

VICTOR®

Infrared Thermometer VC304A/VC304B/VC304C

1. Measuring Emissivity of Material by Direct Measurement

Use a contact thermometer to measure the real temperature of the material, then use an infrared thermometer to measure, adjust the emissivity of the meter until the measured temperature is equal to the real temperature, the emissivity at this moment is the emissivity of the material.

2. Materials with much lower emissivity cannot be measured by direct measurement

Stick black tape on the surface of the material, or spray the black paint to the surface of the material, (the emissivity of the black tape and black paint $\epsilon \approx 0.95$) when the temperature of the black tape and black paint is equal to the temperature of the material, use the infrared thermometer (preset emissivity is 0.95, 0.1~1.00 adjustable) to measure the temperature of the cover on the material, adjust the emissivity value of the instrument, until the measured temperature equals to the real temperature, at this moment the emissivity is the emissivity of this material.

Please follow the safe operation guidance and ensure to use the meter in safe.



Model	VICTOR 304A	VICTOR 304B	VICTOR 304C
Measuring range	-50~480°C -58~896°F	-50~680°C -58 --1256°F	-50 -880°C -58 --1616°F
°C/°F conversion	V	V	V
Backlight display	V	V	V
Auto Off	V	V	V
Measurement accuracy	(1.5%+ 1°C) (1.5%+5°F)		
Repeatability accuracy	+0.5% or + 1°C(2°F)		
Display resolution	0.1°C(0.1°F)		
Response time and wavelength	Less than 500ms 8~ 14um.		
Emissivity	0.1-1.00 adjustable (step size 0.01)		
Measuring material distance ratio	12:1		
Laser aiming	Less than 1 lmW 650 nm		
Screen display mode	VA color screen		
Overrange hint	Low "LO" or high "H"		
Storage temperature	-20°C- ~ 60°C		
Working environment temperature/humidity	No condensation of 10-95%		
Power supply	2x1.5V AAA		
Size	155*92*42mm		
Weight	Approx. 180g		

Impassivity Table

Material	Emissivity	Material	Emissivity
Aluminum	0.3	iron	0.7
Asbestos	0.95	lead	0.5
Bitumen	0.95	limestone	0.98
Basalt	0.7	oil	0.94
Bbrass	0.5	paint	0.93
Brick	0.9	paper	0.95
Carbon	0.85	plastic	0.95
Ceramic	0.95	rubber	0.95
Concrete	0.95	dinas	0.9
Copper	0.95	skin	0.98
Oil sludge	0.94	snow	0.9
Frozen food	0.9	steel	0.8
Hot food	0.93	textiles	0.94
Glass(plate)	0.85	water	0.93
Ice	0.98	wood	0.94