# **Request for quotation**

Enquiry number: AE/KP/2016\_17/CMOS\_CAMERA

Enquiry date: 04/05/2016 Closing Date: 16/05/2016

Closing Date: 23/05/2016\* Date Extended

#### Subject: Purchase of CMOS camera with control and acquisition software plus Zeiss lens

Quotation for the items mentioned above is requested in a sealed envelope. The quotation should reach on or before May 16, 2016 to the address given below.

### **Technical specifications:**

**Camera:** The camera should be supplied with Acquisition software for camera control, image acquisition and archiving of images in various file formats. SDK (software development kit) including a 32 / 64 bit dynamic link library for user customization and integration on PC platforms should be provided.

Sensor: Monochrome CMOS

• Resolution (h x v): 2000 x 2000 pixel or more

• pixel size (h x v) : 11μm x 11μm or less

• Sensor format: 22.0 x 22.0 mm<sup>2</sup> or more

• Frame rate: 2200fps or more @ 4MP resolution and 7000fps or more @ 1MP resolution

• Quantum efficiency: at least 50 % @ peak

• Dynamic range A/D: 12 bit

• Readout noise: 20e-rms or less

• Exposure/shutter time: 1.5µs to 40ms

• Inter-framing time: 3.15µs or less

Primary image memory: 36 GB

• Trigger input signals: frame trigger, sequence trigger, stop trigger

• Trigger output signals: exposure, busy

Data interface: USB 3.0 and Camera Link

• Operating temperature: 0°C to 45°C

• Operating humidity range: 10% to 90% (non-condensing)

• Optical interface: F-mount

CE / FCC certified

**Camera cables**: Camera should be supplied with proper cables that are compatible with both TSI and IDT synchronizers

**Camera Lens:** ZEISS **Otus** 1.4/85 with following specification

Focal length	85 mm
Aperture range	f/1.4 - f/16
Focusing range	0.8 m (31.50") - ∞
Number of elements/groups	11 / 9
Camera mounts	F Mount (ZF.2)

#### Terms and conditions:

- Quotations should have a validity of minimum of 60 days
- The equipment should be provided with a warranty of at least two years after installation
- The delivery period should be specifically stated.
- Permissible educational discount should be provided since the equipment will be used for research work of students.
- For suppliers from outside India, the rate offered should be FOB (specify city) or FCA terms.
- IIT Kanpur has its own freight forwarder for shipping from outside India.

## Address for the quotation:

Dr. Kamal Poddar Department of Aerospace Engineering Indian Institute of Technology Kanpur-208016, India

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