk contract in addition to penalty.

35. DISPUTE AND RESOLUTION

Any dispute or differences between the parties that cannot be settled by mutual discussion at appropriate levels shall be referred to the sole arbitration of the Director, ICTS or his nominee and his decision in the matter shall be final and binding upon the parties to the dispute. The venue of arbitration proceedings shall be Bangalore. In respect of any matters pertaining to such arbitration, the courts of law in Bangalore will have exclusive jurisdiction.

36. DEFINITION AND MEANINGS

In constructing these conditions, specifications, etc. in the tender document or the Annexures/Appendices the following words shall mean herein assigned definitions except where the subject context is otherwise stated.

PURCHASER : Shall mean the International Centre for Theoretical Sciences

BID/TENDER : Shall mean the proposal/document that the BIDDER submits in the requested and specified form or otherwise along with Annexures, Appendices, etc.

BIDDER/TENDERER : Shall mean the firm/party who quotes against an enquiry.

CONTRACTOR/SUPPLIER : Shall mean the party to whom a Work Order/Purchase Order is awarded to undertake all or a part of the work covered by this tender document as well as and amendment orders relating to this tender issued by the Purchaser and shall include his/their legal representative, assignee/s or successor/s.

CONTRACT : Shall mean and include the articles of agreement, Declaration form, the general and special conditions, the Annexures, the Schedule of Quantities & rates and the specifications attached hereto and the drawings, if any.

ORDER VALUE : Shall mean total value of the Purchase Order/Work order issued against this tender item including taxes, levies, etc.

37. TECHNICAL SPECIFICATIONS

See Annexure – 'A'

38. For imported items, final price after totalling the prices of the individual items has to be mentioned with estimated freight, insurance, agency commission charges, etc. The price shall be FOR CIF ICTS, BANGALORE.

39. The quantity mentioned in the tender may be decreased/increased while ordering. However, the price quoted should be firm irrespective of change in the quantity.

40. ACCEPTANCE OF TENDERS

ICTS does not pledge itself to accept the lowest/ any tenders and reserves to itself the right to accept the whole or part of the tenders or a part of the quantity offered.

41. The firm may quote in Foreign Currency for direct import on CIF basis as well as in Rupees on FOR ICTS basis for local supply. Please indicate insurance, freight and other charges separately for direct import.

42. Your Service Engineer should be fully trained to install the equipment and capable of maintaining the equipment during / after the warranty period.

43. LIQUIDATED DAMAGES:

The successful bidder will have to agree that in case the item is not supplied within the agreed delivery schedule and after a grace period of seven days, then Liquidated Damages (not in terms of penalty) will be imposed automatically and be deducted from their bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.

Since ICTS is a Public funded Research Organisation, registered under Government of India Notification No.51/96 – Customs and 10/97 – for Central Excise is applicable for the items listed in the notification.

44. COMPLETENESS RESPONSIBILITY:

Notwithstanding the scope of work, engineering, supply and services stated in bid document, any equipment or material, engineering or technical services which might not be even specifically mentioned under the scope of supply of the vendor and which are not expressly excluded there from but which – in view of the bidder – are necessary for the performance of the equipment in accordance with the specifications are treated to be included in the bid and has to be performed by bidder. The items which are over & above the scope of supply specified in the Schedule of Requirements may be marked as “Optional Items”.

TENDER SPECIFICATIONS

ANNEXURE – A - SCOPE OF WORK

The bidders are advised to visit the site (at their own expense), prior to submission of the proposal, and make surveys and assessment as deemed necessary for proposal submission. Site survey can be done on working days between 11.00 hrs and 17.00 hrs by advance intimation.

- Any additional components required to complete the solution should be included by SI in their proposal.
- All required cables/patch cord/connectors to complete the solution will be in the scope of SI.
- Bidder should configure/integrate proposed items with existing controller and touch panel as per ICTS requirement. Some of programming options are listed below:-
 - Camera Control (pan/tilt/zoom-in-out/on/off etc.,)
 - Change the Camera settings from touch panel.
 - HDMI In/Out Matrix control

SERVICE LEVEL AGREEMENT:

- In the event of a failure of any of the sub-systems or components of the proposed solution, the bidder has to ensure that the defects are rectified before end of the next working day.
- Failure to meet the above requirement will result in extension of the warranty services by 3 days for delay of each day during the warranty period.
- Therefore, the bidder along with the OEMs have to put systems and processes in place to address the above during the period of the contract.

AUDITED ANNUAL TURNOVER
ANNEXURE – B (2)

Sl. No.	Financial /Accounting Year	Profit (Rs.)	Loss (Rs.)	Annual Turnover (in Indian Rupees)
1.	2017-2018			
2.	2016-2017			
3.	2015-2016			

AUTHORIZED SIGNATORY WITH SEAL

N.B.

The right to suspend the NIQ/NIT process or part of the process, to accept or reject any or all NIQ/NITs at any stage of the process and/or to modify the process or any part thereof at any time without assigning any reasons thereto is reserved by ICTS-TIFR without any obligation or liability whatsoever.

SCHEDULE OF DEVIATION FROM SPECIFICATIONS/CONDITIONS
ANNEXURE – C

All deviations from the specifications/conditions shall be filled in by the bidder in this schedule.

The bidder hereby certifies that the above mentioned are the only deviations from Technical Specifications / Commercial terms and conditions of this tender. (State NIL if no deviation is envisaged.)

Signature

Name

Designation

Name of the company

Date

Seal of the company

ANNEXURE – D - COVER – II PRICE BID

Sl. No	Item Description	HSN/SAC Code	Qty	Rate per unit	Amount
A1	<p>Full HD PTZ Camera with the below specifications.</p> <ul style="list-style-type: none"> ● Imaging sensors: 1/2.3-type MOS sensor and DSP (Digital Signal Processor) for high sensitivity and high resolution. ● Lens: Motorized 22x zoom, F1.6 to F4.3 [f=4.3 mm (11/64 inches) to 94.6 mm (3-23/32 inches); 35 mm (1-3/8 inches) equivalent: 31.6 mm (1-31/128 inches) to 705.0 mm (27-49/64 inches)] ● Focus: Switching between auto and manual ● Inputs: Stereo mini-jack (ø3.5 mm) ● Input impedance: Approx. 2 k (unbalanced) [Mic input] ● Mic/line input ● Supported microphones: Stereo mic (plug-in power, on/off switching via menu) ● Supplied voltage: 2.5 V ± 0.5 V ● Mic input level: 60 dBV ± 3 dBV [Line input] ● Input level: -10 dBV ± 3 dBV ● Outputs: HDMI, USB ● Output Connectors: LAN connector for IP control (RJ-45) ● Equipped with straight/crossover cable auto detection function ● Input/ RS-232C Mini DIN 8-pin (IN) Mini DIN 8-pin (OUT) ● Output RS-422 CONTROL IN RS422A (RJ- 45) connector ● USB Mini-B port ● SD card microSD card slot ● Focus distance <ul style="list-style-type: none"> ○ Entire zooming range:1.2 m (3.94 ft) ○ Wide end: 10 cm (0.33 ft) ● Color separation: optical system On-chip color lter system ● Minimum Illumination at 50 Hz ● 0.7 lx (50 IRE, F1.6, 48 dB,1/50 without accumulation) ● 0.35 lx (50 IRE, F1.6, 48 dB,1/25 with accumulation [Frame Mix 6 dB]) ● Horizontal resolution: 1000 TV lines Typ (Center area) ● Gain Selection Auto, 0 dB to 48 dB (3 dB step) ● Electronic shutter speed ● During 1/30 to 1/2000 [59.94 Hz] ● Full Auto 1/25 to 1/2000 [50 Hz] ● During Auto 1/60 to 1/2000 [59.94 Hz] 1/50 to 1/2000 [50 Hz] ● During Manual 1/100, 1/250, 1/500, 1/1000, 		2 No.		

	<p>1/2000,1/4000, 1/10000 [59.94 Hz],1/120, 1/250, 1/500, 1/1000, 1/2000,1/4000, 1/10000 [50 Hz]</p> <ul style="list-style-type: none"> ● Synchro scan 59.94 Hz: 59.94 Hz to 660.09 Hz 50 Hz: 50.00 Hz to 570.12 Hz ● Gamma: Off, Normal (Low, Mid, High), Cinema ● White balance: AWB A, AWB B, ATW, 3200K,5600K, VAR (2400K to 9900K) ● Output format HD: <ul style="list-style-type: none"> ○ 1080:59.94p/50p ○ 1080:59.94i/50i ○ 1080:29.97p/25p ○ 1080:29.97PsF/25PsF ○ 720:59.94p/50p ● Synchronization system: Internal synchronization ● Video output: USB Video Class Ver1.0 ● Resolution: 1920 x 1080, 1280 x 720, 640 x 360 ● Frame rate: max 30 fps (System frequency 59.94 Hz) ● Audio output: USB Audio Class Ver1.0 ● Audio compression format: Linear PCM, 48 kHz, 16-bit, 2 channels ● Installation method: Stand-alone (Desktop) or suspended (Hanging) ● Pan/tilt operation speed: Maximum speed during preset: 300°/s, Maximum speed during manual: 90°/s ● Panning range: ±175° ● Tilting range: 30° to 90°*5 ● Quietness: During preset: NC40 or less, During manual: NC35 or less ● Control: Serial / IP / IR ● Power requirements: <ul style="list-style-type: none"> ○ DC 42 V to 57 V (PoE+ power supply) ○ DC 12 V (Supplied AC adaptor) ○ Current consumption <ul style="list-style-type: none"> ■ 1.2 A (Supplied AC adaptor) ■ 0.4 A (PoE+ power supply) ● Ambient operating temperature 0°C to 40°C (32°F to 104°F) ● Storage temperature 20°C to 50°C (4°F to 122°F) ● Should be pro AV standard device. <p>Warranty : OEM 3 years comprehensive onsite warranty.</p>				
A2	Optional but mandatory to quote: OEM 4th and 5th-year comprehensive onsite warranty		2 No.		
B1	4K PTZ camera with the below specifications.		2 No.		

<ul style="list-style-type: none"> ● Sensor 1/2.3-inch MOS Sensor ● Optical Zoom 20x ● iZoom +30x ● DIGITAL ZOOM 12x ● Focus Auto / Manual ● Horizontal Resolution 1300 Lines (UHD) ● MINIMUM ILLUMINATION 0.35 lx ● Gain 0 dB - 48 dB ● Control Serial / IP / IR ● Power PoE+ or AC ● Pan Range ±175 degrees ● Tilt Range -30 to 90° ● Pan / Tilt Speed 300°/s (Preset) 90°/s (M) ● Operation noise NC35 or Less ● VIDEO OUTPUT 3G-SDI, SD-SDI, HDMI, Composite, USB, LAN ● Output Format 2160/29.97p*3, 1080/59.94p, 1080/29.97p, 1080/59.94i, 1080/29.97PsF, 720/59.94p, 2160/25p*3, 1080/50p, 1080/25p, 1080/50i, 1080/25PsF, 720/50p ● IP Live Preview ● Simultaneous Multi-Stream ● Image Stabilization Optical, Hybrid O.I.S. ● Night Mode (for IR) ● Dynamic Range Stretch (DRS) ● Audio Input and Embedding ● Focus Auto and Manual ● Horizontal Resolution 1300 Lines (UHD) ● Gain 0 dB - 48 dB ● Control Serial / IP / IR ● Power PoE+ or AC ● Pan Range ±175 degrees ● Tilt Range -30 to 90° ● Pan / Tilt Speed 300°/s (Preset) 90°/s (M) ● Operation noise NC35 or Less ● Features: IP Live Preview, Simultaneous Multi-Stream, Night Mode (for IR), Dynamic Range Stretch (DRS), High Dynamic Range (HDR), Fanless Design, Advanced Color Adjustment, Digital Noise Reduction (DNR). ● Camera Should have a built-in H.264/MJPEG encoder for 7 channels of encoding up to 25Mbps. ● Image Stabilization Optical, Hybrid O.I.S. (FHD) ● Presets Up to 100 ● Should be pro AV standard device. <p>Warranty : OEM 3 years comprehensive onsite warranty.</p>				
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B2	Optional but mandatory to quote: OEM 4th and 5th-year comprehensive onsite warranty		2 No.		
C1	<p>Camera Joystick Controller with the below specifications.</p> <ul style="list-style-type: none"> ● Preset Memory Up to 100 sets ● LAN 10BASE-T/100BASE-TX (for IP control) RJ45 x 1 ● Protocol IPv4, RS-422 ● Adjustment functions Pan/Tilt, Zoom, Focus, Iris, Gain, Pedestal, Shutter, Detail, White Balance (Auto, R/B Gain), Black Balance (Auto, R/B Pedestal), Switch scene files ● Linkage Camera information display, Tally information imported, Bus material selection (AUX/PVW/PinP/KEY-F), Parameter Changes (Pan/Tilt lever, Zoom button) T0 Pan/Tilt Head RS-422 (for Serial control)/RJ45 x 5 ● TALLY/GPI TALLY INPUT x 5 channels GPI INPUT x 4 channels GPI ● OUTPUT x 4 channels/D-sub 15 pin (female) x 1 ● Power supply DC 12 V ±10 % (AC adapter provided) ● Power consumption 0.5 A (With DC1 2V) ● Operating temperature 0°C to 40°C ● Operating humidity 10% to 90% (no condensation) ● Should be pro AV standard device. ● Features <ul style="list-style-type: none"> ○ Up to 100 remote camera units may be controlled via IP and Ethernet hubs ○ Various settings can be configured from a PC along with Configuration software. <p>Warranty : OEM 3 years comprehensive onsite warranty.</p>		1 No.		
C2	Optional but mandatory to quote: OEM 4th and 5th-year comprehensive onsite warranty.		1 No.		
D1	<p>Installation, mounting brackets/Kit ,cabling and existing touch-panel/controller programming.</p> <ul style="list-style-type: none"> ● The mounting kit should have a sleek design and robust construction. ● Should include a metal rope for additional support. ● Integrated cable management on top of the mount without additional accessories. ● The mounting kit length varies from 7 to 20 feet as per site requirement. Kit need to get approval from ICTS. ● Floor/Ceiling/wall customised mount kit/brackets should be provided as per site requirement. 		1 Lot		

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Date: 20/05/2019

	<ul style="list-style-type: none"> ● HDMI Cable/Patch Cords :Preferred Kramer / Crestron make with minimum 10-years OEM warranty. ● CAT 6A STP Cable : Preferred Commscope/Systemax make ● CAT 6 patch cable Color : Light Blue Jacket at rack side ● All cable laying should be in HMS Conduct /Industrial Flexible. 				
	Sub Total				
	Add: GST				
	Total Amount in Rupees				

Please enter Unit Price, Total Price and Grand Total in figures as well as words. Unit Price and Total Price may be entered below each item.

For and on behalf of International Centre for Theoretical Sciences-TIFR



Authorized Signatory