



**COLLEGE OF ENGINEERING KIDANGOOR**  
(Under Co-operative Academy of Professional Education, Govt. of Kerala)  
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No:CEK/D/315/2022

Dated: 20.05.2022

### QUOTATION NOTICE

Competitive quotations are invited from qualified firms for the supply of two numbers of **Thermal Imaging Camera** with specification mentioned below :

| Serial no. | Name                   | Specifications              | Quantity  |   |
|------------|------------------------|-----------------------------|---|---|
| 1          | Thermal Imaging Camera | Thermal pixel size          | 12 $\mu$ m  | 2 |
|            |                        | Thermal resolution          | 19,200 pixels (160 $\times$ 120)  |   |
|            |                        | Thermal sensitivity         | 70 mK   |   |
|            |                        | Object temperature range(s) | -20 $^{\circ}$ to 120 $^{\circ}$ C (-4 $^{\circ}$ F to 248 $^{\circ}$ F) 0 $^{\circ}$ C 400 $^{\circ}$ C (32 $^{\circ}$ F to 752 $^{\circ}$ F)                  |   |
|            |                        | Certifications              | MFi (iOS version), RoHS, CE/FCC, CEC-BC, EN62133  |   |
|            |                        | Operating temperature       | 0 $^{\circ}$ C to 35 $^{\circ}$ C (32 $^{\circ}$ F to 95 $^{\circ}$ F), battery charging 0 $^{\circ}$ C to 30 $^{\circ}$ C (32 $^{\circ}$ F to 86 $^{\circ}$ F) |   |
|            |                        | Non-operating temperature   | -20 $^{\circ}$ C to 60 $^{\circ}$ C (-4 $^{\circ}$ F to 140 $^{\circ}$ F)   |   |

The last date and time for receiving quotations: 31-05-2022, 11.00 AM

Date and time for opening quotations: 31-05-2022, 3.00 PM

The rates of Govt Quotations are applicable for these quotations also. The decision taken in the matter by the undersigned will be final.

  
**PRINCIPAL**

Encl: Detailed specification of Thermal Imager is attached herewith



## Thermal imager specifications

|                                |   |
|--------------------------------|---|
| Thermal pixel size             | 12 $\mu\text{m}$  |
| Thermal resolution             | 19,200 pixels (160 $\times$ 120)  |
| Thermal sensitivity            | 70 mK   |
| Object temperature range(s)    | -20 $^{\circ}\text{C}$ to 120 $^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to 248 $^{\circ}\text{F}$ ) 0 $^{\circ}\text{C}$ to 400 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 752 $^{\circ}\text{F}$ )   |
| Certifications                 | MFi (iOS version), RoHS, CE/FCC, CEC-BC, EN62133  |
| Operating temperature          | 0 $^{\circ}\text{C}$ to 35 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 95 $^{\circ}\text{F}$ ), battery charging 0 $^{\circ}\text{C}$ to 30 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 86 $^{\circ}\text{F}$ )                             |
| Non-operating temperature      | -20 $^{\circ}\text{C}$ to 60 $^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$ )  |
| Size (w $\times$ h $\times$ d) | 68 $\times$ 34 $\times$ 14 mm (2.7 $\times$ 1.3 $\times$ 0.6 in)  |
| Weight (incl. battery)         | 36.5 g  |
| Drop tested                    | Drop from 1.8 m (5.9 ft)  |
| Spectral range                 | 8 – 14 $\mu\text{m}$  |
| Visual resolution              | 1440 $\times$ 1080  |
| HFOV / VFOV                    | 50 $^{\circ}$ $\pm$ 1 $^{\circ}$ / 43 $^{\circ}$ $\pm$ 1 $^{\circ}$   |
| Frame rate                     | 8.7 Hz  |
| Focus                          | Fixed 15 cm – infinity  |
| Measurement                    |   |
| Accuracy                       | $\pm$ 3 $^{\circ}\text{C}$ (5.4 $^{\circ}\text{F}$ ) or $\pm$ 5%, (59 $^{\circ}\text{F}$ to 95 $^{\circ}\text{F}$ ) and the scene is within 5 $^{\circ}\text{C}$ to 120 $^{\circ}\text{C}$ (41 $^{\circ}\text{F}$ to 248 $^{\circ}\text{F}$ ) |
| Emissivity correction          | Matte, Semi-Matte, Semi-Glossy, Glossy  |
| Measurement correction         | Emissivity; Reflected apparent temperature (22 $^{\circ}\text{C}$ / 72 $^{\circ}\text{F}$ )   |
| Shutter                        | Automatic/Manual  |
| Power                          |   |
| Battery life                   | Approximately 1 hr  |
| Battery charge time            | 40 min  |
| Video                          | Male Lightning (iOS), Male USB (Android)  |
| Charging                       | Female USB (5V/1A)  |
| App                            |   |
| Image presentation modes       | Infrared, visual, MSX <sup>®</sup>  |
| VividIR                        | Yes   |
| Palettes                       | Gray (white hot), Hottest, Coldest, Iron, Contrast, Arctic, Lava, and Color Wheel   |
| Video and image capture        | Video and photo, saved as 1440 $\times$ 1080  |
| File formats                   | Radiometric JPG, MPEG-4 (file format MOV (iOS), MP4 (Android))  |
| Spot measurements              | Hottest, Coldest, and 3 spot measurement  |
| Adjustable MSX distance        | 0.3 m – infinity  |
| Visual battery indicator       | 0-100%  |



*[Signature]*

**PRINCIPAL**

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