Kaye LTR-150

Dry Block and Liquid Bath All-in-One Temperature Calibrator flexible - easy to use (-30 to 150°C)

The Kaye LTR-150 is the most advanced Multi-purpose calibrator specifically designed to address the capacity and flexibility needs for thermal validation.
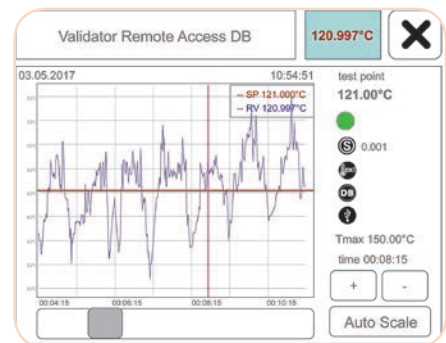
From its ability to calibrate 48 thermocouples at one time to it's versatility to function as a Dry Block, Liquid Bath or Surface calibrator, the LTR-150 saves hours of time and effort when calibrating or verifying validation sensors.

The LTR-150 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 150°C with temp stability of up to 0.01°C and uniformity of up to 0.1°C

- Fast Heating and Cooling times

- Ability to be used as Dry Block, Liquid Bath and Surface Calibrator

- Calibration of up to 48 thermocouple with Dry Block insert savings hours of time

- Thermocouple Fixture for easy handling of up to 48 TC's

- Dry Block inserts are designed to accommodate thermocouples, IRTD, ValProbe flexible/bendable as well as RF ValProbe probes

- Software interface for all existing Kaye products (IRTD, Validator 2000, Validator AVS, ValProbe and RF ValProbe software for automatic / manual calibrations

- Liquid micro bath tub with sensor cage and magnetic stirrer can be used for thermocouples, special process probes as well as ValProbe rigid loggers

- 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 LTR-150

The Calibrator is extremely flexible and allows within minutes a fast conversion from dry-block calibrator to micro bath or even surface temperature function.

Dry-Block Function

The LTR-150 comes standard with a 48 channel insert with 16 wells for thermocouples, as well as 2 for the IRTD and 1 for the External Control Reference Probe.

Each thermocouple well has a sleeve which accommodate 3 thermocouples (similar to current models).

The LTR-150 also has several additional inserts available as options for calibration of specialty process probes.

Thermocouple Fixture

To ensure accurate calibration, the LTR-150 comes standard with a Thermocouple Fixture to be used with the dry block, ensuring that all thermocouples are securely held at the full immersion depth.

Micro Bath Function

The LTR-150 can also offer an optional insert which allows the unit to be used as a Micro bath. This allows the unit to easily be used for specialty probes or loggers such as ValProbes. The optional Micro Bath Tub kit comes with the Micro Tub, a sensor cage as well as a magnetic stirrer and sensor cover.

Kaye also offers Silicone Oil which covers the complete temperature range of the bath.

Surface Temperature Function

Surface temperature sensors are calibrated using a special insert.

The reference probe is located directly beneath the contact surface of the insert. The insert is designed in such a way that the best temperature homogeneity is achieved in the center of the contact surface. The special design of the insert enables good thermal contact.

This optional insert makes the unit ideal for verification of Kaye Flat surface ValProbes.
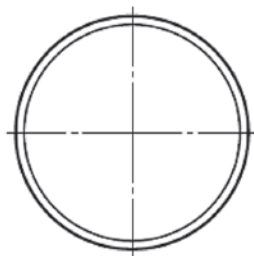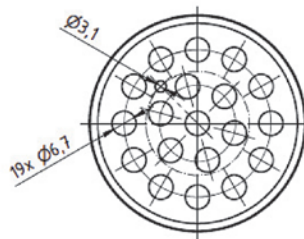
Kaye LTR-150 Specifications

Technical Data

Model	
Model	LTR-150
Control Sensor	External

Dry Block	
Temperature Range*	-30°C to 150°C (-22°F to 302°F)
Accuracy	±0.1°C (±0.18°F)
Stability	±0.010°C (±0.018°F)
Uniformity	0.1°C (0.18°F)

Micro Bath	
Temperature Range*	-30°C to 150°C (-22°F to 302°F)
Accuracy	±0.15°C (±0.27°F)
Stability	±0.010°C (±0.018°F)
Uniformity	0.15°C (0.27°F)

Surface	
Temperature Range*	-25°C to 150°C (-13°F to 302°F)
Accuracy	±1°C (±1.8°F)
Stability	±0.15°C (±0.27°F)
Heating/Cooling time	20°C to -25°C in 45 min 20°C to 121°C in 30 min 121°C to 20°C in 30 min -30°C to 20°C in 20 min

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	210 mm x 300 mm x 380mm
Weight (approximate)	15 kg / 33 lbs
Power Supply	100 - 240 VAC, 50/60Hz
Power Consumption	Approx. 375w

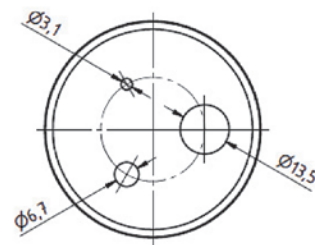* at an ambient temperature of 20°C / 68°F
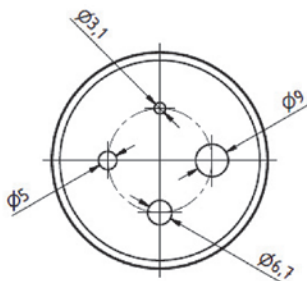
Kaye LTR-150 Additional Inserts (units mm)
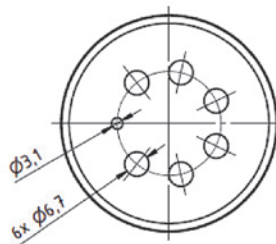

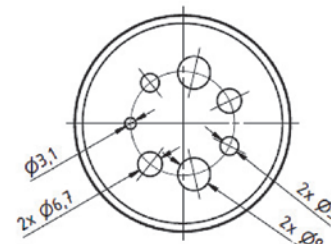Insert Part Number:
410-3031

Insert Part Number:
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Insert Part Number:
410-3034

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Insert Part Number:
410-3037

Kaye LTR-150

Part Number	Description	
X0365	**Kaye LTR-150 Multi-Functional Calibrator; Includes:** • 48 Sensor Dry Block Insert with sleeves and transport lid • Thermocouple Fixture • 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	

Accessories

Part Number	Description	
425-3061	**Micro Bath Tub Insert; Includes:** • Micro Bath tub • Sensor Cage with IRTD slot • Magnetic Stirrer • Sensor Cover	
V0830	1 l Silicone Oil - Temperature Range -30 to 150°C	
412-3054	Surface Calibration Insert	
412-3066	Thermocouple Fixture	
441-1053	LTR-150 Shipping Case	

Amphenol
Advanced Sensors

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