

# Calibration Report: Pyrometer

## S/N: 1415

21 August 2008

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Science Systems and Applications, Inc.  
Hampton, Virginia

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### Summary

Calibration date: 21 Aug 2008

Next Calibration date: 21 Aug 2009

A collection, analysis and calibration of data from a Heitronics Pyrometer, S/N: 1415, has been completed. The calibration was performed by Simco Electronics. These data were collected by Simco on 21 August 2008.

Model: KT19.85

Serial Number: 1415

The test data presented in table format displayed the sensor to be in specification on arrival. The deviation in degrees Kelvin was +/- 0.6 K taken at four different points. Simco electronics quality management conforms to ISO 9001:2000 and all calibrations are performed using internationally recognized standards traceable to the International System of Units (SI Units). Traceability is achieved through calibrations by NIST (National Institute of Standards and Technology).

The following pages provide more detail into the calibration process and results.

Application: Standard Campbell data logger program for KT19.85 pyrometer.

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Certificate No. 3989364

806 MIDDLE GROUND BLVD.  
NEWPORT NEWS, VA 23606

**CERTIFICATE OF CALIBRATION  
FOR**

**JACOBS SVERDRUP**  
LARC. 1 Enterprise Parkway Room 140  
HAMPTON., VA 23666

Description: **EG&G HEIMANN OPTOELE, KT19-85, PYROMETER**

Serial No: 1415

Asset No: A058121

Simco ID: 39692-2107

Dept: 1250-124B

PO No: AI00033

Calibration Date: 08/21/08	Calibration Interval: 12 Months	Recall Date: 08/21/09
Arrival Condition: MEETS MANUFACTURER'S SPEC'S.		Service: CALIBRATED & CLEANED

Procedure: C614T.0021 REV 2

Temperature: 75°F

Relative Humidity: 39%

Standards Used:

Type	Simco ID	Due Date	Intvl Mos	Acc/Unc	Trace No.
SPRT	37590*182	02/21/11	48	TEMPERATURE	836272597-05A
SUPER THERMOMETER	37590*159	03/04/09	12	RESIS +/-0.0008%	811/269433-04
SUPER THERMOMETER	37590*159	03/04/09	12	RESIS +/-0.0008%	811/269433-04
DMM	37590*162	09/12/08	12	DCV+/-0.005%RDG	1163338243

There are 1 Supplementary Data Sheet(s) attached.

Work performed by: *KFC*  
**Kathleen Czarnecki**  
Mechanical Technician C (14018)

Reviewed by:

*[Signature]*

SIMCO Electronics' quality management system conforms to ISO 9001:2000, ISO/IEC 17025:2005, and ANSI/NCSL Z540-1-1994. All calibrations are performed using internationally recognized standards traceable to the International System of Units (SI Units). Traceability is achieved through calibrations by the National Institute of Standards and Technology (NIST), other National Measurement Institutes (NMIs), or by using natural physical constants, intrinsic standards or ratio calibration techniques. Instruments are calibrated with a test accuracy ratio of 4:1 or greater, otherwise measurement uncertainty analysis and/or guard bands are applied during the measurement process. The information shown on this certificate applies only to the instrument identified above and may not be reproduced, except in full, without prior written consent from SIMCO Electronics. There is no implied warranty that the instrument will maintain its specified tolerances during the calibration interval due to possible drift, environment, or other factors beyond our control.

Dated: 08/21/08



SIMCO Electronics - Report of Calibration  
 Calibration of Infrared Thermometer

Manufacturer: Heimann  
 Serial Number: 1415  
 Cert Number: 3989364

ECN: A058121  
 Model: KT19-85  
 Range: See Below

Tech: 14018  
 Date: 8/21/2008  
 Emissivity: 0.95

Calibration Procedure: C614T.0021 REV 2

Conversion of Standard Degrees K e = 0.95	Indication of Test Unit Degrees K e = 0.95	Deviation of Test Unit Degrees K e = 0.95	Analog Output Millivolts	Manufacturer's Tolerance Degrees K
223.754	224.1	0.3	-52.480	±1.0
273.090	273.4	0.3	1.532	±0.7
324.297	323.7	-0.6	498.84	±0.7
371.041	370.7	-0.3	972.88	±1.0