



# Infrared Calibration Equipment


## Performance & Features summary

- **Transfer Radiation Thermometers ; -50 ... 3000 °C**  
Typical spectral ranges 8 ... 14µm and/or 3.9µm, 1µm, 1.6µm  
NETD to as low as ~ 20 ... 30mK  
Uncertainty to as low as ~70mK for k=2 ( 35mK for k=1)
- **Blackbody Radiation Sources ; -20 to 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 Thermometers & Blackbodies ; End User Cal Labs as well as the HEITRONICS laboratory.**

| <i>Primary Transfer Standards</i>   |          | <u>Spectral Range</u> | <u>Temperature Range °C</u>  |
|---|----------|-----------------------|--|
|                                      | TRTIV.82 | 8 ... 14µm            | -50 ... 1000 °C ( <i>std.</i> )<br>options as wide as<br>0 ... 2500 °C           |
|   | TRTIV.41 | 3.9µm                 | 150 ... 1000 °C ( <i>std.</i> )<br>options as wide as<br>150 ... 1800 or 2500 °C |
|   | TRTII    | 8 ... 14µm + 3.9µm    | -50 ... 2000 °C<br>( <i>with options</i> )                                       |
| <br>( <i>TRT Qualified Version</i> ) | CT18.04  | 1.6µm                 | 200 ... 2900 °C  |
|   | CT18.03  | 1µm                   | 450 ... 3000 °C  |

| <i>Secondary Transfer Standards</i>   |         |            |  |
|---|---------|------------|--|
| <br>16 other spectral ranges available | KT19.82 | 8 ... 14µm | -50 ... 1000 °C ( <i>std.</i> )<br>options as wide as<br>0 ... 2500 °C           |
|   | KT19.41 | 3.9µm      | 150 ... 1000 °C ( <i>std.</i> )<br>options as wide as<br>150 ... 1800 or 2500 °C |

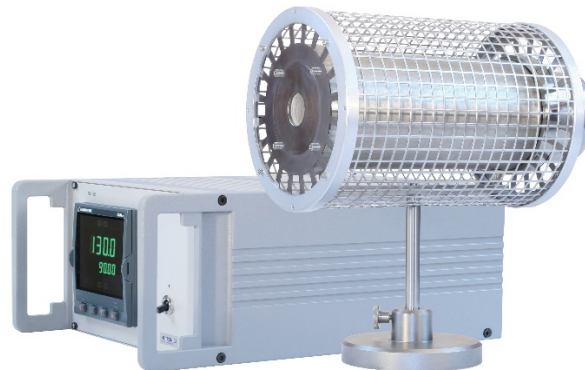
**HEITRONICS Blackbody Radiation Sources are used by National Laboratories ; National Certifying/Underwriting Labs ; Independent Metrology Labs ; Government Research & Military Labs ; Manufacturers of Thermal Imaging Cameras & Infrared Thermometers ; End User Cal Labs as well as the HEITRONICS laboratory.**



**ME30**  
 -20 ... 180 °C or,  
 40 ... 250 °C or,  
 90 ... 350 °C  
 E = 0.9994  
 60mm diameter cavity  
 Fluid Bath design



**SW40**    30 ... 150 °C  
 E > 0.995  
 40mm diameter cavity  
 Fluid Bath design



**SW10**  
 50.0 ... 400.0 °C  
 E = 0.995  
 25mm diameter cavity

**SW11**  
 350 ... 1000 °C  
 E = 0.995  
 25mm diameter cavity



**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  
 20mm diameter cavity

Specifications are subject to change without notice