

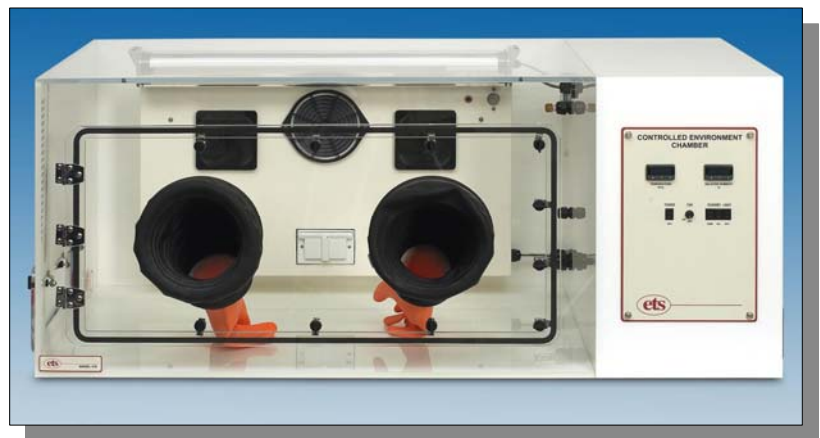
CONTROLLED ENVIRONMENT CHAMBER

Model 5518

The Model 5518 is a lower cost alternative to the Model 5532. The system is designed for users that require precise control of humidification, dehumidification and heating but do not require precision, long-term cooling, multiple ramping or computer control. The Model 5518 is an integrated environmental control system that can independently maintain humidity levels from <10 to >98% RH and temperature from <32 to 122°F (0-50°C), or from ambient to 50°C without cooling when used in an area maintained at 23°C. The chamber has a large working area of 13 cu. ft. (368 l), excellent visibility and built-in humidity and temperature control. The system is designed for testing, storage, conditioning, weighing and fabrication in electronic, electrostatic, biomedical, pharmaceutical, consumer research, R&D and many other applications. The standard cooling system is designed for short-term applications using customer supplied tanks of liquid CO₂ (with a dip tube). The Model 5518 is available in 115 and 230 VAC versions.

Features:

- Microprocessor PID control
- Front & side doors
- 8" Ports with gloves
- Fluorescent lighting
- Internal AC power outlet
- Clear & white acrylic with PS30 welded seams
- Dehumidification and humidification systems
- Liquid CO₂ cooling and electric heating systems
- Optional software, 3rd parameter monitoring & control



Performance Characteristics:

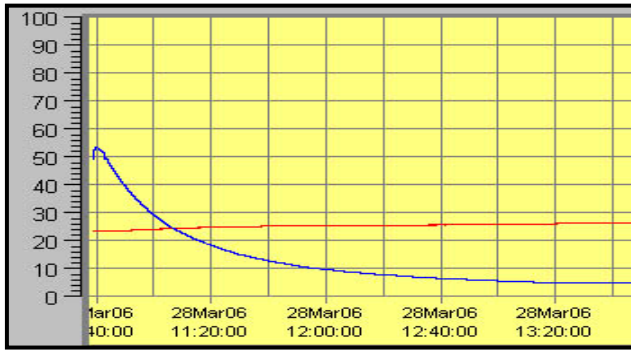
Equipment and samples placed inside the environment have an impact on the conditions that can be maintained and the time required to increase or decrease to the set point. Any item that adds heat or humidity to the environment will have an impact on system performance. Chamber performance pertains to the ability of the chamber to reach and then hold a given level along with gradients. It is not only a function of the chamber, but the ambient temperature and humidity levels, operating systems and controllers used. The following charts show the time typically required to decrease and increase (Blue = RH, Red = T °C) plus humidity gradients using the optional CALCOMMS software package in a no-load situation.



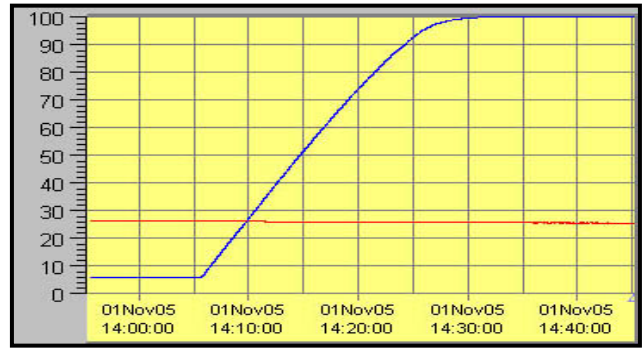
electro-tech systems, inc.

www.electrotechsystems.com

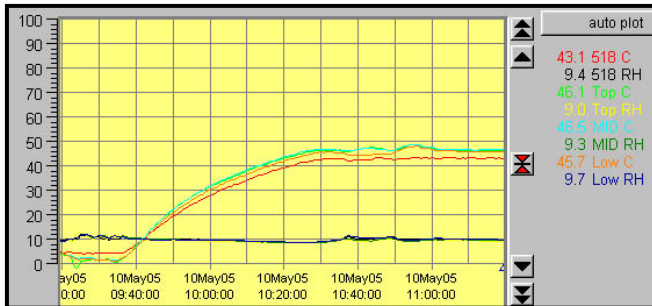
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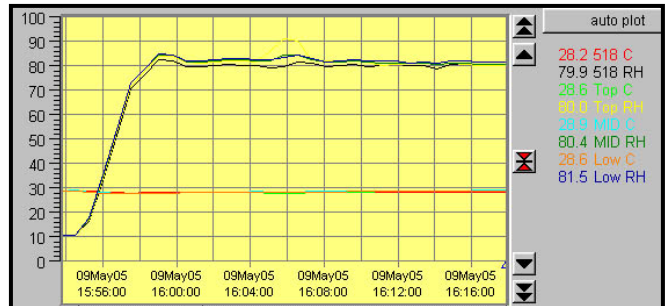
Rate of decrease



Rate of increase



Increase temperature, constant low RH



Increase RH, constant temperature

Specifications:

Chamber:

Dimensions:

Overall: 54"Wx25.25"Dx21.75"H (137x64x55cm)
 Working space: 38.75"Wx24.5"Dx21"H (98x62x53cm)
 Full clearance: 35.75"Wx20"Dx18"H

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

Construction: PS30 polished welded seams

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

Front: 32" x 14" (81 x 35 cm) Access Opening

Side: 14" x 4" (35 x 10 cm) Access Opening

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

Operating Range:

Humidity: <10 to >98% @ 23°C ambient

Temp: 32 to >122°F (0-50°C) @ 23°C ambient

Controllers:

Two (2) CAL 3300, single ramp/soak cycles

One (1) CAL 3300, optional 3rd parameter

Resolution: 0.1%/0.1°

Rec. Out: Humidity: 0-1VDC (0 to 100% RH)

Temperature: 0-1VDC (-40 to 60°C)

Optional Computer Interface:

MODBUS pro. via RS485-PC (Serial or USB)

with W98, XP, W7Pro (No function with W7 Home)

Sensor: (Extends 3" into chamber on right side wall)

Type: Temperature compensated RH/Temp

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

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

Accuracy: ±1.5% RH @ 72°F (22°C) ±0.5°F (±0.3°C)

Lighting: 18W sealed fluorescent, ON/OFF sw
 (Light extends 3" down from top of chamber.)

Gloves: .018" (0.5mm), replaceable hands,
 natural rubber, accordion sleeves standard
 Optional: Iris Ports, No Ports

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

Ports on Right-Hand Side:

Qty: 2x1/4" (6mm) Quick Connect (Dehumidification)

Qty: 1x1" (25.4mm) Hose Barb (Humidification)

Qty: 1x1" (25.4mm) Hose Barb (Chamber Vent)

Qty: 1 Brass Quick Connect for Liquid CO₂

Port on Left-Hand Side:

1x1.5" (31.4mm) Cable pass through

Power:

Voltage: 115/230VAC, 50/60Hz

Current: 8 Amps/4 Amps

Shipping: Chamber: 63"x36"x33" 150-lbs.

Accessories: 22"x22"x14" 27-lbs.

Operating Systems:

Dehumidify: Desiccant/Pump

1-lb (0.45kg) CaSO₄/0.6cfm

Humidify: Single Head Ultrasonic

Capacity: 0.9 gal (3.4 l)

Heat: Electric, 500W

(Mounted internally on rear wall of chamber.)

Cool: Liquid CO₂ to gas (user supplied CO₂)

Warranty: One (1) year

Specifications are subject to change without notice.