



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 it 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.











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.)

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.

Options Available

Chart Recorder

Data Logger

Magnetic latch door handle with lock and two keys



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 Corrrection 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 | Available | Dry Alarm Contact, RS 485 & 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 |

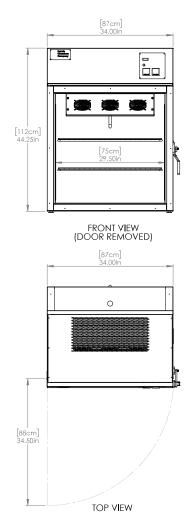
| Capacity & Dimensions | US Standard | Metric |
|----------------------------|------------------------|------------------------|
| Interior Capacity | 10.5 ft ³ | 297.33 liters |
| External Dimensions | Refer to Drawing Below | Refer to Drawing Below |
| Usable Internal Dimensions | Refer to Drawing 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 |









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

