

## FS011 STABILITY FREEZER CHAMBER

### FS Series Overview

The FS series stability freezer chambers are designed for performance specifications exceeding FDA and ICH requirements.

### FS011

The FS011 is a bench top stability freezer chamber designed to fit on 24" benchtops or stacked with optional racking.

### FS030

The FS030 is a single-door stability freezer chamber.

### FS055

The FS055 is a 2-door stability freezer chamber.

### FS084

The FS084 is a 3-door stability freezer chamber.



Featured photo is the FS011 bench top stability freezer chamber, shown with upgraded West Controller, open door view to show adjustable internal racks.



The FS011 benchtop stability freezer chamber, closed door view.



## FS SERIES: STABILITY FREEZER CHAMBERS

### Temperature Range

The FS series offers a temperature range of -25°C to 15°C.

Temperature during defrost typically does not exceed -15°C when setpoint is at -20°C.

### Widely Proven, Non-Proprietary Controllers

Standard controllers for the FS Series are manufactured by Fuji Electric and are ideal for laboratory freezer. 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, ramp/soak, offset capability, etc. A touchscreen control interface is optional. Other controller manufacturers are also

supported (Watlow, Allen-Bradley etc.)

### Options Available

Chart Recorder

Data Logger

Magnetic latch door handle with lock and two keys

### Services and Warranties

We offer technical support throughout the lifetime of your freezer. 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.

### Refrigeration System

The FS Series provides an oversized and balanced, environmentally friendly R404A refrigeration system, epoxy coated evaporator, large evaporator and coil heater permit for a short defrost cycle.

## FS011 Stability Freezer Chamber Specifications (ambient 21° C)

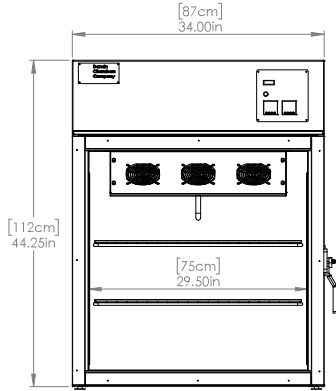
Performance	Standard	Customized Option
Temperature Range	-25° C to 15° C	Available
Ambient Temperature	21° C ± 3° C	Available
Temperature Control	± 0.2° C	Available
Temperature Uniformity	± 0.8° C	Available
Control Resolution	0.1° C	Available
Temperature Sensor	NIST Traceable PT100 RTD Class A	Available

Control System	Standard	Customized Option
Controller	Fuji PXF4 (PID - Fuzzy Logic)	West EC-44, Future Design Touchpad + More
Control Readout	Actual and Set-Point Values	Trending, Duty Cycle
Calibration Correction Capability	Actual and Set-Point Values	Available
Uniformity Off Set	N/A	N/A
Alarm	Audible and Visual	Text, Email, Web Server, Remote Access
Alarm Type	Deviation in 0.1° C with Delay	Absolute 0.1 Resolution with Delay
Remote Monitoring	Dry Alarm Contact, RS 485 Modbus	Analog Output
Password Protection	Numeric	Numeric, Alpha Numeric
Audit Trail	N/A	Available
Uninterrupted Power Supply (Monitoring)	N/A	Available

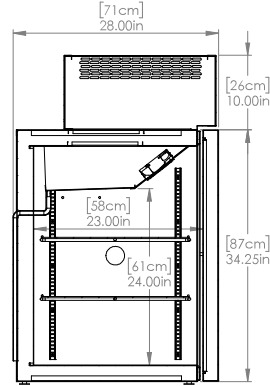
Construction	Standard	Customized Option
Exterior	Heavy-Gauge Powder-Coated Galvanized Steel Exterior Sides/Exposed Surfaces	316/304 Grade Stainless Steel
Interior	304 Grade Stainless Steel Door Liner, Top, Bottom, Back and Sides	Available
Shelving	2 Stainless Steel Adjustable 1" Increments, Supports Up to 150lbs of Evenly Distributed Weight	Available
Casters	2.5" Weight Capacity is 300lbs Per Caster, Not Including the Weight of the Chamber	5" Casters or Seismic Legs

Capacity & Dimensions	US Standard	Metric
Interior Capacity	10.5 ft <sup>3</sup>	297.33 liters
External Dimensions	Refer to Drawing Below	Refer to Drawing Below
Usable Internal Dimensions	Refer to Drawing Below	Refer to Drawing Below
Shelf Dimensions	Refer to Drawing Below	Refer to Drawing Below
Crated Weight	470 lbs	213.19kg

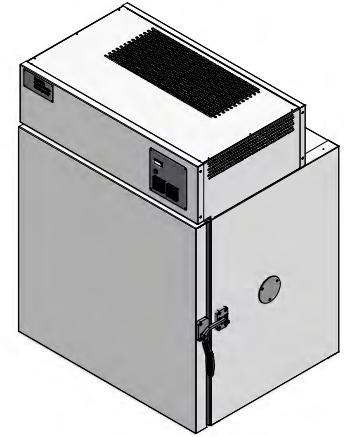
Electrical	US Standard	International
Voltage	115v / 60 HZ	230 / 50 / 1
RLA	6.7	4.0 With Step Down Transformer
Cord Length	9 ft	2.74m



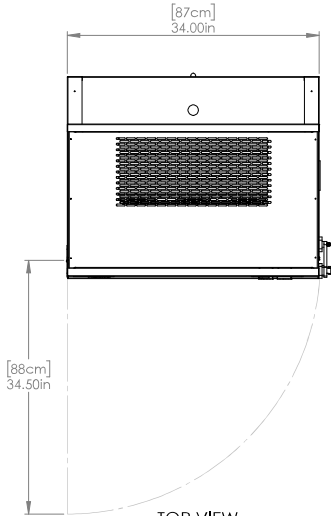
FRONT VIEW  
(DOOR REMOVED)



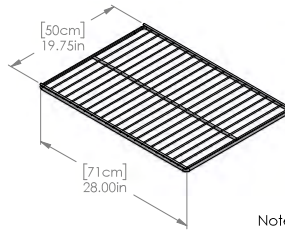
SIDE VIEW  
(SECTION)



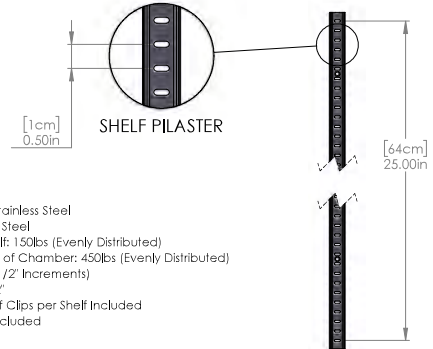
3D VIEW



TOP VIEW



WIRE SHELF



SHELF PILASTER

**Notes:**

- Shelf Material: 304 Stainless Steel
- Shelf Finish: Polished Steel
- Max Weight per Shelf: 150lbs (Evenly Distributed)
- Max Load Capacity of Chamber: 450lbs (Evenly Distributed)
- Pilaster Height: 25" (1/2" Increments)
- Minimum Spacing: 2"
- 4 Stainless Steel Shelf Clips per Shelf Included
- 2" I.D. Access Port Included

**Note:** Tolerances are 0.25" unless otherwise stated  
\*Dimensions and components are subject to change without notice.