

FTS Systems ThermoJet_{ES}

Precision Temperature Cycling System



Features

- Control temperature from - 80 to 225 °C.
- Flow rate of up to 20 SCFM.
- Enhanced digital temperature control.
- Utilizes off-the-shelf refrigerants.
- Highest heat removal capacity in the industry.
- Compact footprint smallest on market.
- CE compliant.
- Removable touchscreen interface.

Controller Specifications

Type	Microprocessor PLC-based PID
Program	Save and load 48 programs of 8 segments each
Safeties	Low flow, over temp, EMO interlock
Status Indication	Air input, air temp, air / DUT control, OK, run/idle, purge, defrost
Available Limits	Max. ramp rate, min. / max. air temperatures
Ramp Rates	1 °C / min. incremental up to 999 °C

* Dimensional data is for base unit (i.e., without air delivery assembly).

† Voltage and Hertz are adjustable.

Performance Specifications

	THJ80ES
Temperature Range (Standard)	-80 to 225 °C
Temperature Range (High Temperature Option)	-80 to 350 °C
Accuracy	1 °C
Setability	0.1 °C
Indication/Resolution	0.1 °C
Stability	± 0.5 °C (at discharge nozzle)
Max. Transition Rates	125 to -55 °C in <10 s / -55 to 125 °C in < 10 s 200 to -65 °C in <15 s / -80 to 200 °C in <15 s
Stabilization Rate	125 to -55 °C in <12 s / -55 to 125°C in <4 s

Note: Performance parameters are based on SP Scientific test data from similar units operating at 230 V, 60 Hz at 15 scfm (425 lpm) at an ambient temperature of 23 °C (72 °F) and a relative humidity of 55%.

Air Flow Specifications

	THJ80ES
Flow (Input)	25 scfm @ (708 lpm)
Pressure (Input)	80 - 125 psig (5.5 - 8.6 bar)
Dew Point (Input)	10 °C
Flow (Output)	5 - 20 scfm @ (142 - 566 lpm)
Setability	1 scfm (28.3 lpm)

Dimensional Data*

	THJ80ES
Width	21 in (53.3 cm)
Depth	27 in (68.6 cm)
Height	38 in (96.5 cm)
Weight	425 lbs (193 kg)

Electrical Configurations

	200 / 208 - 230 V	220 - 230 V	208 - 240 V†
Voltage			
Hertz	50 / 60 Hz	50 Hz	50 / 60 Hz†