No: AIIMS/R/CS/DST/01/2021/NOC/

Date: 06.08.2021

Call for Objection

Subject: Inviting comments/objection, if any before declaring proprietary article for procurement of "FLIR E85 24° Infrared Camera with associated software and hardware" for DST Project at AIIMS, Raipur.

DST Project AIIMS, Raipur has to procure FLIR E85 24° Infrared Camera with associated software and hardware through Proprietary Article basis.

The proposal submitted by M/s FLIR SYSTEM AB, Sweden who is sole manufactures and M/s Hi-Tech System & Services Ltd. Kolkata is the Local Agent of this item along with Proprietary Article Certificate are attached & uploaded on CPP Portal & Institute website.

The above documents are being uploaded for open in formation to submit objections, comments if any from any manufacturer/supplier before declaring proprietary article of the said equipment/items to be procured, within 10 days (i.e.16.08.2021) from the date of issuance/uploading of the notification.

The objection should be raised in the technical compliance sheet as enclosed, if any Firm claiming suitability of their product with respect to specification mentioned.

The comments should be sent to the office of Central Store Office on above address at AIIMS Raipur in a sealed envelope with above reference on sent to respective mail address storesofficer.cp@aiimsraipur.edu.in/store@aiimsraipur.edu.in on before 16.08.2021 up to 05:00PM from the date of uploading on institutional website, failing which it will be presumed that any other manufacture/vendor is having no comment to offer ard case will be decided on merits.

Sr. Procurement cum Stores Officer
AIIMS Raipur (CG)

वरिष्ठ खर(, एह भंडार अधिकारी
Sr. Procurement cum Stores Officer
अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छ.ग.)
All India Institute of Medical Sciences, Raipur (C.G.)

Enclosure:-

1. PAC Certificate by Manufacturer.
2. PAC Certificate by Department.
3. Technical Specification.

◆FLIR | The World's Sixth Sense®

PROPRIETARY CERTIFICATE

2nd Mar. 2021

TO WHOMEVER IT MAY CONCERN

This is to certify that the FLIR E85 and Exx Series (E75/E95) Thermal Camera is a Proprietary product manufactured by **FLIR SYSTEMS AB** at our manufacturing unit Danderyd, Sweden and Head office located at Antennvägen 6, 187 66 Täby, Sweden.

FLIR MSX® (Multi-Spectral Dynamic Imaging) is the registered under FLIR Thermal Camera only. It adds visible light details to thermal images in real time for greater clarity, embedding edge and outline detail onto thermal readings. Unlike image fusing (merging of a visible light and thermal image), MSX® does not dilute the thermal image or decrease thermal transparency.

FLIR Model E53 / E75/ E85 E/95 and T5xx Series cameras now feature **UltraMax™**, a unique image processing feature that significantly improves the IR resolution and sensitivity of the cameras. **UltraMax™** images have four times the thermal pixels, twice the resolution, and 50% greater sensitivity than standard unprocessed images. Images are viewed and processed in FLIR Tools software for PC's. **UltraMax™** images allow users to zoom in on smaller heat anomalies, get more accurate measurements and see more detail than with previous un-processed images.

<40mK Sensitivity camera with Movable and Re-Sizable Picture in Picture is an unique feature of FLIR Exx Series.

It is not manufactured by any other firms as the best of our knowledge.

Also we are the only manufacturer of Thermal Imaging Camera who are providing 10 years warranty on Infrared Detector.

For FLIR Systems India Pvt. Ltd.

Authorized Signatory

Mr. Ajay Singh – GM (Sales)
ajay.singh@flir.com

निदेशक / DIRECTOR
अखिल भारतीय आयुर्विज्ञान संस्थान
All India Institute of Medical Sciences
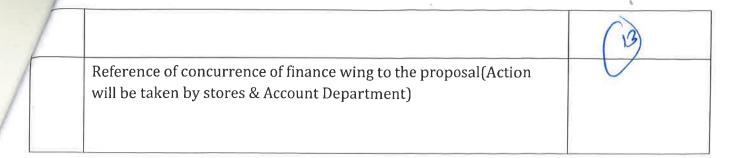रायपुर (छत्तीसगढ़) Raipur (Chhattisgarh)

All India Institute of Medical Sciences, Raipur (Chhattisgarh)
Tatibandh, GE Road,
Raipur-492 099 (CG)
www.aiimsraipur.edu.in

Proprietary Article Certificate

File Number and Reference		
1	Description of article	FLIR E85 24° Infrared Camera with associated software and hardware
2	Forecast of quantity/annual requirement	01(ONE TIME)
3	Approximate estimated value for above	
4	Maker's name and address	~~Teledyne FLIR LLC, USA~~ FLIR SYSTEMS AB SWEDEN
5	Name(s) of authorised dealers/stockists	HI-TECH SYSTEMS & SERVICES KOLKATA 14.07.21
6	I approve the above purchase on PAC basis and certify that:- Note- Tick to retain only one out of (b), (c-1) or (c-2) whichever is applicable and cross out others. Please do confirm (a) by ticking it – without which PAC certificate will be invalid.	
6 (a)	This is the only firm who is manufacturing /stocking this item.AND	✓
6 (b)	A similar article in not manufacturing/sold by any other firm,which could be used in lieu OR	
6 (c-1)	No other make/brand will be suitable for following tangible reasons (like OEM/warranty spares): OR	✓
	The item is required for the study and development of dynamic infrared Thermography(DIRT) device in the project entitled "Postoperative non invasive monitoring device for micro-vascular free flaps in microsurgical reconstruction in head and neck tumors", in the Department of ENT, Head and Neck Surgery. This firm also provides camera cores with associated hardwares and softwares for custom thermography device manufacturing. In this project we will use this camera core for development of dynamic infrared thermography device and will compare with the above mentioned device. This can't be possible with other well known infrared camera manufacturer of this class.	
6 (c)	No other make/brand will be suitable for following intangible reasons (if PAC was also given in the last procurement cycle, please also bring out efforts made since then to locate more sources): OR	✓

		13
Reference of concurrence of finance wing to the proposal(Action will be taken by stores & Account Department)		

History of PAC purchase of this item for past three years may be given below (if any)				
Name of the Supplier				
Order/Tender reference & Date	Quantity Ordered	₹ Basic Rate on order (₹)	Adverse Performance Reported if any	

Sign of the approving officer _____

निदेशक / DIRECTOR. 2021
अखिल भारतीय आयुर्विज्ञान संस्थान
All India Institute of Medical Sciences
रायपुर (छत्तीसगढ़) Raipur (Chhattisgarh)

Date: __08 July 2021.__

Officer's Designation_____DIRECTOR & C.E.O.
AIIMS RAIPUR.

Complete Description of items (Specification Model)	
Specification of Infrared Camera	
Sr. No.	**Model: FLIR E85 24 degree**
1	IR resolution : More than 110000 detector pixels in camera
2	Thermal sensitivity/NETD - <40 mK,
3	Field of view (FOV) - 24° × 18°+ 2 deg
4	Minimum focus distance - 0.15 m (0.49 ft.),
5	Spatial resolution (IFOV) - 1.09 mrad/pixel,
6	Image frequency –30 Hz
7	Focus–Continuous, one shot & manual
8	Digital zoom – 1-4x continuous
9	Detector type -Focal plane array (FPA), uncooled microbolometer
10	Spectral range –7.5–14 μm
11	Display –Touch screen, 4.0 in. LCD, 640 × 480 pixels
12	Image adjustment –Auto, Auto max, Auto min & manual
13	Image modes - IR image, visual image, picture in picture, thumbnail gallery
14	Picture in Picture –Resizable & movable IR area on visual image
15	Object temperature range - –20°C to +120°C (–4°F to +248°F), 0°C to +650°C (+32°F to +1202°F)&+300°C to +1200°C (572–2192°F)
16	Accuracy - ±2°C (±3.6°F) or ±2% of reading
17	Spotmeter - 3 in live mode
18	Area - 3 in live mode
19	Automatic hot/cold detection - Auto hot or cold spotmeter markers within area
20	Color alarm (isotherm) – Above, below, interval, condensation & insulation
21	Emissivity correction - Variable from 0.01 to 1.0 or selected from materials list
22	External optics/windows correction – Automatic, based on inputs of optics/window transmission and temperature
23	Color palettes - Arctic, Gray, Iron, Lava, Rainbow and Rainbow HC
24	Image storage- Standard JPEG, including measurement data (Infrared-only mode)
25	Voice Annotation - 60 seconds (via Bluetooth)
26	Text Annotation - Text from predefined list or soft keyboard on touch screen
27	Laser distance meter information – Yes
28	Area measurement information - Yes
29	Report generation – In std software
30	Radiometric infrared-video recording - RTRR (.csq)
31	Non-radiometric IR video recording - H.264 to memory card
32	Visual video recording - H.264 to memory card
33	Radiometric IR video streaming - Yes: over UVC or RTSP (Wi-Fi)
34	Non-radiometric IR video streaming - H.264 (AVC) over RTSP (Wi-Fi), MPEG4 over RTSP (Wi-Fi), MJPEG over UVC and RTSP (Wi-Fi)
35	Visual video streaming - Yes

36	Built-in digital camera- 5 MP with LED light
37	Laser - Activated by dedicated button
38	Interfaces - USB 2.0, Bluetooth, Wi-Fi, DisplayPort
39	Battery type - Rechargeable Li ion battery
40	Battery operating time - > 2.5 hours at 25°C (68°F) and typical use
41	Charging time –2.5 h to 90% capacity, charging status indicated by LED's
42	Power management - Automatic shutdown and sleep mode (user selectable)
43	AC operation - AC adapter, 90–260 VAC input, 50/60 Hz
44	Operating temperature range - −15°C to +50°C (+5°F to +122°F)
45	Storage temperature range - −40°C to +70°C (−40°F to +158°F)
46	Humidity (operating and storage) - EC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) / 2 cycles
47	Encapsulation - IP 54 (IEC 60529)
48	Shock - 25 g (IEC 60068-2-27)
49	Vibration - 2 g (IEC 60068-2-6)
50	Safety - EN/UL/CSA/PSE 60950-1

Note: Keep below specification in Additional Specification
Additional Specifications
FLIR Thermal Studio Pro with associated hardware
• Professional Inspection Reports
• The software should provide Build reports with more than 100 images quickly with fully customizable templates, overlays, and formulas.
• Streamline thermal analysis
• The software should provide advanced tools such as Batch Processing and Magic Wand accelerate post-processing tasks.
• Enhance Thermal Videos
• Record and show the findings more clearly by analyzing, recording, segmenting, and editing thermal video.
• Software Subscription Period
• Initial software subscription period is 1 year. This can be increased later as per project requirement.
• Portable Hardware Platform:
• Minimum Intel core i3 7th gen (or AMD Ryzen 3 3300U), 4GB DDR4 RAM, 500GB HDD (or 256GB SSD), 14" display with windows 10 OS. The thermal pro software should be installed in this portable hardware platform which will be used in various places for field testing.

Technical Specifications Compliance report

Sr. No.	Required Specification	Specification Offer by Firm	Deviation (if any)	Remark
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