



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

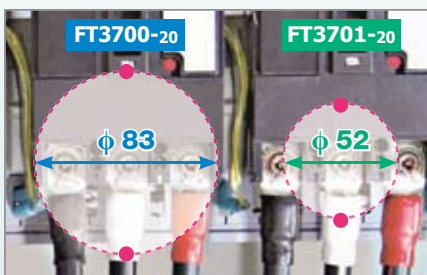
30 : 1

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



ISO14001
JQA-E-90091



www.hioki.com

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 (ϵ) can be set based on the measurement target
- Continuous measurement
- Backlight

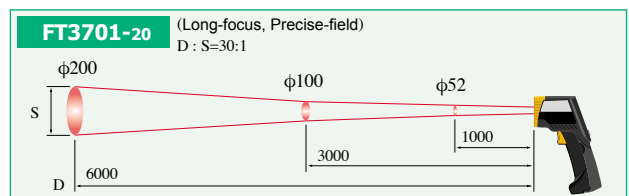
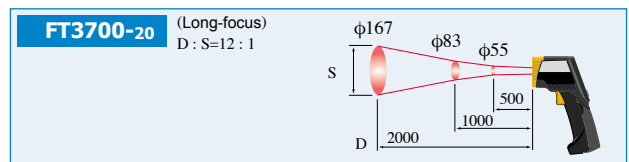
Specifications

(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 μm [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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