

# Wide Measuring Range 400~3000°C!!



## Long Focus & View Finder

2-color mode

600 ~ 2000℃

Single color mode

400 ~ 3000 ℃

**Measuring Range** 

600°C 2-color mode 2000°C

400°C single color mode

3000℃

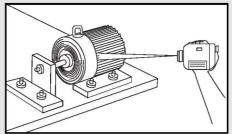


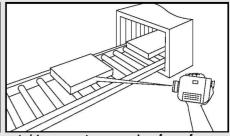
- Repeatability : ±1 ℃
- Field of view : φ20/4000mm
- Response : 200msec
- Continuous measuring mode
- Hi/Lo alarm
- Light weight: 350g

#### **Portable**

#### 2-color Thermometer

## **VF-3000**





heat check for equipments

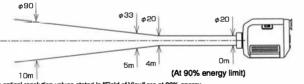
metal temperature coming from furnace.

1	O. if: i:	
	Specification	
Model	VF-3000	
Managina Danca	600 to 2000°C (2-color)	
Measuring Range	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	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	
Accuracy	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)	
Measuring Mode	3 Maximum 100 data memory function	
	4 LCD digital 4 digits, Displayed in the viewlinder and in external display	
Other Functions	Auto-power-off, Automatic back-light, Continuous measurement,	
Other runctions	°C/°F selection, Battery check, High / low alarms	
Power Supply	2 AA (UM-3) alkaline batteries (about 30 hours for continuous measurement)	
Ambient Temperature	0 to 50°C	
> T	Lower than 1000°C: 0.2°C/°C	
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 ABS resin	
Casing Material		
Weight	About 350g (thermometer only)	
Attachment	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

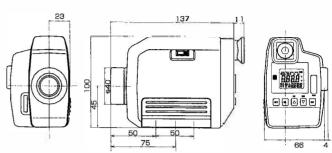
#### Field of view

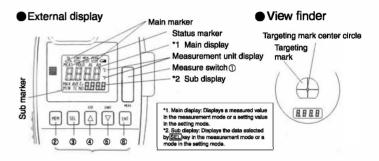
The relation of measuring distance and measuring diameter is shown below.



- 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 137





#### Functions of keys

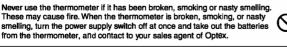
Keys	Functions	Indications
(1)Measure Switch	Turns on the power supply and starte/stops a measurement. (The power supply will be automatically turned off if any key is not pressed for 15 seconds in the hold mode.)	MEAS
(2)Memory key	Changes from the standard or continuous measurement mode to the data 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 Omark indicates prohibited operations.

#### 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



Δ	Caution	May cause injury or physical damage		
lack	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.			
lack	Do not walk while sighting through the viewfinder of the thermometer. It may cause accidents like as falling down.			
$\mathbf{\Lambda}$	Never take the and danger.	thermometer apart or convert it. These may cause trouble	0	
Λ	Read the entir	e contents in this instruction manual to have the thermometer titly.		
$\Lambda$	Dispose the ba	atteries used to places specified with the disposal		

