



Department of Electrical Engineering
Indian Institute of Technology, Delhi
Hauz Khas, New Delhi 110016

NIQ no. IITD/EE/PLN03-BEEN/IEC/11

Due Date: 12.11.2012, 5 PM

**Notice inviting quotations for
Time-Of-Flight, 3D camera for range finding**

Sealed quotations are invited for Time-Of-Flight, 3D camera for range finding. The required specifications are given below. The purchase will be made through a two part bidding process. Technical and Financial bids have to be made separately. Complete technical information should be provided along with the Technical bid. Please refer to the last page on Terms and Conditions for details on how and when to submit Technical and Financial bids.

Required Specifications for the TOF camera

1. Detection range: $\approx 10\text{m}$
2. Modulation Frequency: $\approx 15\text{MHz}$
3. Absolute accuracy: $< 20\text{mm}$
4. Resolution: higher than $128(\text{H}) \times 128(\text{V})$
5. Maximum frame rate: $\geq 50 \text{ fps}$
6. Angular resolution: < 0.5 degrees
7. Pixel pitch: $< 50\mu\text{m}$
8. Field of view: $> 65 \times 50$ degrees
9. Interface: USB.
10. Temperature drift: $\leq 1.5\text{mm}/\text{degree C}$ (maximum)
11. Illumination wavelength: around 800nm .
12. Operating temperature: > 40 degree C
13. Acquisition mode : Continuous, Triggered
14. Integration time: $> 20\text{ms}$
15. Signal amplitude: 0-65535 (16 Bit)

16. Eye Safety: EN 60825-1 2002: Class 1 or equivalent
17. EMC: EN55022: Class A or equivalent
18. Dimensions: around 65x65x65mm
19. Weight: around 500g
20. Cooling: Passive, no fan
21. Software drivers: Windows XP, Windows 7 and Vista (32-bit and 64-bit), Linux 32-bit.
22. Software API: C, C++, Matlab.
23. Accessories: power cord (Indian), USB cable (nearly 2m)
24. Delivery: Within 3-4 weeks of placed order.

Terms and Conditions

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as "Technical Bid" and "Financial Bid" respectively. Both the sealed envelopes should be sent in a single sealed envelope, clearly marked as "Quotation for 3D TOF Camera". The quote should reach the following address on or before **12.11.2012, 5 PM**.
Dr. M. Sarkar
Electrical Engineering Department
Block II, Room 333
IIT Delhi, Hauz Khas
New Delhi, 110016
2. Please quote prices for FOB New Delhi, inclusive of all taxes and duties.
3. Quote should be in Indian Rupees for agents of Indian manufacturers, or in foreign currency, for agents of foreign manufacturers, and needs to be valid for at least three months.
4. Attach all the technical literature and a list of similar installations done in India.
5. If the quote is being submitted by a representative of the manufacturer, a valid agency-ship or dealership certificate authorizing the agent to quote to IIT Delhi on behalf of the manufacturers should be enclosed. **The principal and the vendor, both, are not allowed to quote for the same product.**
6. Complete set of manuals for the operation of the equipment should be given.
7. Clearly specify the installation requirements - such as space, power, frequency, environment etc.
8. If the item quoted is proprietary in nature, please enclose proprietary certificate from the principals stating, "Certified that is a proprietary item of M/s and no other manufacturer makes this item."
9. Please attach a signed and stamped compliance chart for the specifications. The format of the compliance chart is attached to this document.
10. Please specify all of your terms and conditions clearly, including delivery period.
11. Mode of payment for purchases in foreign currency are through irrevocable letter of credit, or through wire transfer on delivery. Only bank charges within India are payable by IIT Delhi, all bank charges outside India are the responsibility of the seller. For purchases in INR, payment is on delivery.
12. The Institute reserves the right to accept or reject any or all quotations without assigning any reasons thereof.