

**High-accuracy
Infrared Thermometer
Handheld Models**

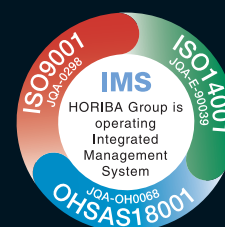
IT-545 Series



CE marking compliant



IT-545 (Actual size)

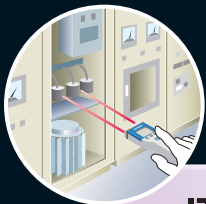
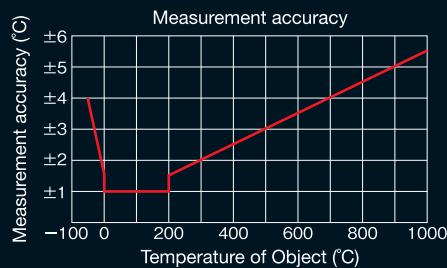


Industry-leading accuracy



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

$-50^\circ\text{C} \sim 500^\circ\text{C}$

Twin beam marker

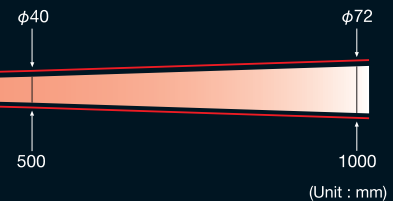
Upper/Lower temp alarm
Measurement-hold function

IT-545NH

$-50^\circ\text{C} \sim 1000^\circ\text{C}$

Twin beam marker

Upper/Lower temp alarm
Measurement-hold function



For measuring electronic components

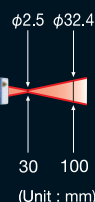
Spot focus model

IT-545S

$-50^\circ\text{C} \sim 500^\circ\text{C}$

LED target marker

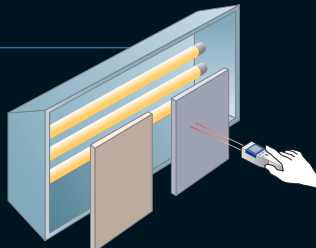
Upper/Lower temp alarm
Measurement-hold function



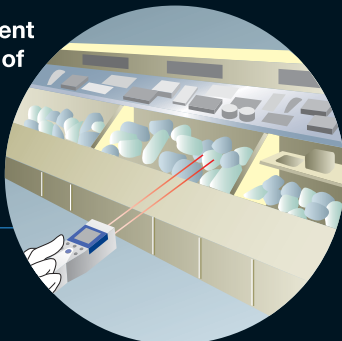
Applications

■ For high-precision measurements

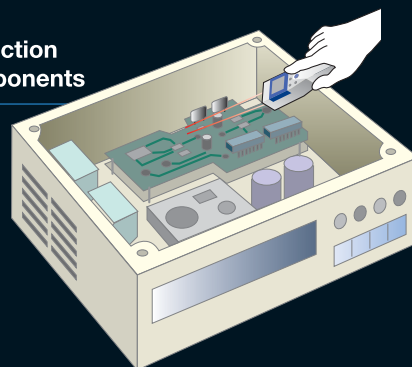
Comparison and inspection of thermal insulators



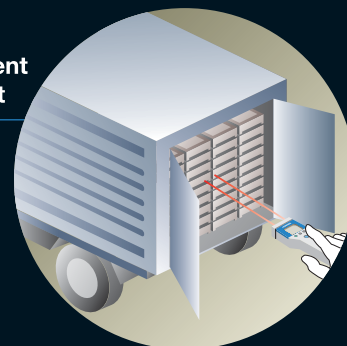
For food management such as inspection of refrigerated/frozen foods, cooking temperature, deep fryer oil temperature etc.



Overheating inspection of electronic components

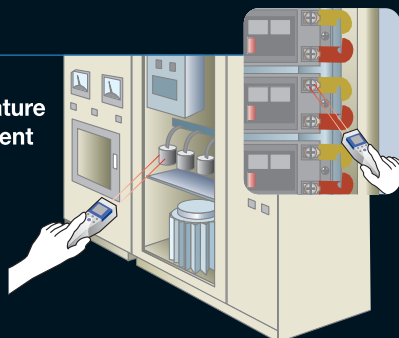


Temperature measurement for refrigerated transport

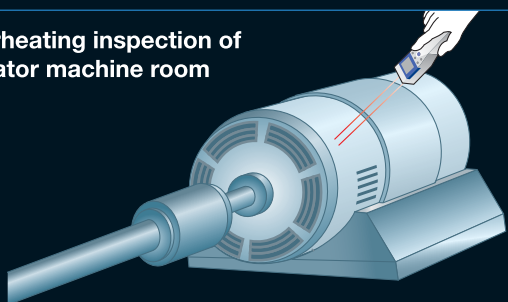


■ For standard measurements

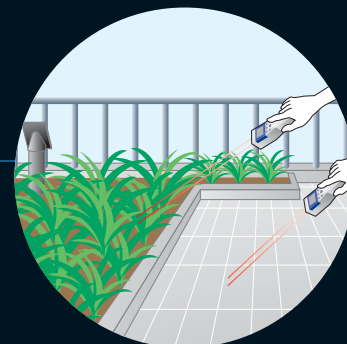
Inspection for abnormal temperature of electric equipment



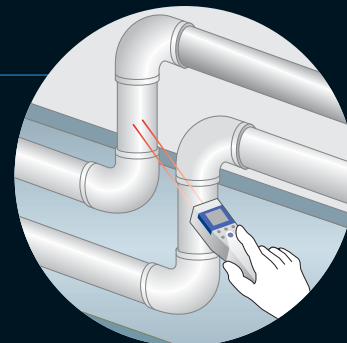
Overheating inspection of elevator machine room



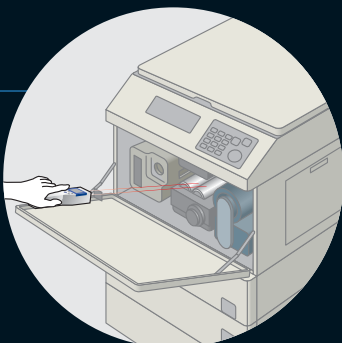
To confirm the efficacy of roof greening or heat-island prevention materials



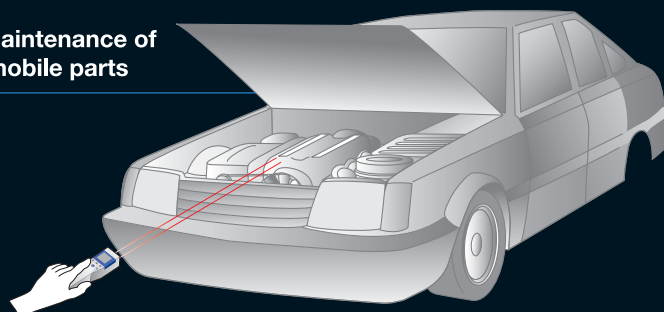
To confirm the surface temperature of pipe, checking overheating or freezing



Overheating inspection of copiers



For maintenance of automobile parts



Narrow-focus model			Spot focus model					
IT-545NH			IT-545N			IT-545S		
Twin beam marker			Upper/Lower temp alarm			Measurement-hold function		
Twin beam marker			Upper/Lower temp alarm			Measurement-hold function		
LED target marker			Upper/Lower temp alarm			Measurement-hold function		
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) Max/Min values Measurement-hold Auto power off		Upper/Lower temp alarm (between -55 and 505°C) Max/Min values Measurement-hold 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



Please read the operation manual before using this product to assure safe and proper handling of the product.

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