



**High-accuracy  
Infrared Thermometer  
Handheld Models**

IT-545 Series

**CE**  
CE marking compliant

IT-545 (Actual size)



Distribuciones Industriales y Científicas S.L.

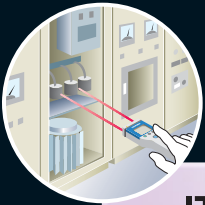
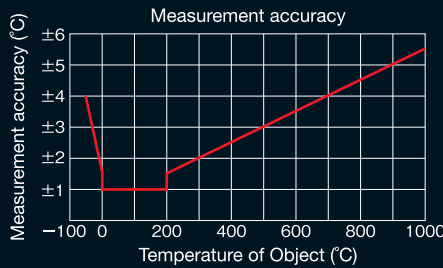
**ciencia e innovación**

# Industry-leading accuracy



Our unique thermopile sensor enables high accuracy ( $\pm 1^{\circ}\text{C}$ ), high repeatability ( $\pm 0.3^{\circ}\text{C}$ ), and fast response (within 0.8sec, 95%)

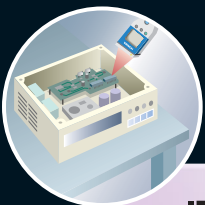
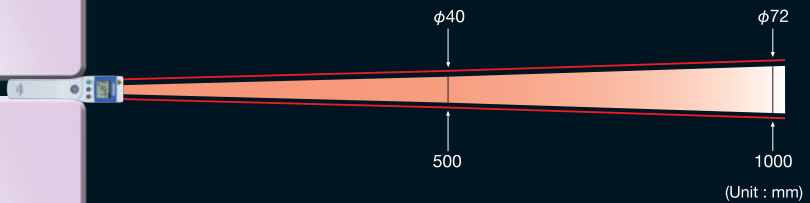
- Adoption of our unique thermopile sensor structure provides enhanced resistance to fluctuations in ambient temperature for very stable measurement with minimal drift.
- Years of successful development of infrared multi-layer filters are leveraged to identify the best wavelength regions and filter designs matched to sensor performance to ensure high accuracy temperature measurements.
- Exclusive in-house black body furnace technology produces superior uniform temperature conditions to deliver industry-leading characterization and calibration.
- Easy-to-use, compact & lightweight, simple, advanced design.
- Laser guide marker define measurement area for high precision
- Wide measurement area.
- Abnormal temperature warning by audio alarm and flashing marker



For routine maintenance work  
**Narrow-focus model**

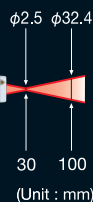
**IT-545N**  
 -50°C ~ 500°C  
 Twin beam marker  
 Upper/Lower temp alarm    Measurement-hold function

**IT-545NH**  
 -50°C ~ 1000°C  
 Twin beam marker  
 Upper/Lower temp alarm    Measurement-hold function



For measuring electronic components  
**Spot focus model**

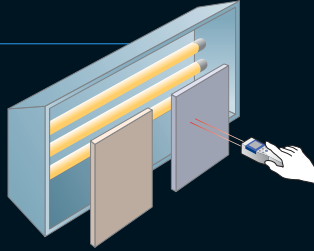
**IT-545S**  
 -50°C ~ 500°C  
 LED target marker  
 Upper/Lower temp alarm    Measurement-hold function



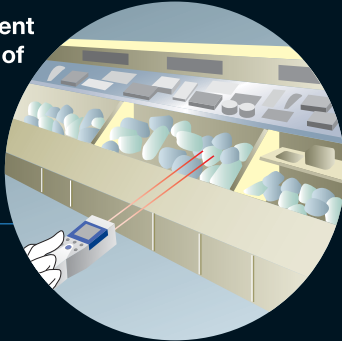
# Applications

## ■ For high-precision measurements

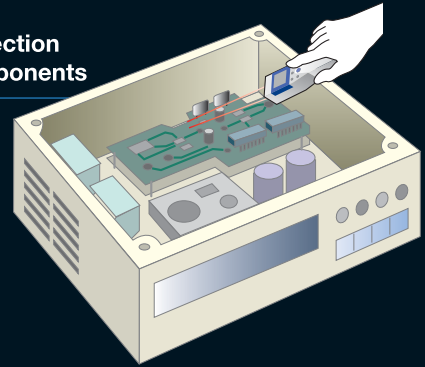
Comparison and inspection of thermal insulators



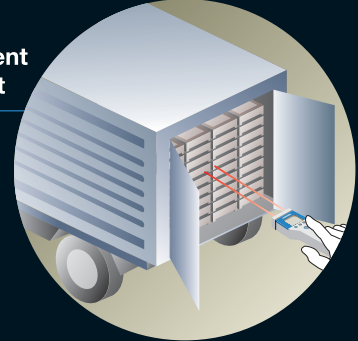
For food management such as inspection of refrigerated/frozen foods, cooking temperature, deep fryer oil temperature etc.



Overheating inspection of electronic components

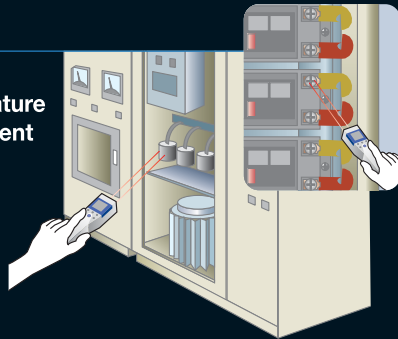


Temperature measurement for refrigerated transport



## ■ For standard measurements

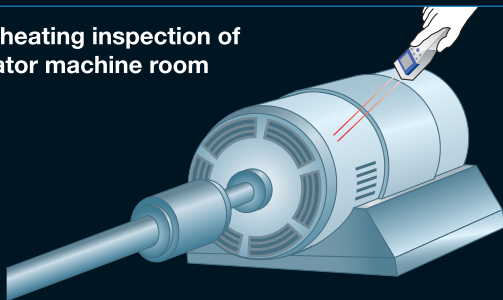
Inspection for abnormal temperature of electric equipment



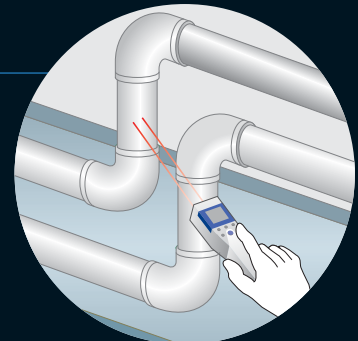
To confirm the efficacy of roof greening or heat-island prevention materials



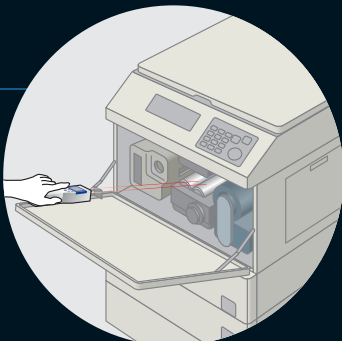
Overheating inspection of elevator machine room



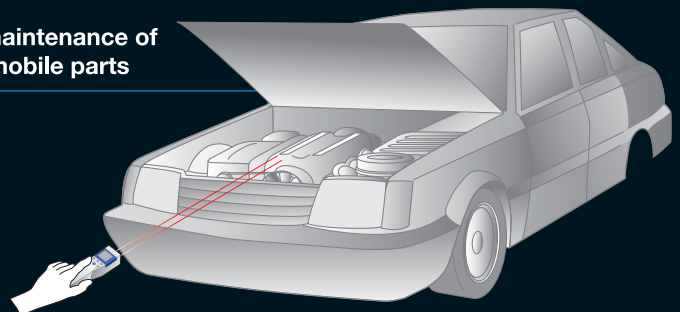
To confirm the surface temperature of pipe, checking overheating or freezing












Overheating inspection of copiers



For maintenance of automobile parts



Narrow-focus model		Spot focus model	
<b>IT-545NH</b>   		<b>IT-545N</b>   	
<b>IT-545S</b>   			
Measurement wavelength	8 to 14μm		
Measurement temp. range**	-50 to 1000°C		-50 to 500°C
Display temp. range	-55 to 1010°C		-55 to 505°C
Display resolution	0.1°C for 0.0 to 199.9°C 1°C for other than above		
Accuracy*2	-50 to -0°C ±(10% of reading -1.5)°C		
	0.0 to 199.9°C ±1.0°C		
	200 to 500°C ±(0.5% of reading +0.5)°C		
	501 to 1000°C ±(0.5% of reading +0.5)°C (Only for IT-545NH)		
Repeatability	-50 to -0°C ±1°C		
	0.0 to 199.9°C ±0.3°C		
	200 to 500°C ±1°C		
	501 to 1000°C ±1°C (Only for IT-545NH)		
Response time	Within 0.8sec (95%)		
Measuring diameter	ø40/500 mm (DS*3 12.5:1)		ø2.5/30 mm
Emissivity setting	0.10 to 1.00 in 0.01 increments		
Sight	Twin beam laser marker (Class 2)		LED spot marker
Operating temp. & humidity	0 to 50°C, 35 to 85% RH, no condensation		
Power	AAA batteries × 4		
Battery life	Approx. 8 hrs (continuous use under standard condition using manganese battery)		Approx. 25 hrs (continuous use under standard condition using manganese battery)
	Dimensions / Mass		
40(W) × 170(L) × 36(H) mm / Approx.140g (batteries included)			
Other functions	Upper/Lower temp alarm (between -55 and 1010°C)		Upper/Lower temp alarm (between -55 and 505°C)
	Max/Min values		Max/Min values
	Measurement-hold		Measurement-hold
	Auto power off		Auto power off
Accessories	AAA batteries × 4, carrying case, manual		

\*1: Fahrenheit and Celsius displays are available for the Americas.

\*2: Temp. 18°C to 28°C, Humidity 55%RH, Emissivity (ε)=1.00

\*3: DS = Distance to spot size

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