

Driver Night Sight



Introduction: Driver Night Sight (DNS) for T-90 tank has been developed to enable driving of tanks in night without switching on headlights. It comprises of an advanced uncooled TI & a day camera in form-fit configuration without armour cutting. The electronic image fusion provides DNS the capability to see beacon lights and thermal image simultaneously during night.

Specifications	Features
<ul style="list-style-type: none">• Uncooled IR Detector : 640 x 480 format/17μm Pitch• Day Camera : 1280 x 1024format/9.7μm pitch• FOV : 45° x 34°• Rec. Range : 150m for tank size target• Display : Binocular OLED & LCD• Power : Tank power (24 VDC nominal)• Environmental : JSS 5855 / JSS-55555	<ul style="list-style-type: none">• Form-fit configuration for existing Driver Sight for T-90 tank• Selectable TI or Day or Fused(TI + Day) image• Wide FOV coverage• Ability to see beacon lights and thermal image simultaneously• Imaging in the presence of dust and smoke• Day light camera with low Light level imaging capability• Day and Night operation

Technology Involved: Development of DNS involved development of following technologies

- Development of uncooled TI and Day camera in periscopic mode
- Development of IR/Visible/Eyepiece Optics module
- Development of a miniaturized fusion board for electronic image fusion of TI and Day camera images
- Development of Interface board and power supply board catering for power of various modules, BITE and serial link/USB interfaces with different modules
- Development of Binocular OLED Eyepiece to provide unit magnification image
- Development of form-fit mechanical casing of DNS for Defogging, sealing and EMI/EMC

All the above technologies were successfully developed at IRDE(DRDO), Dehradun.

Interested Industry may write to Director, IRDE, Dehradun at the following address:

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Dehradun-248008
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2. Director, DITM, DRDO HQ.
Min of Defence, DRDO Bhawan,
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Rajaji Marg, New, Delhi-110011
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3. Mr Vipin Sharma, Joint Director (Technology)
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Format for Seeking Expression of Interest (EOI)

- (a) Memorandum and Articles of Association (Should be incorporated as per Indian Companies Act, 1956)
- (b) Certificates of registration as a manufacturing unit, if any.
- (c) Balance Sheet for the preceding three years.
- (d) Income Tax returns for the preceding three year period
- (e) Details of shareholding/ownership pattern especially foreign partners/ shareholders, foreign employees, directors, etc. The company must adhere to the prevailing Govt of India policies and regulations on Foreign Direct Investment (FDI)/DIPP norms as applicable.
- (f) Annual budget for R&D during last three years.
- (g) Numbers and details of IPR or patents, etc., held by the company.
- (h) Number of technically or professionally qualified personnel.
- (i) Record of past performance (e.g., Supply orders executed against of Ministry of Defence orders, Public Sectors and Paramilitary Forces, if any).
- (j) Availability of adequate infrastructure (List of machines and their production capacities) and technical expertise.
- (k) List of Testing and Support equipments
- (l) ISO/ ISI certification or any other certification
- (m) Relevant clearances form the authorities/ ministries (if any)
- (n) Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.
- (o) Capacity/capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.