



SP FTS ThermoJet

Precision Temperature Cycling System

Features & Benefits

- Control temperature from -80 °C to 225 °C
- Flow rate of up to 20 SCFM
- Enhanced digital temperature control
- Highest heat removal capacity in the industry
- Smallest footprint on the market
- Removable touchscreen interface
- High temperature option of +350 °C
- Temperature transitions from +200 °C to -65 °C in less than 15 seconds, -80 °C to +200 °C in less than 15 seconds
- Reliable and robust cascade refrigeration system
- External Device Under Test (DUT) thermocouple for controlling temperature accuracy at the device
- Configured with no holding arm or mechanical arm for easy air stream placement
- Dry air purge to help protect test site
- Built in air dryer with oil, water and particulate filters

Performance Specifications

Description	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 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%.



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Controller Specifications

Description	THJ80ES
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

Dimensional Data¹

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

¹ Dimensional data is for base unit (i.e., without air delivery assembly).

² Voltage and Hertz are adjustable.

Air Flow Specifications

Description	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)

Electrical Requirements

Voltage	200 / 208 - 230 V	220 - 230 V	208 - 240 V ²
Hertz	50 / 60 Hz	50 Hz	50 / 60 Hz ²

A selection of optional accessories are available including shrouds, enclosures, boots, and sponges sponges to meet with your application needs



SP FTS ThermoJet chamber ready model



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