



HEITRONICS Infrared Calibration Equipment


Consolidated Datasheet Summary

- **Transfer Radiation Thermometers; -50 ... 3000 °C**
 Typical spectral ranges 8 ... 14µm, 3.9µm, 1µm, 1.6µm
 NETD to as low as ~ 20 ... 30mK
 Uncertainty as low as ~70mK for k=2 (35mK for k=1)
- **Blackbody Radiation Sources; -20 ... 1000 °C**
 Cavity diameter up to 60mm
 Emissivity as high as 0.9994 ±0.0002
 Cavity Uniformity & Uncertainty as low as ≤0.11 °C



HEITRONICS Transfer Radiation Thermometers are used by National Laboratories ; National Certifying / Underwriting Labs ; Independent Metrology Labs ; Government Research & Military Labs ; Manufacturers of Thermal Imaging Cameras, Infrared Pyrometers & Blackbodies ; End User Cal Labs as well as the HEITRONICS laboratory.

<u>Primary Transfer Standards</u>		<u>Spectral Range</u>	<u>Temperature Range °C</u>
	TRTIV.82	8 ... 14µm	-50 ... 1000 °C (<i>std.</i>) (options up to 2500 °C)
	TRTIV.41	3.9µm	150 ... 1000 °C (<i>std.</i>) (options up to 2500 °C)
	TRTII	8 ... 14µm + 3.9µm	-50 ... 1000 °C (<i>std.</i>) (options up to 2500 °C)
 (TRT Qualified Version)	CT18.04	1.6µm	200 ... 2900 °C
	CT18.03	1µm	450 ... 3000 °C

<u>Secondary Transfer Standards</u>			
 16 other spectral ranges available	KT19.82	8 ... 14µm	-50 ... 1000 °C (<i>std.</i>) (options up to 2500 °C)
	KT19.41	3.9µm	150 ... 1000 °C (<i>std.</i>) (options up to 2500 °C)

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ME30

**-20 ... 180 °C* or,
40 ... 250 °C or,
90 ... 350 °C****

E = 0.9994

**Ø60mm cavity
Fluid Bath design**

*** Operation < 40 °C requires
an external chiller**

**** Operation > 300 °C limited
to 5 hours / day**



SW40

ambient +10 ... 150 °C*

E > 0.995

**Ø40mm cavity
Fluid Bath design**

*** Operation ≥ 110 °C
requires insulation around
the bath cylinder for safety**

**SW10 50 ... 400 °C
E = 0.995 Ø25mm cavity**



**SW11 350 ... 1000 °C
E = 0.995 Ø25mm cavity
(option from 150 °C after consultation)**



**SW15
Portable Battery Powered or
12VDC Power Supply
Fixed Single Point
50 °C or 60 °C or 80 °C or 100 °C
E ≥ 0.996
Ø20mm cavity**

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