

PSC-90

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

PSC-90 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 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 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 additional model, the PSC-90-2 with optional analog output of 0 to 1VDC, is also available.

TECHNICAL SPECIFICATIONS FOR MODEL PSC-90

| GENERAL SPECIFICATIONS | |
|-------------------------------|---|
| Measuring range | 1112° to 5432°F (600 to 3000°C) switchable |
| Spectral response | 0.96µm |
| 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 |
| 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-90-2
On-line monitoring with 0 to 1 Volt DC
(output option)

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