

# Kaye 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 backward compatible with the Validator 2000, Validator AVS, ValProbe or RF ValProbe software for automatic sensor calibration or can be used stand-alone via it's easy to use touch screen display.

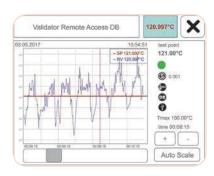
#### **Features & Benefits**

- 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 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 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



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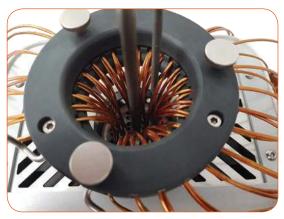
## Flexibility and Efficiency with the HTR-420

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 accommodate 3 thermocouples (similar to current models).

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.





Special TC Fixture for easy handling of up to 48 Thermocouples

#### Fast stabilization

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



# Kaye HTR-420 Specifications

### **Technical Data**

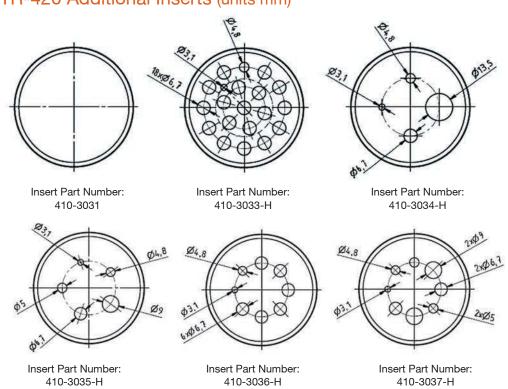
Model	
Model Control Sensor	HTR-420 External
Dry Block	
Temperature Range* Accuracy Stability Uniformity	30°C to 420°C (86°F to 788°F) ±0.1°C (±0.18°F) ±0.010°C (±0.018°F) 0.1°C (0.18°F)
Heating / Cooling Time	
	30°C to 100°C in 7 minutes 30°C to 350°C in 20 minutes 350°C to 125°C in 20 minutes

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 / 3x 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

### Kaye HTR-420 Additional Inserts (units mm)

350°C to 50°C in 40 minutes



## Kaye HTR-420

Part Number	Description	
X0385	Kaye 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	

#### Warranty and disclaimer:

The information mentioned on documents are based on our current tests, knowledge and experience. Because of the effect of possible influences in an application of the product, they do not exempt the user from their own tests, checks and trials. A guarantee of certain properties or a guarantee for the proper suitability of the product for a specific, especially permanent application cannot be derived from our data. Liability is therefore excluded to that extent permitted by law. Any proprietary rights of third parties as well as existing laws and regulations must be observed by the recipient of the product on his own responsibility.



#### www.kayeinstruments.com