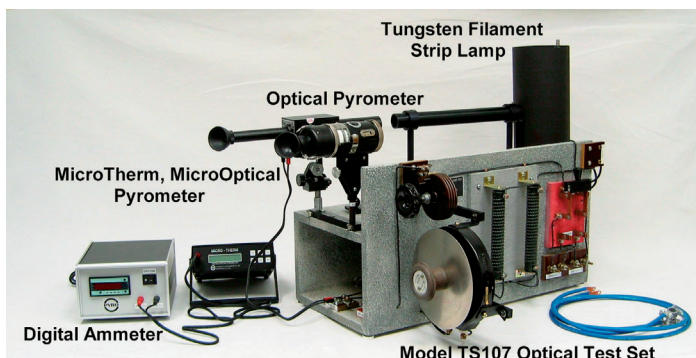


# Pyro Precision Optical Calibration Test Set 107



## FEATURES

- In-house Optical Pyrometer Calibration
- Ease of Operation and Setup
- Temperature Range: 1400°F - 4200°F (800°C - 2300°C)
- Calibration Accuracy to:  $\pm 5^\circ\text{F}$
- Source Type: Tungsten Filament Strip Lamp  
Certificate of Calibration to NIST
- Power Requirements: 12 Vdc RV Marine deep cycle battery

## DESCRIPTION

The Precision Optical Test Set is designed to accurately and simultaneously calibrate up to two optical pyrometers to read identically, irrespective of manufacture. It has been used for many years as a simple and easy-to-use calibration source to calibrate and verify optical pyrometers' accuracy. In high demand applications, temperature errors and uncertainties are eliminated with on-site or in-house calibration.

The Optical Test Set uses a Tungsten Ribbon Filament Strip Lamp that is readily adjusted to the desired temperature value by adjusting the rheostat electrical current passing through the lamp. The lamp swivel base and sighting tube ensure precise optical alignment between the two optical pyrometers during calibration.

## OPERATION

To operate the Optical Test Set, the user must first connect the proper power terminals to the 12 Vdc battery supply or equivalent DC power supply. Next, connect up a laboratory standard ammeter or potentiometer with a corresponding shunt for 0 to 30 amperes to measure the electrical current going to the lamp. Finally, the operator uses the Strip Lamp certificate of calibration data to determine the current necessary to produce the desired temperature of the lamp.

## APPLICATIONS

- Optical Pyrometer Calibration

## SPECIFICATIONS

### Model 107 Optical Test Set comes complete with:

- Lamp Shield
- Sighting Tube with mounted magnifying lens
- Mounting Stem
- Vernier slide wire rheostat (infinite resolution)
- On-Off Temperature Range Switch
- Wiring for Battery Charger
- DP-DT Switch for Battery Charger Connection
- Swivel Mount for Lamp
- Instrument Holder for Optical Pyrometer
- Continuous step type 105 points rheostat
- Terminal Board and Switch Panel
- Ammeter Shunt Switch
- Complete Installation and Operating Instructions

### Requirements for the Model 107 Optical Test Set:

- 12 Vdc power supply (RV Marine deep cycle battery or equivalent supply)
- Ammeter or Potentiometer with shunt to measure current
- Tungsten Filament Strip Lamp

Model No	Description of Product and Accessories
TS 41	EXTRA Instrument Holder (for an Optical)
TS 42	EXTRA Stem for Mounting (for a Micro-Optical/Therm)
STL-L	STRIP LAMP Low Temperature Range: 1400° - 3400°F or 800° - 1900°C
STL-H	STRIP LAMP High Temperature Range: 1400° - 4200°F or 800° - 2300°C
COC	Certification of Calibration (Per Point) Traceable to NIST
P-907	Digital ammeter – measurement of current 0 - 30 amps

## PYRO'S AUTHORIZED REPRESENTATIVE



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