DEPARTMENT OF MECHANICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY - DELHI
HAUZ KHAS, NEW DELHI – 110016

Dated: 12/11/2012

Sealed quotations are invited for the purchase of an INFRARED THERMAL IMAGING CAMERA. Interested parties are requested to submit the technical and financial bids in separate sealed envelopes. Mark the envelopes clearly as "Technical bid" and "Financial bid". Both the sealed envelopes should be sent in a single envelope, clearly marked as "Quotations for Infrared Thermal Imaging Camera." The technical specifications of the data acquisition system are as follows:

Technical Specifications of Infrared Thermal Imaging Camera

1. Infrared Thermal Imaging Camera should be rugged, light weight & easy to install. The camera should be able to provide live real time thermal pattern along with facility for thermal image capturing.
2. Infrared Camera should be fit & forget type fixed tripod mounting facility. User should be able to continuously monitor & control the camera on line vide PC for detailed temperature analysis.
3. Temperature measurement range should be from -20°C to 250°C.
4. Latest technology Uncooled microbolometers detectors, Focal Plan Array type with image resolution of 320 x 240 pixels.
5. 8x digital interpolating zoom should be available.
6. Image frame rate should be 9Hz or more.
7. Real time 16 bit image streaming should be available for signal / Temperature Linear & Radiometric image.
8. Detector pitch should be 25 µm or less.
9. Thermal Images should be captured automatically based on temperature based alarm function.
10. Thermal sensitivity should be at least 0.08°C at 30°C.
11. Field of view of lens should be capable to capture at least 25 x 25 cm frame in single shot from a distance of 20cm.
12. Manual motorized Focus facility should also be in camera.
13. Spectral range should be from 7.5 to 13 µm.
14. Measurement mode should be available in camera in the form of Spot, Area, Isotherm, (Delta T) etc. & all functions can be used through PC control for live thermal imaging pattern.
15. Camera should be fully controlled from the PC on site or in control room.

16. At least 1no. Digital Input / Output should be user configurable.

17. Camera should have provision of external triggering to initialize image storage.

18. Camera should be able to operate from 230 VAC (Standard) along with DC supply of 12 or 24V. Required adapters should be provided along with camera.

19. Software CD should accompany camera as standard accessory.

20. Software for camera control, fast data transfer and thermograph analysis should be provided.

21. Camera should be able to capture images automatically at periodic interval of time with variable time frequency from 5 sec. to 1 hr. with Time vs Temperature graph plotting.

22. Radiometric video recording of thermal pattern should be possible. Recording should show the temperature of user selected spots & areas.

23. User should be able to extract frame/images from the video based on the image rate

24. User should be able to frame temperature vs time chart

25. Software should be able to export spot & temperature data in excel format.

26. Camera has protection grade IP-40, IEC-529 encapsulated and shock (under unit operation) tested to 25G, IEC 68-2-29 and vibration (unit under operation) tested to 2G, IEC 68-2-6.

27. Bidder must have supplied similar equipment to Research or technological institute.

28. Tripod must be provided along with camera.

Accessory:

Supplier should also provide Infrared window of at least 85mm diameter enabling user to capture thermal pattern through the Infrared Window in concealed chamber.

Terms and Conditions:

1. IIT Delhi is exempted from paying custom duty under notification No.51/96 (partially or fully) and necessary "Custom Duty Exemption Certificate" can be issued after providing following information.
   a) Shipping details i.e. Master Airway Bill No. and House Airway No. (if exists)
   b) Forwarder details i.e. Name, Contact No., etc.
   Custom Duty Exemption Certificate will be issued to the shipment in the name of Institute and Bills of Entry should be submitted to IIT Delhi later on.
2. Either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

3. Imported items should be quoted on FOB basis (Freight on Board) and FOB price be provided.
4. Three years comprehensive warranty be provided and AMC price beyond 3 years should be mentioned separately.
5. Payment will be made only after successful installation
6. Delivery period: within 1 months from the date of supply order.
7. The quotations must have validity of at least three months.
8. The products will be used for educational purposes. Any applicable academic institution discounts should be offered and stated.
9. If the bidder is an authorized dealer of any manufacturer, the authorized Indian dealership certificate from the principles should be enclosed. Similarly, proprietary certificate for proprietary items should be provided.
10. Authorities of IIT Delhi reserve the right to reject any or all quotations without assigning any reasons.
11. The quotation should provide the total price of the system including all taxes and transportation charges.
12. Price should be quoted in the US dollar
13. Payment will be made only after successful installation and verification of technical details.

Kindly submit your bids on or before 29.11.2012 to the address given below.

Dr.B.Premachandran,
Assistant Professor,
Department of Mechanical Engineering,
Indian Institute of Technology Delhi,
Hauz Khas,
New Delhi – 110 016.