



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
Powai, Mumbai 400076.

Ref. PR No. 1000052221

Rfx. No. 6100002745

Item Description: Thermal Imaging Camera

Sr. No.	Item Description	Detailed Technical Specification	Technical Compliance (Yes / No)	Additional Information (if any)
1.	Thermal Imaging Camera and accessories	Detector resolution: 640 x 480 (307,200 pixels) IFOV with standard lens: ≤ 0.93 mRad Field of view with standard lens: $\leq 34^\circ \text{H} \times 25.5^\circ \text{V}$ Minimum focus distance: ≤ 15 cm Camera focus: Should have remote focus operation IR – Blending: Picture-in-Picture (PIP), IR/Visible alarm, Full IR, Full visible light and with detailing option Thermal sensitivity (NETD): $\leq 0.040^\circ \text{C}$ at 30°C target temp (40 mK) Filter mode: Required, NETD improvement Level and span: Auto and manual scaling in software Auto toggle between manual and auto modes: Required through software Minimum span (in manual mode): 0.1°C in software Minimum span (in auto mode): $< 1.0^\circ \text{C}$ in software Built-in digital camera: 5 MP Frame rate: ≤ 9 Hz Digital zoom: Variable up to 16x		

	<p>Image & Video capture mode: Fully radiometric and Non radiometric</p> <p>Video recording: Required</p> <p>Export file formats: BMP, GIF, JPEG, PNG, TIFF, AVI</p> <p>Remote display viewing: Yes, see the live stream of the camera display on PC</p> <p>Remote control operation: Yes, through ethernet</p> <p>Temperature measurement range: -10 °C to +1200 °C</p> <p>Accuracy: ± 2 °C or ± 2 %, whichever is greater</p> <p>Reflected background temperature compensation: Required</p> <p>Transmission correction: Required</p> <p>Color Palettes: Min 8 no of palettes</p> <p>Spot temperature: Yes (hot and cold spot markers) with multiple spots</p> <p>User-definable spot markers: Required, Area (with Min, Avg, Max & pixel are) & Spot</p> <p>Live line markers: Required, On-screen line marker with graph</p> <p>Color alarms: Temperature alarms</p> <p>Infrared spectral band: 8 μm to 14 μm (long wave)</p> <p>Operating temperature: 10 °C to +50 °C</p> <p>Storage temperature: 10 °C to +50 °C</p> <p>Relative humidity: 10 % to 95 % non-condensing</p> <p>Electromagnetic compatibility: EN 61326-1:2013 IEC 61326-1:2013; (Industrial)</p> <p>Vibration: IEC 60068-2-26: 3G, 11–200 Hz, 3 axis</p> <p>Shock: IEC 60068-2-27: 50G, 6 ms, 3 axis</p> <p>Size (H x W x L): OEM to be specified</p> <p>Weight: ≤ 1 kg</p>		
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