

# Indian Institute of Technology Kanpur

## Center for Lasers and Photonics

September 04, 2013

**Enquiry Number:** CELP/UD/INST/NC8,

**Dated:** September 04, 2013

**Opening date:** September 05, 2013 at 10:00 AM

**Closing date:** September 12, 2013 at 10:00 AM

Sealed quotations are invited for the supply of “InGaAs Sensor Line Scan Camera” as per the following specifications.

### **Technical specifications of InGaAs Sensor Line Scan Camera:**

- Spectral Response nominally 800-1700nm (extended to 600nm @ 10% efficiency from peak value)
- Peak Quantum Efficiency: > 70%
- Resolution : 1024x1 pixels (pixel size < 25 $\mu$ m) [2048x1 MAY BE QUOTED SEPARATELY]
- Aperture size < 25 $\mu$ m (QUOTE SEPARATELY IF OTHER SIZES ARE POSSIBLE)
- Line rates : Programmable from <100lps to > 45,000lps. (Step wise is acceptable)
- Image acquisition: Integrate while read / integrate then read snapshot acquisition.
- Minimum Exposure Time: < 20ns to > 1s (user Programmable or through External trigger).
- 14-bit Camera Link.
- Dynamic Range Various Settings from <100:1 till > 2600:1.
- Sync. Output : SMA 5V, 50Ohm terminated.
- Modes: Free running or user selectable frame size per trigger.
- Trigger Input: SMA (0.5V-5.0V)
- External Trigger Jitter: < 80ns.
- Cooling: No cooling or TEC Cooled.
- Operating Temperature: -10C-50C (Case Temperature)
- Differential Nonlinearity: < +/- 1%.
- Focal Plane : ~ 25mm
- Software to download Image and Line Scan Profile: Line and Image Grabbers (Itemize Separately, or mention if included in price)
- Bad Pixel Identification: < 1% of total line pixels (not more than 5 adjacent bad pixels)

### **Itemize Separately:**

- Lens Adapter
- Optical Lenses
- Mounts

### **Terms and conditions:**

- Technical and financial details should be in separate envelope.
- Maximum educational discounts should be applied
- Validity of quotation should be at least for 60 days.
- Price should be on FOR IIT Kanpur & should include the installation and training cost.
- Institute is exempted for payment of Excise Duty under notification No. 10/97.
- Warranty/Guarantee should be clearly mentioned.
- Normal payment terms for the institute will be applicable (90% on delivery of the items and remaining 10% after satisfactory installation/inspection).
- Quotation should carry proper certifications like **Sole Indian Agency certificate, Proprietary certificate**, etc.
- The delivery should be specifically stated. Earlier delivery may be preferred.

- The indenter reserves the right to withhold placement of final order. The right to reject all or any of the Quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.

Kindly send the quotation (in duplicate) in sealed envelope latest by 12.09.2013 to the following address.

Prof. Utpal Das  
Department of Electrical Engineering  
Indian Institute of Technology Kanpur, 208016  
utpal@iitk.ac.in