

Request For Proposal (RFP) for the supply of sCMOS Cameras (2No's)

Name of the proposal:

sCMOS cameras with high dynamic range and low readout noise.

Project under which the item to be procured:

VELC- Aditya La

Justification for the requirement of the item

Above mentioned items will be used for the laboratory experiments related to VELC.

Technical specifications of the components with codes and standards if any:

Sensor Type	: Front Illuminated Scientific grade CMOS
Active pixels (W x H)	: 2K x 2K
Pixel size(W x H)	: 6.5 x 6.5 microns
Pixel well depth (e-)	: >25,000
Pixel readout rate	: > 100 MHz
Read noise (e-)	: 1 - 2
Dark current(e-/pix/s)	: < 0.1 at -20°C
Read out modes	: Rolling shutter & global shutter
Maximum cooling	: -40°C
Full frame rate	: > 10 fps
Read out rate Readout rate	: 560MHz and 200 MHz
Data Range	: 12 bit and 16 bit
Quantum Efficiency	: ≥ 50 % (500-750nm)

Eligibility criteria of vendor:

The vendor must have understanding, experience and infrastructure for the design and fabrication of Scientific grade CMOS Systems and associated software.

Expected deliverables

sCMOS cameras with all conformance certificates for the specifications as mentioned above.

Safety Requirements:

Environmental conditions:

Components will be operated and stored in ISO6 (class 1000) clean rooms

Inspection, test and acceptance criteria:

The following test data should be provided along with the cameras

- 1.Pixel response non uniformity
2. Cosmetics
3. PSF degradation
4. Readout noise, gain linearity and full well capacity, charge transfer efficiency
- 5.Quantum efficiency, stability of the detector sensitivity over the temperature range.

Expected Time Schedule

2-3 months

For further information/clarifications

For any other technical clarifications, the indenter venkata@iiap.res.in may be contacted. For any administrative matters, the administrative officer pur_officer@iiap.res.in may be contacted.