

T-2420 SPECIFICATIONS

GENERAL DESCRIPTION

Method of Cooling: Forced air with single-stage mechanical refrigeration and multistage self-cooling heat exchanger.

Method of Heating: Forced air with in-line air heaters.

Operator Interface: Twenty character alphanumeric display and keypad; menu-driven software with self-diagnostics.

Controls: Microprocessor control of all critical functions.

PHYSICAL DESCRIPTION

Model #	Height (in/cm)	Width (in/cm)	Depth (in/cm)	Weight (lbs/kgm)
T-2420	40/102	24/61	21/53	290/132
T-2420 with TF-IC5 or TF-IC7	48/123	24/61	49/124	355/161

ENVIRONMENT

Ambient temperature range:

Operating: 15°C to 28°C

Non-Operating: -40°C to +85°C

Relative Humidity: 20 to 65%

POWER REQUIREMENTS

Model #	Volts (AC)	Hertz	Phases	Amps
T-2420	208—230	50/60	1 Φ	20

Optional transformers are available for input voltage ranges of 195-210 VAC or 220-245 VAC.

AIR INPUT REQUIREMENTS

Pressure: 80-110 PSIG (5.7 to 7.8 Kg/cm²)

Flow Rate: 10-16 SCFM (4.7-7.6 liters/sec)

Dew Point: Less than 10 °C at 80 PSIG (5.7 Kg/cm²)

Quality: Clean, dry air, free of oil, moisture and particles.

THERMONICS

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Specifications subject to change without notice.

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TEMPERATURE PERFORMANCE

Model #	Range (°C)*	Accuracy (°C)	Stability (°C)	Displayed Resolution(°C)	Transition Time (sec)†
T-2420 with T-BOH	-75—200	±1.0	±0.3	0.1	150
T-2420SX with T-BOH	-85—225	±1.0	±0.3	0.1	120
T-2420 with TF-IC5	-75—205	±1.0	±0.3	0.1	90
T-2420 with TF-IC7	-75—225	±1.0	±0.3	0.1	5
T-2420SX with TF-IC7	-85—225	±1.0	±0.3	0.1	4

* Cold specifications are for room ambient temp. of 75 °F, or lower, with 60 Hz power.

† Transition time is from +125 °C to -55 °C or -55 °C to +125 °C; air temperature measured at air output nozzle. Measured in temperature cycle mode after system stabilization with a 10 second soak time, or less, at each temperature. Room ambient temperature to be below 75°F.

FEATURES

Calibration: Automatic or manual. Up to 10 different applications may be calibrated independently and stored in non-volatile memory.

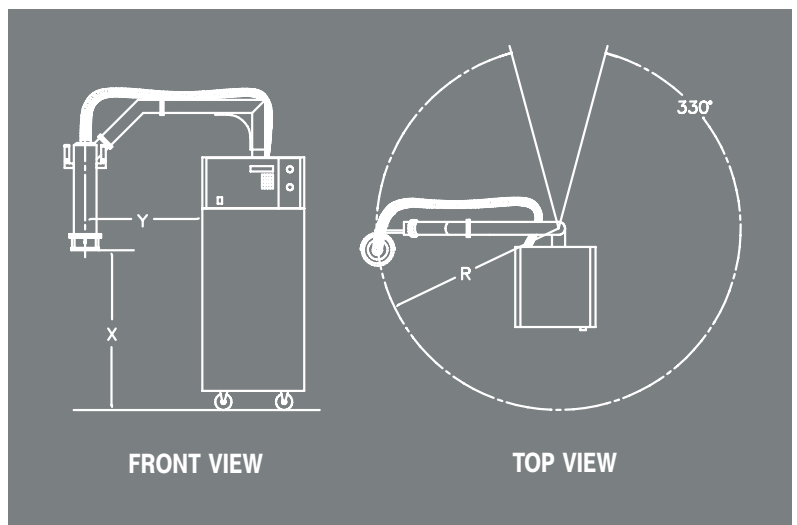
Temperature Sensor: Device under test (DUT), K-type thermocouple. Optional T-type thermocouple. 1000 ohm RTD for auto calibration.

Controller: Microprocessor-based PID (Proportional, Integral, Differential) with user control of DUT mass constant.

Fail Safes: Snap disc thermostats, air flow sensors and thermocouples. Over temperature limit of 235°C.

Air Dryer: Dries air to -70°C dew point.

Air Flow: 200 to 960 SCFH (1.6 to 7.6 liters/sec)



ARM	X (in/cm)		Y (in/cm)		R (in/cm)	
	MAX	MIN	MAX	MIN	MAX	MIN
TF-IC5	57/145	24/61	30/76	18/46	54/137	38/96
TF-IC7	57/145	24/61	30/76	18/46	54/137	38/96