

Wide Measuring Range  
**400~3000°C!!**

**NEW**

**PORTABLE**

**2-color**

Non-Contact Thermometer

**THERMO-HUNTER**

**VF-3000**

# ***Long Focus & View Finder***

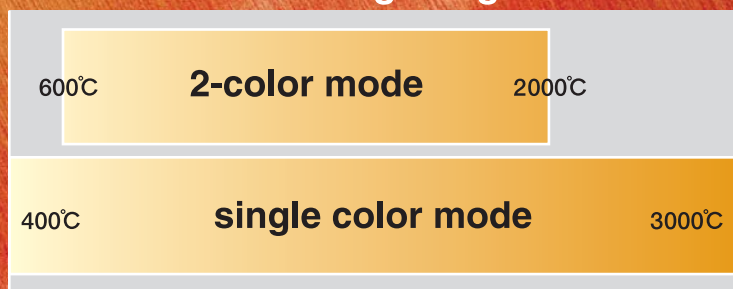
*2-color mode*

**600 ~ 2000°C**

*Single color mode*

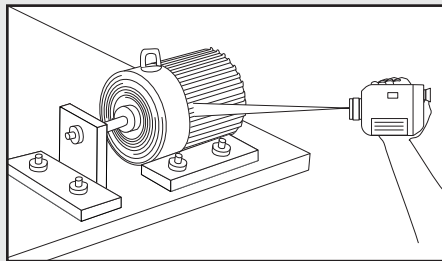
**400 ~ 3000°C**

**Measuring Range**

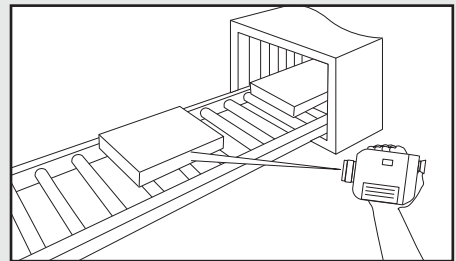


- Repeatability :  $\pm 1^{\circ}\text{C}$
- Field of view :  $\phi 20/4000\text{mm}$
- Response : 200msec
- Continuous measuring mode
- Hi/Lo alarm
- Light weight: 350g

# Portable 2-color Thermometer VF-3000



heat check for equipments



metal temperature coming from furnace.

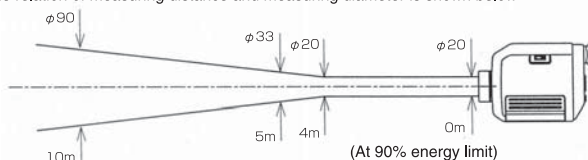
## Specification

<b>Model</b>	<b>VF-3000</b>
<b>Measuring Range</b>	600 to 2000°C (2-color) 400 to 3000°C (single color)
<b>Field of view</b>	φ20/4000mm (Ref. [Distance and diameter])
<b>Optical System</b>	Fixed focus type
<b>Sensing Element</b>	Si/InGaAs
<b>Measuring Wavelength</b>	0.9/1.55μm
<b>Response Time</b>	0.2 second
<b>Accuracy *</b>	Lower than 1000°C: ±6°C 1000°C to 1500°C: ±0.6% of reading 1500°C to 2000°C: ±1.2% of reading Higher than 2000°C: ±2.4% of reading
<b>Repeatability</b>	±1°C
<b>Resolution</b>	1°C
<b>Emissivity Adjustment</b>	0.100 to 1.900
<b>Targeting</b>	Direct viewing finder
<b>Measuring Mode</b>	1 Maximum, Minimum, and Average value
	2 Peak, delay (Signal Modulation)
	3 Maximum 100 data memory function
	4 LCD digital 4 digits, Displayed in the viewfinder and in external display
<b>Other Functions</b>	Auto-power-off, Automatic back-light, Continuous measurement, °C/°F selection, Battery check, High / low alarms
<b>Power Supply</b>	2 AA (UM-3) alkaline batteries (about 30 hours for continuous measurement)
<b>Ambient Temperature</b>	0 to 50°C
<b>Stability</b>	<b>Temperature drift</b> Lower than 1000°C: 0.2°C/°C Higher than 1000°C: 0.02%/°C of reading
	<b>In the test environment required by EMC directives</b> ±15°C
<b>Lens Diameter</b>	φ20mm
<b>Casing Material</b>	ABS resin
<b>Weight</b>	About 350g (thermometer only)
<b>Attachment</b>	2 pieces of AA (UM-3) battery

\* Reference operating conditions: At  $\epsilon = 1.0$ , 23°C  $\pm$  5°C, relative humidity: 35 to 75%RH

## Field of view

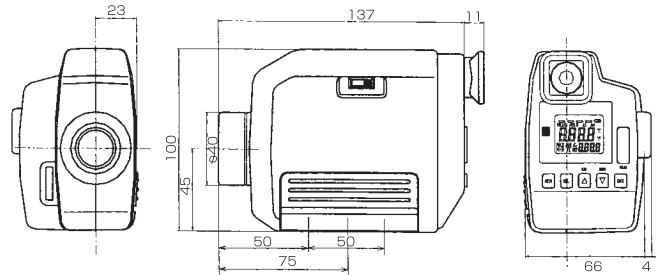
The relation of measuring distance and measuring diameter is shown below.



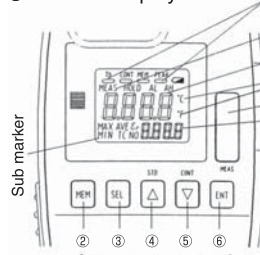
● The optical resolution values stated in "Field of View" are at 90% energy

● The size of the target object should be sufficiently larger than the Field of View shown in the above illustration.

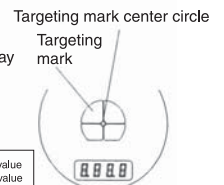
## Dimensions and Functions



### ● External display



### ● View finder



\*1, Main display: Displays a measured value in the measurement mode or a setting value in the setting mode.  
\*2, Sub display: Displays the data selected by **SEL** key in the measurement mode or a mode in the setting mode.

### ● Functions of keys

Keys	Functions	Indications
(1) Measure Switch	Turns on the power supply and starts/stops a measurement. (The power supply will be automatically turned off if any key is not pressed for 15 seconds in the hold mode.)	[MEAS]
(2) Memory key	Changes from the standard or continuous measurement mode to the data storage mode, or vice versa.	[MEM]
(3) Select key	Switches a data to be displayed in the sub display in the measurement mode. Switches a mode in the sub display in the setting mode.	[SEL]
(4) Up key (5) Down key	Selects a mode or changes a setting value in the setting mode.	[Δ], [▽]
(6) Entry key	Stores the mode selected or the setting value entered in the setting mode. Stores the measured value in the data storage mode.	[ENT]

## Safe Usage

Please use the thermometer correctly by keeping the following items. The ⊘ mark indicates prohibited operations.

### ⚠ Warning May cause death or serious injury

- ⚠ Make sure not see the sun through the viewfinder of the thermometer. It may cause becoming blind. Never directly face the objective lens to the sun to protect the detecting element. ⊘
- ⚠ Never operate the thermometer in places where combustible or volatile gas exists. It is extremely dangerous to use the thermometer in such environment. ⊘
- ⚠ Never put the batteries into fire, or never charge, short-circuit, heat or disassembly the batteries. Breaking or heating of the batteries may cause fire or injury. ⊘
- ⚠ Never use the thermometer if it has been broken, smoking or nasty smelling. These may cause fire. When the thermometer is broken, smoking, or nasty smelling, turn the power supply switch off at once and take out the batteries from the thermometer, and contact to your sales agent of Optex. ⊘

### ⚠ Caution May cause injury or physical damage

- ⚠ Do not use other batteries than the batteries specified. Load the batteries so that their polarities meet the polarity marks on the battery case. Different polarities may cause fire, injury or damage by burst or liquid leakage of the batteries. ⊘
- ⚠ Do not walk while sighting through the viewfinder of the thermometer. It may cause accidents like as falling down. ⊘
- ⚠ Never take the thermometer apart or convert it. These may cause trouble and danger. ⊘
- ⚠ Read the entire contents in this instruction manual to have the thermometer function perfectly.
- ⚠ Dispose the batteries used to places specified with the disposal procedure specified.



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