

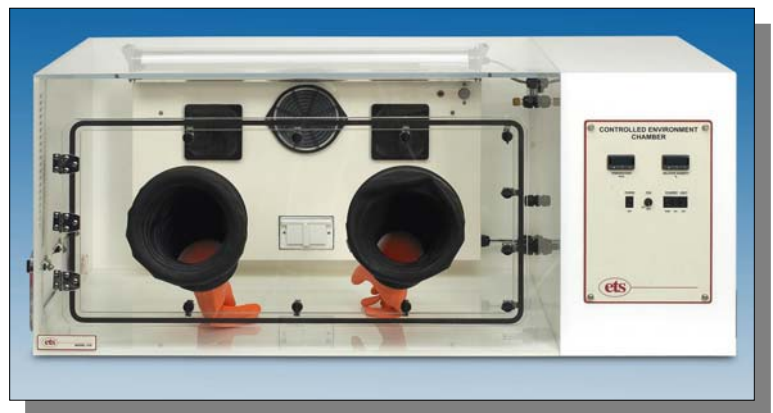
# CONTROLLED ENVIRONMENT CHAMBER

## Model 5518

Integrated environmental control system that can independently maintain humidity levels from <10 to >98% RH and temperature from <40-135°F (0-55°C). The chamber has a working volume of 13 cu. ft. (368 l) and features built in humidity and temperature control systems. Designed for storage, conditioning, testing, weighing and fabrication in electronic, electrostatic, biomedical, pharmaceutical and other applications.

### Features:

- Microprocessor Control
- Doors (3/8") with ½-turn latches  
Front: 32"x14" (81x36 cm)  
Side: 14"x4" (36x10 cm)
- 8" Ports with gloves
- Fluorescent lighting
- Internal AC power outlet
- 3/8" clear & white acrylic with polished PS30 welded seams
- Gas cooling and electric heating systems
- Desiccant/pump and ultrasonic humidity systems
- Optional software, 3<sup>rd</sup> parameter monitoring & custom configurations



### Performance Characteristics:

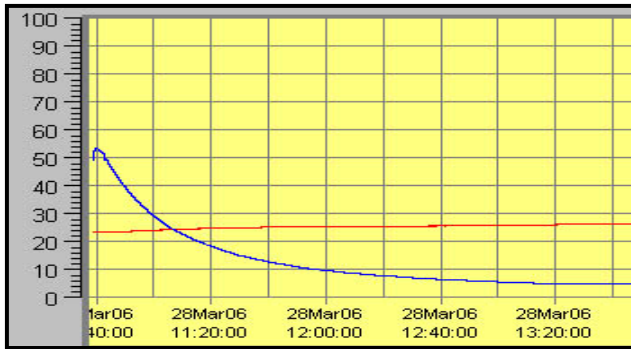
Chamber performance pertains to the ability of the chamber to reach and then hold a given humidity level along with humidity gradients. It is not only a function of the chamber, but of the temperature, operating systems and controllers used. The following charts show the time typically required to decrease and increase humidity (Blue = RH, Red = T °C) plus humidity gradients using the optional CALCOMMS software package.



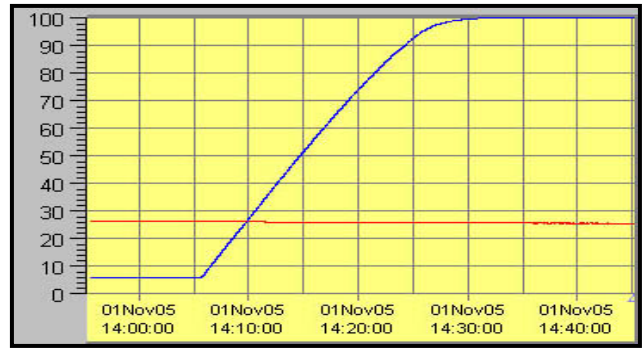
**electro-tech systems, inc.**

3101 Mt. Carmel Avenue, Glenside, PA 19038 • Tel: (215) 887-2196 • Fax: (215) 887-0131

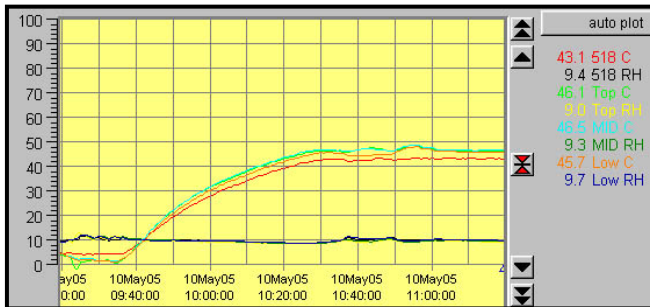
[www.electrotechsystems.com](http://www.electrotechsystems.com)



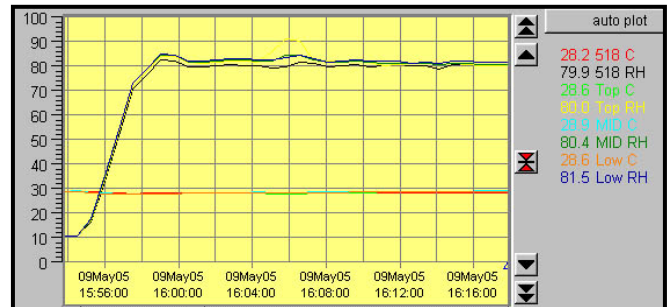
Rate of decrease



Rate of increase



Increase temperature, constant low RH



Increase RH, constant temperature

## Specifications:

### Chamber:

#### Material:

3/8" (6mm) clear & white acrylic

#### Construction:

PS30 polished, welded seams

Doors: 3/8" (9mm) clear acrylic, 1/2-turn latches

Seal: 1/4" (6mm) Poron, non-setting gasket

Gloves: (when configured)

.018" (0.5mm) replaceable hands, natural rubber, accordion sleeves, 8" (20.3cm) ports

#### Operating Range:

Humidity: <10 to >98% @ 72°F

Temperature: <40 to 135°F (0-55 °C)

### Controllers:

#### Type:

2x CAL 3300, single ramp/soak cycle

1x CAL 3300, opt 3<sup>rd</sup> parameter, linear input

Resolution: 0.1%/0.1°

Set Pt. Tracking: ±0.1

Rec. Out: 0-1vdc, 0-20ma, 4-20ma

Computer IF: MODBUS proto. Via RS485-

(Optional) PC with W98 or higher, NT

Sensor: Temp compensated RH/Temp

RH: Capacitive film, 0 to 100%, non-condense

Temp: RTD, -40 to +140°F (-40 to 60°C)

Accuracy: ±1.5% RH @ 72°F (22°C)

±0.5°F (±0.3°C)

Fans: 2x110 cfm (6230 l/min), ON/OFF sw

Access Ports: (right side)

2x1/4" (6mm) Quick disconnects

1x1" (25.4mm) Hose barb

1x1 1/2" (31.4mm) cable pass through  
(located on left side)

Lighting: 18W sealed fluorescent, ON/OFF sw

#### Dimensions:

Overall: 54"Wx25.5"Dx22"H (137x65x56cm)

Working space (useable): 39"Wx20"Dx22"H  
(99x51x56 cm)

Weight: 101 lbs (46 kg)

### Operating Systems:

#### Dehumidify:

Desiccant/Pump

1 lb (0.45kg) CaSO<sub>4</sub>/0.6cfm

Humidify: Ultrasonic

Capacity: 1/2 Gal. (1.9 l) tank

Flow rate - <0.05 cfm

Heat: Electric, 500W

Cool: Liquid CO<sub>2</sub> to gas (user supplied CO<sub>2</sub>)

#### Power:

Voltage: 115/230VAC, 50/60Hz

Current: 6 Amps

Warranty: One (1) year

Specifications subject to change without notice.