



# SP FTS AirJet™ XE

## Precision Temperature Cycling System

### Features & Benefits

- Full Mil-spec temperature range of -75 °C to +225 °C in a compact size
- Fastest benchtop temperature cycling rates
- Self-contained design does not require liquid nitrogen or other external temperature source
- Temperature control and monitoring from either an external or internal thermocouple
- Excellent stability, accuracy and repeatability
- Several multi-step profiles saved, loaded and run at the touch of a button
- Compatibility with automatic test equipment using GPIB or RS232 interface
- Flow rates adjustable from 1.0 to 6.0 scfm
- Small enough to be rack mounted

### Options

- Manual holding arm with pneumatic up/down for positioning and securing head over DUT
- Optional Air Dryer lets you use shop air – includes pressure regulator, pressure gauge, oil filter, particle filter, and heatless regenerative air dryer
- Assortment of thermal caps available for different applications
- Mobile integrator with casters for mobility

### Physical Characteristics

Description		AirJet XE
Controller Dimensions (W x D x H)		23.6 cm x 17.8 cm x 20.8 cm (9.3 in x 7 in x 8.2 in)
Refrigeration Dimensions (W x D x H)		37.9 cm x 60.19 cm x 40.9 cm (14.9 in x 23.7 in x 16.12 in)
Airjet Dryer Dimensions (W x D x H)		30.7 cm x 20.3 cm x 70.6 cm (12 in x 8 in x 27 in)
Weight:	Controller	4.08 kg (9.0 lbs)
	Refrigeration	54.4 kg (120.0 lbs)
	Dryer (optional)	19.5 kg (43.0 lbs)



*Please note: Cart is sold separately and may vary from design pictured above*

# SP FTS AirJet™ XE

## Model Specifications

Temperature Range	XE751	XE752	XE753
2 scfm	-75 °C to +225 °C	-75 °C to +225 °C	-75 °C to +225 °C
3 scfm	-55 °C to +185 °C	-55 °C to +225 °C	-55 °C to +225 °C
4 scfm	-35 °C to +145 °C	-35 °C to +225 °C	-35 °C to +225 °C
5 scfm	-25 °C to +125 °C	-25 °C to +225 °C	-25 °C to +225 °C
6 scfm	-15 °C to +100 °C	-15 °C to +200 °C	-15 °C to +225 °C

Transition Data	XE751	XE752	XE753
2 scfm	-55 °C to +125 °C <10 seconds	-55 °C to +125 °C <10 seconds	-55 °C to +125 °C <10 seconds (est.)
3 scfm	+125 °C to -55 °C <10 seconds	+125 °C to -55 °C <20 seconds	+125 °C to -55 °C <20 seconds (est.)
4 scfm	-25 °C to +100 °C <10 seconds	-25 °C to +125 °C <10 seconds	-25 °C to +125 °C <10 seconds (est.)
4 scfm	+100 °C to -25 °C <20 seconds	+125 °C to -25 °C <20 seconds	+125 °C to -25 °C <20 seconds (est.)

### Safeties

Built-in over temperature safety indicator  
Built-in low flow safety indicator

## Other Specifications (All Models)<sup>1</sup>

Description	
Control	PID
Stability	± 0.5 °C
Repeatability	± 0.5 °C
Resolution	0.1 °C
Thermocouple	Type K
Flow (Output)	1 to 6 SCFM
Air Transfer Line	2.4 m (8 ft)
Refrigeration	Dual stage cascade

<sup>1</sup> Performance parameters are based on SP test data from similar units operating at an ambient temperature of 23 to 30 °C (72 to 86 °F) and a relative humidity of <75%.

## Optional Accessories

### GENERAL ACCESSORIES

Model	Description
AJSP-200	Bench stand assembly with pneumatic lift
AJC24	AirJet mobile integrator with casters
AD100A	AirJet air dryer, 115V, 50/60Hz
AD100D	AirJet air dryer, 220V, 50/60Hz, 2A
AD31	Manifold, air, 3 outputs (3/8" female quick disconnect)
AJ-NQCA	AirJet nozzle quick connect adapter
AJ-NHA	AirJet nozzle holder
SWD-XE	Labview drivers for XE
SET1	Static eliminator, for transport shrouds/thermal caps
THJ-TC1	Thermocouple kit

### THERMAL CAPS

Model	Description
SH35T1	Transparent, 3.5 ID x 2" deep
SH45T1	Transparent, 4.5 ID x 2" deep
SH55T1	Transparent, 4.5 ID x 2" deep

## Electrical Requirements

Model	Description
XE751	120V, 50/6Hz, 1Ph, 15A
XE752	120V, 50/6Hz, 1Ph, 20A
XE753	220V, 50/6Hz, 1Ph, 13A

## System Requirements

Ambient Temperature	23 °C to 30 °C (72 °F to 86 °F)
Humidity	<75% RH
Air	Clean dry air (CDA): 7 SCFM (3.3 l/s) at 75 PSI (5.2 BAR), -80 °C dew point
With Optional Air Dryer	Clean dry air (CDA): 10 SCFM (4.7 l/s) at 100 PSI (6.9 BAR), +10 C dew point



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