

ST633 and ST642

Configurable Handheld Infrared Thermometers



- Wide temperature range
- Built-in laser pointer to improve aim
- Narrow field of view
- Input for type K thermocouple (ST642)
- Adjustable / selectable emissivity setting
- Adjustable high and low alarms, audible and visual (ST642)
- Backlit display with Reading Hold
- °C / °F switchable
- Fast sampling time
- Auto-hold and power off
- High quality construction

FEATURES

	ST633	ST642
Emissivity Setting	Selectable 0.95, 0.7, 0.3	Adjustable 0.1 to 1.0
Type K Thermocouple Input	NO	YES
eSmart Emissivity Correction	NO	YES
Colour Changing Display for Alarm	NO	YES
Tripod Mounting Thread	NO	YES
Audible Alarm	YES	YES
°C/°F Switchable	YES	YES
Backlight	YES	YES
Laser Sight Switchable On/Off	YES	YES
Max/Min/Avg/ΔT	YES	YES
Carrying case included	YES	YES
10 Point Memory	YES	NO

SPECIFICATIONS

Temperature Range	ST633: -35°C to 630°C (-31°F to 1,166°F) ST642: -32°C to 535°C (-25°F to 999°F) Type K Thermocouple input: -200°C to 1380°C (-328°F to 2516°F)
Accuracy (ST633)*	± 2.5°C (± 4.5°F) from -35°C to 0°C (-31 to 32°F), ± 1.5°C (± 2.7°F) from 0°C to 100°C (32 to 212°F), ± 2% above 100°C (212°F)
Accuracy (ST642)*	± 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) Type K Thermocouple input: ± 1.5% + 1° C/F
Optics	12:1 divergent (see OPTICS)
Spectral Range	5 to 14 μm
Repeatability	±1°C (±2°F)
Resolution	0.1°C (0.1°F)
Response Time	500 ms
Ambient Range	0°C to 50°C (32°F to 122°F), 10% to 90% RH
Power OFF	Automatic after approx. 7 s
Display	LCD with backlighting
Battery Type	9 V, PP3
Dimensions	180 x 130 x 40 mm (ST642) 156 x 100 x 32 mm (ST633)
Weight	195 g (ST642) / 133 g (ST633)

*Accuracy is given at ambient temperature of 25°C (77°F)

The ST633 and ST642 are low-cost, high-quality handheld infrared thermometers with laser sighting and a large backlit LCD display.

A wide temperature range covers most general industrial applications.

Both units offer a narrow 12:1 field of view, with a small diameter measurement area allowing the unit to be precisely aimed.

The default emissivity setting is 0.95, making the ST633 and ST642 ideal for most organic materials and non-reflective (painted, oxidised or anodised) metals. The emissivity setting is selectable (ST633) or adjustable from 0.1 to 1.0 (ST642), and can be set automatically on the ST642 by using the thermocouple input and eSmart feature.

Both models have adjustable audible alarms. The ST642 has visual alarms: the colour of the display changes when the target temperature exceeds the alarm set point.

Readings can be taken in °C or °F, and when the trigger is released the last measurement is held for approximately 7 seconds before the unit automatically powers off.

These thermometers will operate in ambient temperatures from 0°C to 50°C and are powered by a standard PP3, 9V battery.

Each unit is supplied with a soft carrying case.

OPTICS

ST633 and ST642

