Request for Proposal (RFP) for the supply of SWIR Detector

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<td>SWIR Detector system with all required accessories as per the RFP</td>
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Technical specifications of the Detector

Sensor Type: InGaAs
Pixel Array: 640x512
Pixel Pitch: \( \leq 20\mu m \)
Spectral Response: 0.8 \( \mu m \) to 1.7 \( \mu m \)
Read Noise (RMS): < 200 electrons/pixel in Low Gain, <50 electrons/pixel in High Gain
Quantum Efficiency: \( \geq 60\% \) (avg) in the response range, \( \geq 75\% \) at 1.074 \( \mu m \)
Pixel Well depth (electrons): \( \geq 2 \) M in Low Gain
Pixel Operability: > 99.5%
Output Format: 14 bit/16 bit CameraLink (base configuration)
Minimum Exposure time: \( \leq 1 \) ms
Maximum Exposure time: \( \geq 1 \) s
Shutter mode: Global Shutter
Optical Interface: C-mount or M42
Trigger Interface: Trigger IN and OUT - TTL compatible
Cooling Mechanism: TE Cooling
Image Processing Functions: Automatic Gain Control and built-in non-uniformity corrections
Mode of Data Acquisition: Single Frame and Continuous
Additional Requirements:

- The vendor should supply all the relevant hardware and software required for operation of the detector.
- **The detector is intended to be used in Clean room environment ISO-Class 4. Hence, the standard protocols must be followed during packaging.**
- **Indian Agents, if any, should provide letter of authorization from the manufacturer.**

Warranty:

All the supplied hardware should have a minimum warranty of 1 year from the date of installation/supply.

Expected deliverables:

1. As mentioned in Table of Contents that meets the technical specifications.
2. Soft copy and hard copy of all the relevant manuals, soft copy of all control software's should be supplied by the vendor at the time of delivery.
3. All the necessary controls, auxiliary hardware and software for the detector operation should be supplied by the vendor at the time of delivery.
4. All the conformance certificate specifying the performance of the detector must be sent to the purchaser in original.

Expected Delivery Schedule

4-6 Weeks

For any information/clarifications contact the following

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