

HE1200

Portable Temperature Source



Extremely small and light temperature source

- Quick check of pyrometers **100 up to ca. 1150 ± 50°C**
 - Use in infrared measurements on site without pyrometer removal
 - Determination of optical losses in infrared measurements through windows or lenses and automatic compensation in conjunction with an M3 or H3 pyrometer
 - Common applications: laser hardening, laser welding, additive manufacturing
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- Target temperature in a maximum of 3 minutes
 - Small and light for fast positioning
 - Versions with
 - switch for quick use between 1100 and 1200°C maximum temperature
 - control unit for continuously temperature adjustment or control pyrometer for high temperature stability
 - Measuring opening with adjustable aperture and support for light power measuring device (power meter)
 - For Sensortherm pyrometers with fast single-point calibration to a target temperature

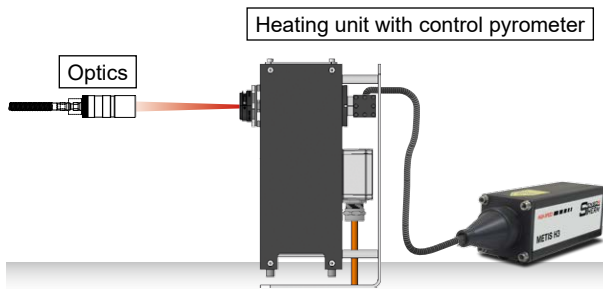
Ready in Only 3 Minutes

The HE1200 is an unsurpassed fast and very small temperature source that can be used to check pyrometers in a few minutes, for example directly at the furnace. Also, optical losses in measurements through windows or lenses can be quickly determined, e.g. when coupling the pyrometer into a processing optics.

Application

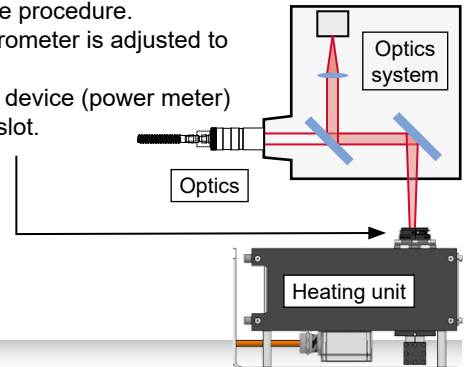
Comparison measurement

- Heating unit with control pyrometer for quick comparison measurement on site at the plant.
Advantage: it is not necessary to remove time-consuming mounted optical fibers and optics.



Measurement with single-point adjustment

- Use Metis M3 or H3 pyrometer, connect to PC and start standard software *SensorTools*.
- Align the HE1200 to the pyrometer's measuring point and heat to application temperature (= adjustment temperature).
- Start the single-point adjustment function, enter the adjustment temperature and start the procedure.
- After a short time the pyrometer is adjusted to the optical system.
- A light power measuring device (power meter) can be connected via a slot.



Technical Data

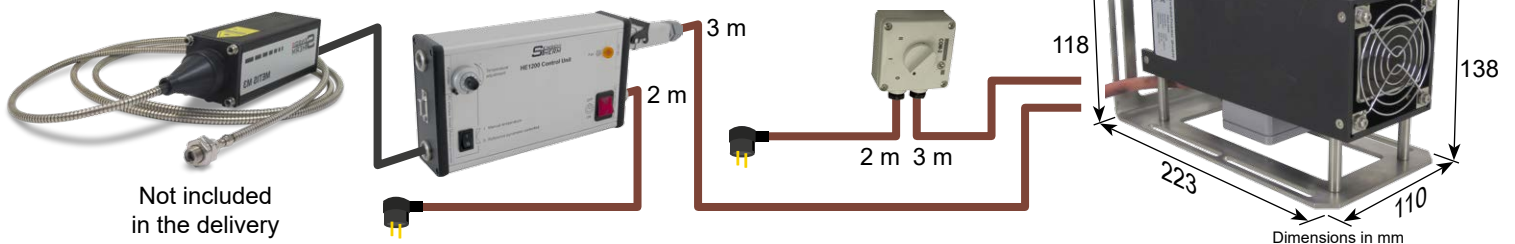
Temperature	with rotary switch: fixed to ca. 1100-1200°C with control unit: adjustable ca. 100-1150±50°C	Weight	ca. 2 kg with rotary switch, ca. 3.7 kg with control unit
Warm-up / cool-down	ca. 3 min / ca. 5 min	Ambient temperature	Heating unit: 0-70°C Control unit: 0-40°C
Measuring area	ca. 10 mm / 0,4"	Connection cables	2 m power cord, 3 m connection cable to heating unit
Front meas. opening	Adjustable aperture 0.9-12 mm	Rel. humidity	Non-condensing conditions
Rear meas. opening	12 mm for fiber optics OL12	CE label	According to EU directives for electromagnetic immunity
Power supply	230 V AC, 500 W max.		
Serial interface	RS485 (on both pyrometer connectors)		
Housing	Heating unit: aluminum, black anodized		

Fiber optics control pyrometer
for HE1200-30 / 40 / 50

HE1200-20 / 30 / 40 / 50
with control unit

HE1200-10
with on / off switch

Heating unit



Reference numbers

HE1200-10	HE1200 with on / off switch
HE1200-20	HE1200 with control unit
HE1200-30	HE1200 with control unit, AL12-02 (12-pin pyrometer connection cable, 2.5 m, straight plug on both sides), UM8000-01 (90°-mirror for optics connection), DK4000 (interface converter RS485⇔USB)
HE1200-40	As HE1200-30 but with 17-pin pyrometer adapter connection cable for pyrometers with 17-pin connector
HE1200-50	As HE1200-30 but with AL12-02 and AL07-02
M3 pyrometer	Control pyrometer with fiber optics
Optional:	Device protection case

Sensortherm reserves the right to make changes in scope of technical progress or further developments.

Sensortherm-Datasheet_HE1200_Portable_Temperature_Source (Dec. 04, 2018)

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