



## INFRARED THERMOMETER FT3700-20/ FT3701-20

Environmental Measuring Instruments



### Non-contact infrared thermometer featuring simple, one-touch measurement



Choose according to  
your measurement  
location.

### Two Models

**FT3700-20**

Distance : Spot

**12 : 1**

**Long-focus**

For measuring temperature  
over a wide area

**FT3701-20**

Distance : Spot

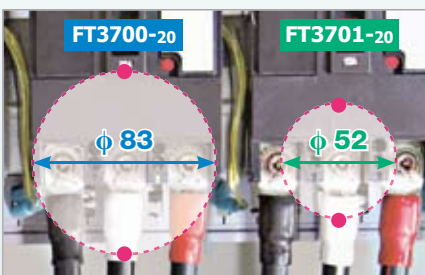
**30 : 1**

**Long-focus, Precise-field**

For measuring temperature  
at a single point

Identify the  
measurement  
location reliably.

### Two-point laser marker



Measure the average  
temperature inside a  
circle whose diameter  
is defined by the two  
indicated points.

Example of a circuit-breaker  
(At a distance of approx. 1 m)



Bright



ISO 9001  
JMI-0216



ISO 14001  
JQA-E-90091



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HIOKI company overview, new products, environmental considerations  
and other information are available on our website.



Simulated measurement

# Easily measure temperature in hazardous or unreachable locations



Locations that cannot be touched due to moving parts



Locations that pose the risk of electric shock



Unreachable locations

## Useful Functions

- MAX, MIN, DIF (MAX-MIN), AVG measurement
- Alarm function
- Emissivity ( $\epsilon$ ) can be set based on the measurement target
- Continuous measurement
- Backlight

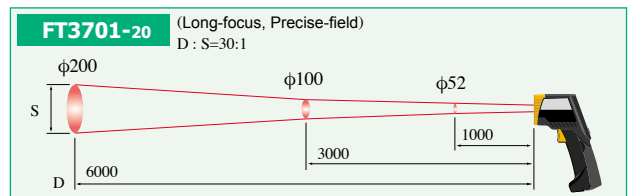
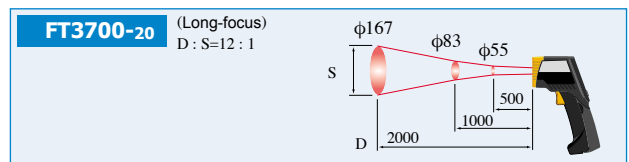
## Specifications

(Accuracy guaranteed for 1 year)

	FT3700-20	FT3701-20
Measurement temperature range	-60.0 to 550.0 °C (-76 to 1022 °F) Guaranteed accuracy range is -35 to 500°C. (-31.0 to 932.0 °F)	-60.0 to 760.0 °C (-76 to 1400 °F) Guaranteed accuracy range is -35 to 500°C. (-31.0 to 932.0 °F)
Accuracy	-60.0 to -35.1 °C (-76.0 to -31.1 °F) : Accuracy not specified -35.0 to -0.1 °C (-31.0 to 31.9 °F) : $\pm 10\% \text{rdg.} \pm 2 \text{ } ^\circ\text{C}$ 0.0 to 100.0 °C (-32.0 to 212.0 °F) : $\pm 2 \text{ } ^\circ\text{C}$ 100.1 to 500.0 °C (212.1 to 932.0 °F) : $\pm 2\% \text{rdg.}$ 500.1 to 550.0 °C (932.0 to 1022 °F) (FT3700-20) 500.1 to 760.0 °C (932.0 to 1400 °F) (FT3701-20) : Accuracy not specified	
Accuracy guarantee for temperature and humidity	23 °C $\pm 3 \text{ } ^\circ\text{C}$ (73 °F $\pm 5 \text{ } ^\circ\text{F}$ ) 80% RH or less (non-condensating)	
Temperature coefficient	Measurement accuracy $\times 0.1/ \text{ } ^\circ\text{C}$	
Response time	1 second (90%)	
Diameter of field of measurement	83 mm at 1000 mm (Distance : Spot = 12 : 1)	100 mm at 3000 mm (Distance : Spot = 30 : 1)
Detection element	Thermopile	
Sighting	Two-point laser marker Max 1mW (class 2), Red	
Measurement wavelength	8 to 14 $\mu\text{m}$ [Thermal emissivity compensation]0.10 to 1.00 by steps of 0.01	
Additional Functions	MAX/ MIN/ DIF (MAX-MIN)/ AVG measurement, Alarm function, Backlight function	
Operating temperature and humidity	0 to 50 °C (32 °F to 122 °F), 80%RH or less (non-condensating)	
Storage temperature and humidity	-10 to 50 °C (14 °F to 122 °F), 80%RH or less (non-condensating) 50 to 60 °C (122 °F to 140 °F), 70%RH or less (non-condensating)	
Applicable standards	EMC : EN61326 Laser : IEC60825-1 CLASS 2 LASER	
Power supply	LR03 alkaline battery $\times 2$ [Continuous operating time: Approx. 140 hours](When laser marker and backlight are OFF)	
Dimensions	Approx. 48 W $\times$ 172 H $\times$ 119 D mm (1.89" W $\times$ 6.77" H $\times$ 4.69" D)(excluding projections)	
Mass	Approx. 256 g (9.0 oz.) (including LR03 alkaline battery $\times 2$ )	
Accessories	Instruction manual, LR03 alkaline battery $\times 2$ (supplied with this product for initial use only), Carrying case $\times 1$	

## Measurement focus

D : Distance (mm) S : Spot (mm)



## INFRARED THERMOMETER FT3700-20

Long-focus

## INFRARED THERMOMETER FT3701-20

Long-focus, Precise-field

## Option

### BLACK BODY TAPE

(50mm $\times$ 10m, 1 roll) Withstands 180°C  $\epsilon=0.95$



\*Optional use of black body tape allows increased emissivity in order to obtain accurate temperature measurements on low-emissivity materials such as metals.



### Laser Product Caution Notice

A caution label is attached to the thermometer. Be sure to observe the operating precautions on the label.

## Related Products

### Use a Temperature HiTester with output for continuous temperature measurement applications.

- Measure a broad range of temperatures quickly and accurately at a resolution of 0.1°C.
- Use the optional INTERFACE PACK 3909 to output measurement data in real time for use by a recorder or computer.



TEMPERATURE HiTESTER 3444  
(With real-time output, narrow field measurement type)

TEMPERATURE HiTESTER 3445  
(With real-time output, fine surface measurement)

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