

# PSC-90 Series

High Performance, Hand-held Digital Infrared Thermometer



- Sharp adjustable focus with precision optics
- High accuracy/repeatability
- Measures wide temperature range 1112°F to 5432°F (600° to 3000°C)
- Read temperature in viewfinder or on large LCD display
- Communication software (optional)
- Data logging up to 1000 temperature readings
- Built-in close focus lens attachments for ultra small spots

#### Typical Applications:

- Steel/Foundry
- Ceramics
- Molten Glass
- Graphite
- Composites
- Semiconductors

The PSC-90 Series is a versatile non-contact, portable digital infrared thermometer for accurate measurement and data logging of surface temperature. It can also be mounted on a tripod for short-term monitoring.

The PSC-90 Series offers a wide temperature measuring range of 1112°F to 5432°F (600°C to 3000°C) and features a digital display of the measured temperature in both the viewfinder and on an LCD display on the back of the instrument. With the provided RS-232C Serial port the stored data is easily transmitted to a personal computer.

Real time, peak, average, and valley measurement modes are easily selectable and a maximum of 1000

data points can be stored either manually on demand, or at programmed intervals. The analysis of the temperature data can be executed easily with the optionally available PSC-VXH2E Windows compatible software.

Other functions of the PSC-90 Series are audible and visual alarms for high/low temperature, auto power off, battery check and user calibration.

A variety of optional close focus lenses are available for measuring distances of 4" (100mm) to 21" (540mm) with a minimum measuring diameter of 0.04" (1.0mm).

An optional analog output of 0 to 1VDC, is also available.

# TECHNICAL SPECIFICATIONS FOR MODEL PSC-90 Series

GENERAL SPECIFICATIONS	PSC-90-96	PSC-90-65
Measuring range	1112° to 5432°F (600 to 3000°C) switchable	1652° to 5432°F (900 to 3000°C) switchable
Spectral response	0.96µm	0.65µm
Accuracy ratings	Lower than 1500°C: ±0.5% of reading ±1 digit 1500 to 2000°C: ±1% of reading ±1 digit More than 2000°C: ±2% of reading ±1 digit ε = 1.0 Reference operating condition: 23°C ± 5°C, 35 to 75%RH)	
Repeatability	1°C ± 1 digit	
Resolution	1°C	
Response time	0.5 second	
Optical system	Focusable lens type	
Variable focus distance	19.6" (500mm) to infinity	
FOV	100:1	250:1
Method of aiming	Through lens via view finder	
Emissivity adjustment	0.10 to 1.00 (0.01 increment)	
Operating modes	Real time, Peak, Delay, and Valley Modulation ratio: 0 to 99 seconds, 1-sec increment	
Display	LCD digital 4 digits, Displayed in the viewfinder and on rear panel	
Data storage function	Maximum 1000 data	
Users calibration function	Calibration at zero and span	
Outputs	Digital transmission (RS-232C), Analog output (0 to 1 VDC, option) with a cable	
Lens diameter	30mm = 1.18"	
Other functions	Auto-power-off, Continuous measurement, °C/°F selection, Battery check, High/low alarms	
Working temperature	0 to 50°C	
Power supply	AA (UM-3) battery, 4 pieces (about 20 hours for continuous measurement)	
Casing material and color	ABS resin, Gray	
Outside dimensions and weight	5.31" x 2.36" x 6.89" (135 x 60 x 175mm) WxHxD 1.54 lbs. (700g)	
Standard Accessories	4 AA (UM-3 battery), tripod adapter, hi-impact carrying case	

## Close Focus Lens Attachments

PART NUMBER	MEASURING DISTANCE	SPOT SIZES
PSC-VHD13	4" (100mm) to 5.1" (130mm)	0.04" (1.0mm) to 0.52" (1.3mm)
PSC-VHD18	5.1" (130mm) to 7" (180mm)	0.052" (1.3mm) to 0.072" (1.8mm)
PSC-VHD29	7" (180mm) to 11.4" (290mm)	0.072" (1.8mm) to 0.12" (2.9mm)
PSC-VHD54	10" (250mm) to 21" (540mm)	0.10" (2.5mm) to 0.22" (5.4mm)



**Model PSC-90**  
On-line monitoring with 0 to 1 Volt DC (output option)

## PROCESS SENSORS CORPORATION

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