

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
- 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

Optics

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.

Heating unit with control pyrometer

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 tempera-	Heating unit: 0–70°C
Measuring area	ca. 10 mm / 0,4"	ture	Control unit: 0–40°C
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 No CE approval. Appro use under laboratory co in accordance with App the Low Voltage Directi	No CE approval. Approved for
Power supply	230 V AC, 500 W max.		use under laboratory conditions,
Serial interface	RS485 (on both pyrometer connectors)		in accordance with Appendix 2 of the Low Voltage Directive.
Housing	Heating unit: aluminum, black anodized		
ibor option control pyr	ameter HE1200.20/20/40/50		Heating unit

Fiber optics control pyrometer for HE1200-30 / 40 / 50 HE1200-20 / 30 / 40 / 50 HE1200-10 with control unit with on / off switch Not included in the delivery Dimensions in mm

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 (Mar. 07, 2022)

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