

ST61, ST81

Portable infrared thermometers



Non-contact temperature measurement



Raytek knows temperature, with decades of thermometry experience.

Today, we offer the latest in non-contact IR temperature test tools and application expertise. Here's what the Raytek ST61 and ST81 offer you:

- Laser guided sighting system for easy targeting with 1 % accuracy
- Data logging— 12 points for the ST61, 99 points for the ST81
- Advanced optics to measure smaller targets at greater distances
- Adjustable emissivity for more accurate temperature measurements
- Selectable MAX, MIN, DIF and AVG functions that display values instantly with Hi/Lo Alarm
- Expanded measurement range (see specifications on back)
- Optional probe accessory available for dual contact and non-contact temperature measurements

Comparison chart	ST61	ST81
IR temperature range	-32°C to 600°C (-25°F to 1100°F)	-32°C to 760°C (-25°F to 1400°F)
Accuracy	< 0°C: $\pm (1^\circ\text{C} + 0.1^\circ/1^\circ\text{C})$; $\geq 0^\circ\text{C}$: $\pm 1\%$ of reading or $\pm 1^\circ\text{C}$, whichever is greater < 32°F: $\pm (2^\circ\text{F} + 0.1^\circ/1^\circ\text{F})$; $\geq 32^\circ\text{F}$: $\pm 1\%$ of reading or $\pm 2^\circ\text{F}$, whichever is greater	
Repeatability	$\pm 0.5\%$ of reading or $\pm 1^\circ\text{C}$ (2°F), whichever is greater	
Display resolution	0.1°C (0.1°F)	
Spectral response	8 μm to 14 μm	
Response time (95%)	< 500 ms	
Distance: spot (90% energy)	30:1	50:1
Laser sighting	Single laser, output <1 mW Class II, wavelength 630 nm to 670 nm	
Emissivity	Digitally adjustable from 0.10 to 1.00 by 0.01 or via built-in table of common materials	
Data storage	20 points	99 points
Communication	none	none
Relative humidity	10% to 90% RH non-condensing up to 30°C (86°F)	
Operating temperature	0°C to 50°C (32°F to 122°F)	
Storage temperature	-20°C to 60°C (-4°F to 140°F)	
Power	2-AA/LR6 batteries (alkaline or NiCd)	2-AA/LR6 Batteries or USB connection when used with a PC
Battery life	12 hours with laser and backlight on; 100 hours with laser and backlight off, at 100% duty cycle (thermometer continuously on)	



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