SUBSIDIARY OF AMPHENOL

HTR-420

DRY BLOCK TEMPERATURE CALIBRATOR

FLEXIBLE – EASY TO USE

(30 TO 420°C)

The Kaye HTR-420 is the most advanced high temperature calibrator specifically designed to address the capacity and flexibility needs for thermal validation.

The HTR-420 is able to calibrate 48 thermocouples at one time and saves hours of time and effort when calibrating or verifying validation sensors.

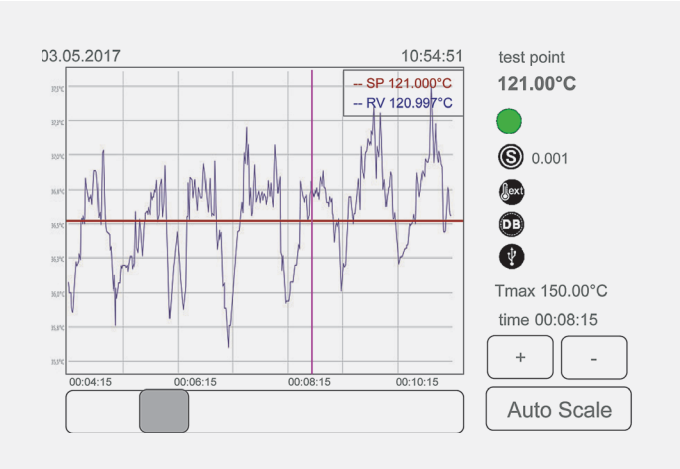
The new Dry Block Temperature Calibrator is compatible with the Validator 2000, Validator AVS, ValProbe (RT) or RF ValProbe software for automatic sensor calibration or can be used stand-alone via its easy-to-use touch screen display.

FEATURES & BENEFITS

- Operating range of 30 to 420°C with temp stability of up to 0.01°C and uniformity of up to 0.1°C
- Fast heating and cooling times
- Calibration of up to 48 thermocouple with dry block insert savings hours of time
- Dry block inserts are designed to accommodate thermocouples, IRTD, ValProbe (RT) flexible/bendable as well as RF ValProbe probes
- Special TC fixture for easy handling of up to 48 thermocouples
- Software interface for all existing Kaye products (IRTD, Validator 2000, Validator AVS, ValProbe (RT) and RF ValProbe) software for automatic/manual calibrations
- Easy-to-use touch screen
- Universal power supply 100 - 240 VAC/50 - 60 Hz
- Addition inserts available for calibrating specialty or process probes

Flexibility and Efficiency with the HTR-420

The standard insert – delivered with each HTR-420 allows the calibration of up to 48 TCs and immersion of up to 2 IRTDs. Each thermocouple well has a sleeve which can accommodate 3 thermocouples.
The HTR-420 comes will a specially designed sensor holder to provide easy installation and ensure sensors are held in position for maximum accuracy during calibration/verification.
The calibrator is extremely flexible and allows within seconds the exchange of the dryblock insert. Multiple inserts are available for great flexibility to accept different sensors of diameter and shape.

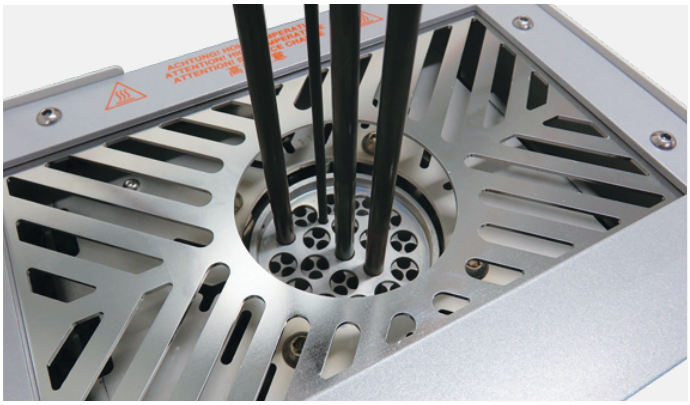


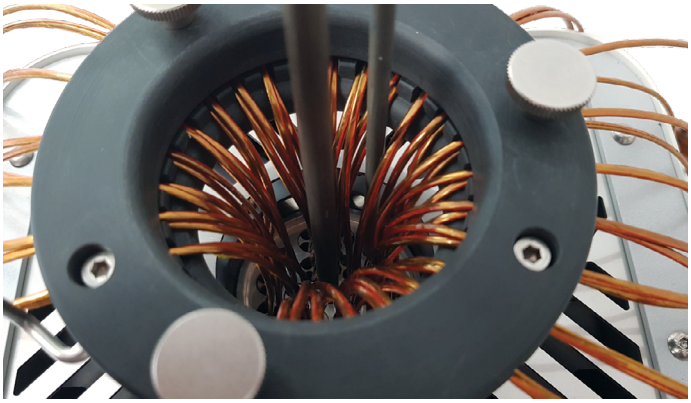
FAST STABILIZATION

The specifically designed controller allows very fast stabilization time with little temperature overshooting, ensuring fast response to setpoint changes as well as extremely stable setpoints of a few thousandths of a degree.

FAST COOLING

The new cooling concept specially designed for the HTR-420 allows a fast cooling rate which is far more efficient than previous models.
With this we ensure a high throughput and efficient calibration, saving hours of labor and cost.





HTR-420 Specifications

TECHNICAL DATA

MODEL

Model	HTR-420
Control Sensor	External

DRY BLOCK

Temperature Range*	30°C to 420°C (86°F to 788°F)
Accuracy	±0.1°C (±0.18°F)
Stability	±0.010°C (±0.018°F)
Uniformity	0.1°C (0.18°F)

HEATING/COOLING TIME

	30°C to 100°C in 7 minutes
	30°C to 350°C in 20 minutes
	350°C to 125°C in 20 minutes
	350°C to 50°C in 40 minutes

BLOCK DIMENSIONS

Diameter	Ø 60 mm (Ø 2.36 in)
Depth	170 mm (6.69 in)

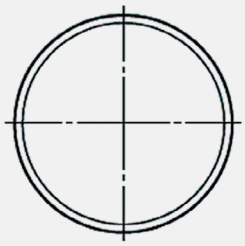
DISPLAY UNIT

Display Unit	7” Color-Touchscreen
Resolution	0.1/0.01/0.001 – °C/°F/K

GENERAL DATA

Interface	Serial to Validator/Ethernet/3 X USB
Dimensions	215 mm x 290 mm x 345 mm
Weight (approximate)	11 kg/24 lbs
Power Supply	100 - 240 VAC, 50/60Hz
Power Consumption	max. 1000W

* at an ambient temperature of 20°C/68°F



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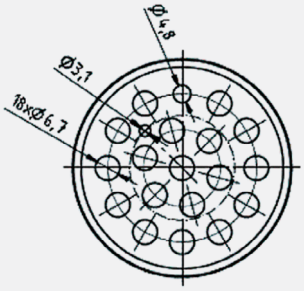

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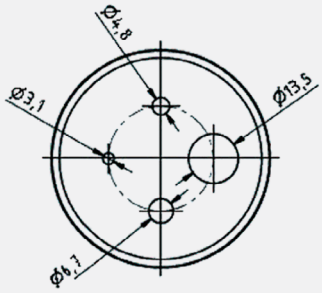

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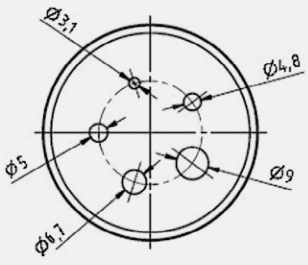

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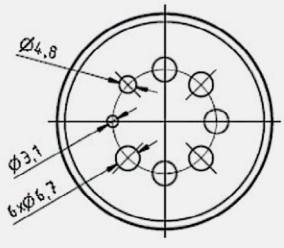

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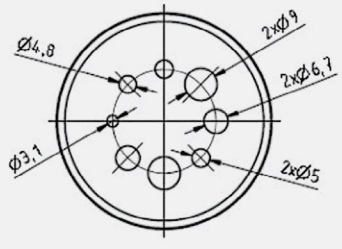

Insert Part Number:
410-3037-H

PART NUMBER	DESCRIPTION
X0385	**HTR-420 Multi-Functional Calibrator includes:** • 48 sensor dry block Insert with sleeves and transport lid • Insert exchange tool/shielding adapter • USB/serial adapter cable • Firmware to support micro bath & surface calibrator functionality • External control reference probe • US and EU power cables (100-240VAC 50/60 Hz) • User manual • Calibration certificate • Special thermocouple fixture

ACCESSORIES

PART NUMBER	DESCRIPTION
441-1053-H	HTR-420 Shipping Case

AAS-DSK-08001-A

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Request a demo:
www.kayeinstruments.com/en/demo

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