

# ST055 STABILITY REFRIGERATOR CHAMEBR

# **ST Series Overview**

Our ST series stability refrigerators provide the highest level of performance and construction with tight uniformity and control of temperature. They are a common product among laboratory researchers looking for exceptional precision and virtually unlimited customization options available.

### **ST09**

The ST09 is a bench top stability chamber designed to fit on 24" benchtops or stacked with optional racking

### **ST030**

The ST030 is a single-door stability refrigerator.

#### **ST055**

The ST055 is a 2-door stability refrigerator.

#### **ST084**

The ST084 is a 3-door stability refrigerator.











# ST SERIES: STABILITY REFRIGERATOR CHAMEBRS

Our ST series come standard with the following: temperature range of 1° C to 15° C. Control of temperature at sensor of  $\pm 0.2^{\circ}$  C. Uniformity inside chamber of  $\pm 1.0^{\circ}$  C. Standard Microprocessor Controller with PID, autotuning, programmable alarms, ability to ramp/soak, process variable and setpoint variable offset, dual display of actual temperature and setpoint temperature (process variable and setpoint variable). Controls are able to be quickly exchanged for future upgrades or repair. As always, if you have different specifications, probes, microprocessors etc., we can probably do it.

## **Superior Control and Uniformity**

The ST series chambers control well within the specifications required by the FDA and ICH for GMP studies. Standard control at the sensor in these chambers is  $\pm 0.2^{\circ}\text{C}$  and  $\pm 0.3\%\text{RH}$ .

## **Options Available**

Data Logging
Chart Recording
Touch Screen Controls

### Widely Proven, Non-Proprietary Controllers

Standard controllers for the ST Series are manufactured by Fuji Electric and are ideal for stability testing chambers. Unlike many proprietary controllers, this controller is commercially available and proven in tens of thousands of installations. Standard functions include: autotuning, fuzzy logic, PID control, programmable alarms, calibration capability, offset capability, etc. A touchscreen control interface is optional. Other controller manufacturers are also supported (Watlow, Allen-Bradley etc.)

### **Services and Warranties**

We offer 24 hour technical support throughout the lifetime of your chamber. In addition to standard warranties, we also offer extended warranties for cooling components, parts and labor. We also provide qualifications, validations and preventive maintenance services at an additional cost. Please ask for a quote.



# ST055 Stability Refrigerator Chamber Specifications (ambient 21° C)

Performance	Standard	Customized Option
Temperature Range	1° C to 15° C	Available
Ambient Temperature	21° C ± 3° C	Available
Temperature Control	± 0.2° C	Available
Temperature Uniformity	± 0.7° C	Available
Control Resolution	0.1° C	Available
Temperature Sensor	NIST Traceable PT 100 RTD Class A	Available
Control Resolution	0.10%	Available

Control System	Standard	Customized Option
Controller	Microprocessor based PID	West EC-44, Future Design Touchpad + More
Control Readout	Actual and Set-Point Values	Trending, Duty Cycle
Calibration Corrrection Capability	Actual and Set-Point Values	Available
Uniformity Off Set	Standard 0.1 Resolution	Available
Alarm	Audible and Visual	Text, Email, Web Server, Remote Access
Alarm Type	Deviation in 0.1° C or 0.1% RH with Delay	Absolute 0.1 Resolution with Delay
Remote Monitoring	Available	Dry Alarm Contact, RS 485 & Analog Output
Password Protection	Numeric	Numeric, Alpha Numeric
Audit Trail	N/A	Available
Universal Power Supply for Monitoring	N/A	Available

Construction	Standard	Customized Option
Exterior	Stainless Steel Door & Front, Aluminum Sides	Stainless Steel Door, Front & Sides
Interior	Aluminum Side Walls & Back, Stainless Steel Floor & Ceiling	Stainless Steel Side Walls, Back, Floor, Door Liner & Ceiling
Shelving	6 Gray PVC Coated, Adjustable 1" Increments, Supports Up to 150 lbs of Evenly Distributed Weight	Stainless Steel, Chrome Plate or Custom
Casters	2.75" Total Weight Capacity is 300 lbs per Castor, Not Including the Weight of the Chamber	5" Casters or Seismic Legs

Capacity & Dimensions	US Standard	Metric
Interior Capacity	46.6 ft <sup>3</sup>	1320 liters
External Dimensions	52.88" W x 35.81" D x 80.5" H	134.3 cm W x 90.95 cm D x 204.47 cm H
Internal Dimensions	47.5" W x 29" D x 58.5" H	120.65 cm W x 73.66 cm D x 148.59 cm H
Shelf Dimensions	22.5" W x 26.25" D	54.61 cm W x 66.68 cm D
Crated Weight	780 lbs	370 kg

Electrical	US Standard	International
Voltage	115v / 60HZ	230/50/1
RLA	7.0	3.6 With Step Down Transformer
Cord Length	7 ft	9 ft



# **ST055 Stability Refrigerator Chamber Technical Drawings**



