

Model HW-101558 "Classic Photoscreenic Wedge Type" Optical Pyrometer



Features:

- Rugged lightweight and portable
- Six models available
- Accuracy $\pm 0.5\%$ of reading
- Single, double and triple temperature ranges
- 760°C - 3200°C (1400°F-5200°F)
- Target sizes to 0.055" (1.4mm)
- Target distance 3' to infinity
- Ni-Cad rechargeable battery
- Battery charger
- One master lamp
- Two service lamps
- Carrying case and Manual



Model HW-101558 operates by allowing the operator to compare the intensity of light radiated from a target at visible .655 μ m wavelength to the known brightness of an internal calibrated lamp. This is achieved by utilizing a rotating optical photoscreenic wedge that functions as a variable neutral density filter. The pyrometer can achieve temperature accuracy to $\pm 0.5\%$ of the temperature being observed. Target sizes from 0.055" at distances of 3' to infinity can be achieved. Supplementary magnification lenses for smaller targets at shorter distances are available. The pyrometer features a circular direct reading scale on the instrument. Several models provide temperature scales in degrees F, degrees C or both. The instrument is constructed in a rugged steel housing providing years or trouble free industrial plant use. The instrument is portable and comes complete with rechargeable Ni-Cad battery and carrying case.

The Optical Pyrometer is used for many industrial applications. *Red scales can be provided for emissivity correction of targets with a 0.4 emissivity value. This is useful for temperature measurement of molten iron and steel. The pyrometer is calibrated at an effective wavelength of 0.655 μ m and is inherently less subject to most errors due to uncertain emissivity or extraneous reflected light than infrared or radiation thermometers.

The Optical Pyrometer is easy to use. The operator rotates the knurled photoscreenic wedge ring on the housing of the pyrometer while viewing the target. A color blend is made between the internal calibrated lamp through the instruments photoscreenic wedge and the target. The temperature is indicated on a direct reading scale on the housing of the instrument. The light viewed by the operator is monochromatic. Therefore, readings are not effected by an individuals color sensitivity.

Model # (1558-XXXX)	Type	Minimum Target Size	Magnification	Focal Distance	Temperature Range
-81C	Single Range	0.090" 1 1/2"	None	3' 20'	760°C - 1400°C
-82C	Single Range	0.090" 1 1/2"	None	3' 20'	1000°C - 1900°C
-83C	Double Range	0.055" 3/4"	None	3' 20'	760°C - 1200°C
		0.008" 0.004"	Single Double	5" 2 1/2"	1000°C - 1900°C
-84C	Foundry Type w/ *Red Scale	0.055" 3/4"	None	3' 20'	1000°C - 1900°C
		0.008" 0.004"	Single Double	5" 2 1/2"	1200°C - 2000°C
-85C	Triple Range w/ *Red Scale	0.055" 3/4"	None	3' 20'	760°C - 1200°C
		0.008" 0.004"	Single Double	5" 2 1/2"	1000°C - 1900°C 1200°C - 2000°C
-87C	Triple Range	0.055" 3/4"	None	3' 20'	760°C - 1200°C
		0.008" 0.004"	Single Double	5" 2 1/2"	1000°C - 1900°C 1800°C - 3200°C

Optional Accessories

- SOC Statement of Calibration Traceable to NIST
- COC Certification of Calibration (per point)
Traceable to NIST
- CAL Annual Calibration Service Contract
- 001 F/C High Temperature Filter No. 1:
3200°-5200°F or 1800°-3200°C
- 002 F/C High Temperature Filter No. 2:
5100°-7700°F or 3000°-4500°C
- 010 Single Magnifying Lens complete with
holder
- 011 Double magnifying Lens complete with
holder
- 041 Adjustable Instrument Holder with Stem
- V46 Auxiliary Eyeshield (Dummy Ocular)

When ordering specify specific model number and battery charger power requirements (110V/220V and 50/60Hz).