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# ST640

* Low-cost, temperature gun-style infrared thermometer
* Temperature range: -35°C to 550°C
* Laser sighting with on/off switch
* Fixed emissivity 0.95, ideal for use on rubber, wood, asphalt, plastics, painted surfaces, organic materials and many more
* Backlit display
* Audible alarms

**ST642**

* All the features of the ST640, plus:
* Adjustable emissivity setting for accurate readings on a variety of surfaces
* Type K thermocouple input
* Automatic emissivity adjustment using the thermocouple measurement

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|  | ST640 | ST642 |
| Emissivity Setting | Fixed at 0.95 | Adjustable 0.1 to 1.0 |
| Type K Thermocouple Input | NO | YES |
| eSmart Emissivity Correction | NO | YES |
| Audible Alarm | YES | YES |
| CIS Visual Alarm | YES | YES |
| °C/°F Switchable | YES | YES |
| Display Backlight | YES | YES |
| Laser Sight, Switchable | YES | YES |
| Max, Min, Avg, ΔT | YES | YES |
| Carrying Case Included | YES | YES |

**General Specifications**

Field of View

12:1

Temperature Range

-32°C to 535°C (-25°F to 999°F)

Accuracy\*

±3°C (±5°F) from -32°C to -20°C (-25°F to -4°F)  
±2°C (±3°F) from -20°C to 100°C (-4°F to 212°F)  
±2% above 100°C (212°F)

Spectral Range

5 to 14 μm

Repeatability

±1°C (±2°F)

Resolution

0.1°C (0.1°F)

Response Time

500 ms

Operating Temperature

0°C to 50°C (32°F to 122°F), 10% to 90% RH

Power Off

Automatic after approximately 7 seconds

Display

LCD with backlighting

Battery Type

9 V, PP3 (not supplied)

Dimensions

180 x 130 x 40 mm

Weight

195 g

Please note: The given measured spot size contains 90% of the energy detected by the sensor. We normally recommend the target is at least twice as large as the given measured spot for maximum accuracy. The thermometer may be used at longer distances than the above diagram shows, with a proportionally larger measured spot