

# Wide Measuring Range 400~3000°C!!





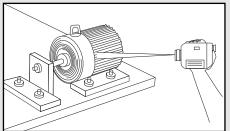


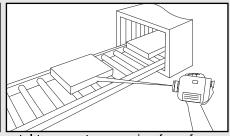
- Pepeatability : ±1 ℃
- Field of view : φ20/4000mm
- Response : 200msec
- Continuous measuring mode
- Hi/Lo alarm
- Light weight: 350g

### **Portable**

## 2-color Thermometer

# **VF-3000**





heat check for equipments

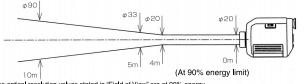
metal temperature coming from furnace.

	Specification	
Model	VF-3000	
Measuring Range	600 to 2000°C (2-color)	
ivieasuring hange	400 to 3000°C (single color)	
Field of view	ø20/4000mm (Ref. [Distance and diameter])	
Optical System	Fixed focus type	
Sensing Element	Si/InGaAs	
Measuring Wavelength	gth 0.9/1.55μm	
Response Time	0.2 second	
	Lower than 1000°C: ±6°C	
Accuracy *	1000°C to 1500°C: ±0.6% of reading	
riodiacy	1500°C to 2000°C: ±1.2% of reading	
	Higher than 2000°C: ±2.4% of reading	
Repeatability	±1°C	
Resolution	1°C	
Emissivity Adjustment	0.100 to 1.900	
Targeting	Direct viewing finder	
	1 Maximum, Minimum, and Average value	
Measuring Mode	2 Peak, delay (Signal Modulation)	
Weasuring Wode	3 Maximum 100 data memory function	
	4 LCD digital 4 digits, Displayed in the viewfinder and in external display	
Other Functions	Auto-power-off, Automatic back-light, Continuous measurement, °C/°F selection, Battery check, High / Iow alarms	
Power Supply	2 AA (UM-3) alkaline batteries (about 30 hours for continuous measurement)	
Ambient Temperature	0 to 50°C	
Ambient temperature	Lower than 1000°C: 0.2°C/°C	
<u>≧</u> Temperature drift	Higher than 1000°C: 0.02%/°C of reading	
Temperature drift In the test environment required by EMC directives	±15°C	
Lens Diameter	ø20mm	
Casing Material	ABS resin	
Weight	About 350g (thermometer only)	
Attachment	2 pieces of AA (UM-3) battery	

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

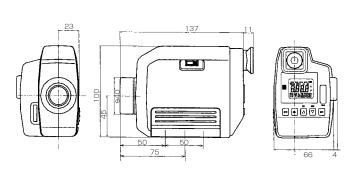
#### Field of view

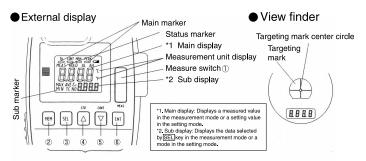
The relation of measuring distance and measuring diameter is shown below.



- 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





#### 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.	△,▽	
(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 \( \rightarrow \text{mark indicates prohibited operations.} \)

#### 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.

$\Lambda$	Caution	May cause injury or physical damage	
$\triangle$	that their pola	her batteries than the batteries specified. Load the batteries so rities meet the polarity marks on the battery case. Different cause fire, injury or damage by burst or liquid leakage of the	0
$\Lambda$		hile sighting through the viewfinder of the thermometer. It may nts like as falling down.	$\bigcirc$
$\Lambda$	Never take the and danger.	e thermometer apart or convert it. These may cause trouble	$\bigcirc$
$\triangle$	Read the enti function perfe	re contents in this instruction manual to have the thermometer ctly.	
$\Lambda$	Dispose the b	atteries used to places specified with the disposal ecified.	





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