

Form for Inviting Quotations

Reference No.: MECH/TML/SPD/2016-17/DSC

Date: 11/11/2016

Sub: Quotations invited for double shutter CCD camera for PIV application

Dear Sir,

Due Date: 01/12/2016

1. Quotations are invited in **duplicate** for the supply of double shutter CCD camera and accessories details of which are shown in overleaf.
2. The Quotations duly **sealed and superscribed on the envelope with the reference No. and due date**, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The Quotations should be valid for **sixty days** from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS&D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate Contract price. If so, please send copy of the R. C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute, if Quotations are for Ex-Godown delivery charges should be indicated separately.
7. **Firms Outside Madras:** Quotations should be F.O.B. Madras. If F.O.B. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated. The following set of documents is required in all cases: a. Complete set of Clean Bill of Lading / Airway Bill / Air or surface Parcel Receipt, showing that the goods have been shipped and freight prepaid. b. Insurance Policies / Certificates in duplicate covering Marine Insurance as per Institute Cargo Clauses (All risks) and perils as per Institute Strikes, Riots and Civil Commotion Clauses, War risks as per Institute, Clauses. Cover for CIF value plus 10 percent.
8. The rate of Sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have Concessional Sales Tax applicable to non-Government Educational Institutions run with no profit motive for which a concessional. Sales Tax Certificate will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.

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Double shutter CCD camera

Camera requirements:

Sensor type: Monochrome CCD / ICCD

Resolution: not less than 1280 x 1024

Maximum Quantum efficiency : Not less than 55%

Pixel size: not less than 6 micro meter

Interframing time between two frames: 1 micro second or less

Minimum exposure time: 5 micro second or less

Binning: 2x2 or higher

Frames per second: not less than 5 fps at full resolution

Dynamic range: 14 bit

Full well capacity: Not less than 15000 e-

Non linearity: less than 1%

Noise: less than 10 e-

Spectral range: 300 nm to 1000 nm

Mount type: F mount (in case of C/CS mount cameras, an F mount adapter should be included)

Control: Manual and external trigger through TTL signal or RS 232 interface

Data interface: USB or Gigabit Ethernet or Camera Link

Operating temperature: up to 40 degrees C ambient temperature

Power requirements: should be able to work with 220 V AC power supply

Warranty for 1 year

Software for acquiring images should be included

The camera should be compatible for control through the LabView software (drivers should be included)

Trigger cable should be included

Accessories

Frame grabber card (if applicable)

Each quotation of camera should also include a catalogue, containing technical specification of the camera offered and also a list of existing customers in India, failing which the offer is liable to be rejected. Also, include an offer to extend warranty to 2 and 3 years.