

Target size **φ24 mm**  Temperature measurement range -50°C to 500°C

## HORIBA

## New Non-contact, handheld type INFRARED THERMOMETERS





IT-550F

(For Field Use)

management for

maintenance for

power supplies.

food items and

preventative

Temperature



IT-550l

(For laboratory Use)

measurement for

Temperature

experiments.

laboratory



IT-550S (For Laboratory Use Sport Focus Model) Temperature measurement for IC surfaces and other small areas. Scheduled for sale in April, 1999.

## Realization of a splashresistant, non-contact thermometer.

The IT-550 Series thermometers are splash-resistant, so they can be safely used with wet hands, and in wet environments and rain. This instrument is ideally suited for monitoring the temperature of food items.

 IECIP54 (splash resistant): no adverse effects resulting from exposure to splashed water from any direction.

## Realization of a $\varphi$ 24/1000 mm (IT-550F/L)

The Horiba IT-550 Series non-contact thermometers are equipped with a twin-beam marker that enables you to target the location that you want to measure quickly and accurately, and to confirm the measurement point at a glance. Choose from one of three models for an ideal match to your temperature measurement application! IT-550F is designed for field use, the IT-550L is for laboratory use, and the IT-550S is for making spot measurements. The IT-550F and IT-550L have a measurement field that is about 1/3 the size of previous models, allowing accurate temperature measurement of areas from a distance. The IT-550S has a measurement spot size of  $\varphi$ 2.5mm and a range of 70mm.



The Right Source For Your Test & Measurement Needs

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The IT-550 Series thermometers are equipped with a data hold function, and have both digital and analog outputs for connection to computers and printers for flexible data manipulation and output.

Data printout is possible by connecting the expansion kit\* to the IT-550F model (which is equipped with data hold), and the IT-550L and IT-550S units have an analog output that can be used to record data on a data logger or to process data using a personal computer. \*Expansion kit sold separately.



SPECIFICATIONS			
Model	IT-550F	IT-550L	IT-550S
Spectral response	8 to16µm		
Measurement temp. range	-50 to 500°C		
Display range (resolution)	-55.0 to 505.0°C (0.1°C)	-55 to 505°C (1°C) or -55.0 to 505.0°C (0.1°C)	
Accuracy	$\begin{array}{c} -50.0 \ \text{to} \ -0.1^{\circ}\text{C};\\ \text{within} \ \pm(10\% \ \text{of read}\\ \text{value} \ -2)^{\circ}\text{C}\\ 0.0 \ \text{to} \ 200^{\circ}\text{C}; \ \text{within}\\ \ \pm2^{\circ}\text{C}\\ 200.0 \ \text{to} \ 500.0^{\circ}\text{C};\\ \text{within} \ \pm(1\% \ \text{of read}\\ \ \text{value})^{\circ}\text{C}\\ \text{Conditions: case temperature} \ 18 \ \text{to} \ 28^{\circ}\text{C},\\ \text{relative humidity}\\ \ 55\%, \ \varepsilon=1.00 \end{array}$	-50.0 to -0.1°C (or -50 to -1°C); within $\pm (10\% \text{ of read value -2})^{C}$ 0.0 to 200°C (or 0 to 200°C); within $\pm 2^{\circ}$ C (or $\pm 2.0^{\circ}$ C) 200.0 to 500.0°C (or 200 to 500°C); within $\pm (1\% \text{ of read value})^{\circ}$ C Conditions: case temperature 18 to 28°C, relative humidity 55%, $\varepsilon$ =1.00	
Repeatability	Within ±1°C (0-50.0 to -0.1°C) Within ±0.5°C (0.0 to 500°C)	0.1°C display resolution: Within ±1°C (-50.0 to -0.1°C) Within ±0.5°C (0.0 to 500°C) 1°C display resolution: Within ±2°C (-50 to -1°C)	
Response time	1.6 sec. max. (95%)	0.7 sec. max. (95%) 1°C display resolution: 1.6 sec. max. (95%) 0.1°C display resolution:	
Target size	<i>φ</i> 24 ±3 mm / 1000 mm, (90% energy limit) <i>φ</i> 2.5 mm / 70 mm (planned)		
Emissivity setting	0.10 to 1.00 in 0.01 steps		
Sighting	Two-point laser marker		
Water resistance	IP54 (IEC529)		
Operating time, humidity	0 to 40°C, relative humidity 35 to 85%, and no condensation		
Power	One 9 V dry battery (6F22 or 6LR61), or special-purpose AC adapter		
Battery life	20 continuous hours using laser marker (alkaline battery)		
Dimensions/Weight	200 (L) ×47 (W) ×48 (H) mm ⁄ 280g (battery included)		
Functions	Data memory (130 points), printer output, RS-232C, auto off, screw hole for camera tripod.	Analog output (0 to 1V scaling function), RS-232C, Max./Min. value display, auto off, screw hole for camera tripod.	
Storage temperature	-20 to 55°C no condensation		
Standard accessories	Instruction manual, Carry case, hand strap, battery, opener for the battery lid.		

Note: Use of analog output, printer output, RS-232C, and the AC adapter requires the expansion kit option (sold separately)



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