

## Section 7 Specifications

*\*Specifications are based on nominal voltages of 115V or 230V in ambients of 22°C to 25°C.*

### Temperature

Control . . . . $\pm 0.1^{\circ}\text{C}$  Microprocessor PID Control  
Setpoint . . . . .Digital - Touch pad,  $0.1^{\circ}\text{C}$   
Range . . . . . $+5^{\circ}\text{C}$  above ambient to  $50^{\circ}\text{C}$   
Uniformity . . . . . $\pm 0.3^{\circ}\text{C}$  @  $+37^{\circ}\text{C}$   
Tracking alarm . . User programmable (low) indicator  
Overtemp . . Tracking, user programmable, action, and indicator  
Display . . . . .Digital, LED,  $0.1^{\circ}\text{C}$  increments

### Temperature Safety

Type . . Extreme temperature safety, action, and indicator  
Sensor . . Thermostat, independent of temp control system  
Indicator . . Message center, audible and visual alarms

### Relative Humidity

Control . . . . .Humidity pan - natural vaporization  
Humidity w/ pan . . . . .95% RH at  $37^{\circ}\text{C}$   
Display . . . . .Optional in 1% increments  
Alarm . . . . .Low RH with optional RH monitor

### CO<sub>2</sub>

Control . . . . . $\pm 0.1\%$  microprocessor PID control  
Sensor . . . . .T/C or IR  
Readability . . . . .0.1%  
Range . . . . .0 to 20%  
Inlet pressure . . . .15 psig (1 bar),  $\pm 5$  psig (0.3 bar)  
Display . . . . .Digital LED, 0.1% increments

**Shelves**

Dimensions . . . . .18.5” x 18.5” (47cm x 47cm)  
Construction . .Stainless steel (belt sanded, both sides)  
Surface area . . . . .2.4 sq. ft. (0.22 sq. m) per shelf  
Max. per chamber . . . . .38.4 sq. ft. (3.6 sq. m)  
Loading . . . 35 lbs (16kg) slide in and out, 50 lbs (23kg) stationary  
Standard . . . . .4  
Maximum . . . . .16

**Construction**

Interior volume . . . . .6.5 cu. ft. (184 liter)  
Interior . . . . .Type 304 stainless steel shiny finish  
Exterior . . . . .18 gauge cold roll steel  
Outer door gasket . . Four-sided molded, magnetic Santoprene  
Inner door gasket . . . . .Bulb, silicone  
Insulation . . . . .Mineral wool

**Fittings**

Access port . . 1-1/4 inch (32mm) removable silicone plug  
CO2 inlet . . . . .1/4” (6.4mm) barbed  
Sample port . . . . .Front mounted barbed

**Electrical**

115 Volt models  
115VAC, 50/60 Hz, 1PH, 9.6 FLA  
(Operating range 90-125VAC)  
230 Volt models  
230VAC, 50/60 Hz, 1 PH, 4.4 FLA  
(Operating Range 180-250VAC)  
Power switch/circuit breaker . . . 2 Pole, 12.0 Amp  
Accessory outlet . .Voltage equal to the cabinet input.  
75 Watts maximum, 0.5ma leakage current  
Alarm contacts . .Deviation of temperature, CO2, power,  
NO and NC



### Safety Specifications

Indoor Use Only

Altitude . . . . .2,000 meters

Temperature . . . . .5°C to 40°C

Humidity . . .80% RH at or below 31°C, decreasing linearly to  
50% RH at 40°C

Mains Supply Fluctuations

Mains supply voltage fluctuations not to exceed  $\pm 10\%$  of nominal  
voltage

Installation Category II<sup>1</sup>

Pollution Degree 2<sup>2</sup>

Class of Equipment<sup>1</sup>

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- 1 Installation category (overvoltage category) defines the level of transient overvoltage which the instrument is designed to withstand safely. It depends on the nature of the electricity supply and its overvoltage protection means. For example, in CAT II which is the category used for instruments in installations supplied from a supply comparable to public mains such as hospital and research laboratories and most industrial laboratories, the expected transient overvoltage is 2500V for a 230V supply and 1500V for a 120V supply.
  - 2 Pollution Degree describes the amount of conductive pollution present in the operating environment. Pollution degree 2 assumes that normally only non-conductive pollution such as dust occurs with the exception of occasional conductivity caused by condensation.