

# PH-DAI-NSF-49S

#### **Product Description**

These cutting-edge pharmacy refrigerators are certified in accordance with the NSF/ANSI 456 Standard for Vaccine Storage. With this certification, units protect pharmaceuticals at optimal temperatures, preventing waste and allowing for peak delivery. Our premium line includes features such as extensive alarm systems and digital touch pad displays.

These solid door refrigerators utilize microprocessor controllers and feature temperature alarms, remote alarm contacts, and probe access ports with included probes. Units run on natural, hydrocarbon refrigerant for environmental health and energy efficiency.

# General Description and Application

Description

Double Solid Door Pharmacy/Vaccine Upright Refrigerator

Operational environment

Indoor use only, +18°C to +26°C (+65°F to +78°F), <70% RH

Storage capacity 49 cu. ft. gross volume

Door Two swing solid doors, self-closing, non-reversible, magnetic sealed gaskets, keyed locks

Shelves Fourteen shelves (twelve adjustable/two fixed) with guard rail on back

Mounting 3 1/2" Swivel Casters (two locking)

Interior lighting Shielded, switched LED lighting, full coverage, balanced spectrum

Airflow management Forced Air technology, patent pending

External probe access Rear wall port (3/4") dia.

Insulation Cabinet is foamed-in-place with EPA compliant high density urethane foam

Exterior materials White powder coated steel

Access control Pyxis®, Omnicell® and AcuDose RX® compatible

General warranty Two (2) years parts and labor warranty, excluding display probe calibration

Compressor warranty Five (5) years compressor warranty

Product Weight 402 lbs
Shipping Weight 452 lbs
Rated Amperage 4.5 Amps

Power Plug/Power Cord NEMA 5-15 plug, 8 to 10 ft typical, conforms to UL471 requirements, Vaccine Storage power

cord warning label

Facility Electrical Requirement 110-120V AC: 15 A (minimum)

Agency Listing and Certification Certified with the temperature performance requirements as defined in the NSF/ANSI 456

Standard for Vaccine Storage for all testing scenarios. UL, C-UL, ETL, C-ETL listed and certified to

UL471 standard, hydrocarbon refrigerant safety. Energy Star Certified

Included Accessories Pharmacy refrigerator/freezer toolkit and temperature logs

### **Refrigeration System**

Compressor

Refrigerant

EPA SNAP compliant, R290, propane

Condenser

Fin and tube design, high efficiency fan

Evaporator

Defrost

Cycle optimized, zero energy

### Performance

Uniformity<sup>1</sup> (Cabinet air) +/- 1.0°C +/- 0.9°C Stability<sup>2</sup> (Cabinet air) Maximum temperature variation (Cabinet +/-1.2°C air) Temperature rise after 8 sec door Temperature did not exceed 6.0°C at any probe for all required NSF/ANSI 456 testing protocols<sup>3</sup> openings Recovery after 3 min door opening All probes recover to under 8°C within 6.5 min. **Energy consumption** 1.45 KWh/day⁴ Average heat rejection 3.15 KWh/day (448 BTU/h)<sup>4</sup> 48 or less installed Noise pressure level (dBA) Pull down time to 4°C nominal operating 45 min

### Controller, Configuration, Alarms and Monitoring

Controller technology Parametric, microprocessor, LED display with 0.1°C resolution NSF/ANSI 456 Standard for Vaccine Storage compliant digital temperature display and alarm Display technology module with battery back-up. Temperature setpoint range 1°C to 10°C (Controller settings must remain unaltered to ensure thermal performance compliant with NSF/ANSI 456 Standard for Vaccine Storage requirements) Calibration Calibrated using a NIST traceable device, three year certificate included External alarm connection State switching remote alarm contacts Visual and audible indicators **Alarms** High / Low temperature, compliant with alarm requirements defined in the NSF/ANSI 456 Standard for Vaccine Storage Simulator ballast Glass bead thermal media

Performance data acquired at 22°C ambient, using NSF/ANSI 456 compliant validation ballast probes, empty chamber, during stabilized steady state operation and a DAQ sampling rate of one measurement every 10 seconds

- 1 Uniformity is defined as the maximum variance in temperature across all probes at any point in time over the testing period
- 2 Stability is defined as the maximum variance in temperature experienced by any single probe over the testing period
- 3 Temperature performance for all loaded and unloaded door opening protocols, all alarm, controller and probe requirements as defined in the NSF/ANSI 456 standard for vaccine storage
- 4 Data per Energy Star test results or equivalent testing and calculation. Heat rejection based on daily averages, not continuous operation. Performance exceeds Energy Star requirements.

#### **Product Data Sheet**

Upright 49cu. ft. Solid Door Refrigerator, High Performance - Certified to NSF/ANSI 456 Standard for Vaccine Storage

#### Certifications



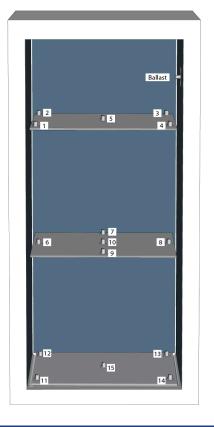




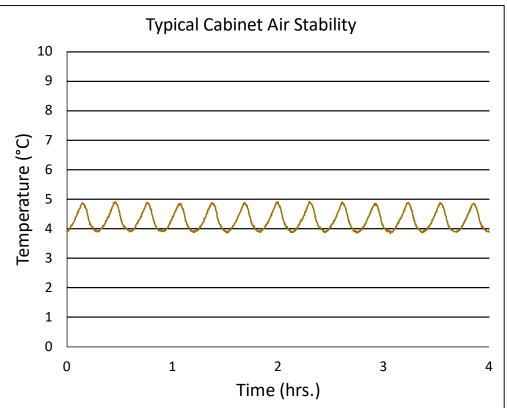


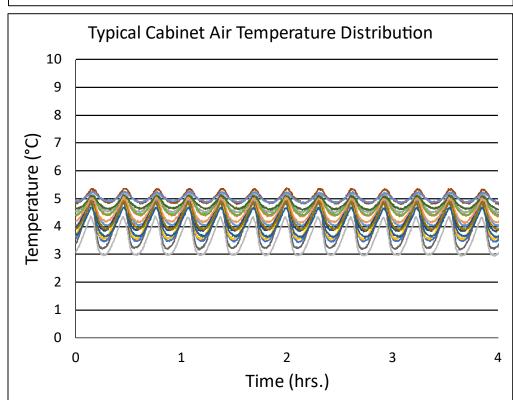
\*-one or more of these certifications may apply to this unit.

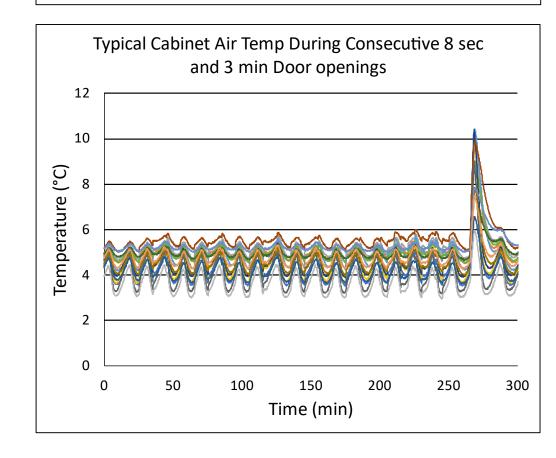
Temperature Probes							
Probe	Ave	Min	Max				
1	4.0	3.4	4.9				
2	4.7	4.3	5.2				
3	4.8	4.5	5.2				
4	4.2	3.5	5.1				
5	4.4	4.0	4.9				
6	4.7	4.4	5.1				
7	4.3	3.8	5.1				
8	5.0	4.8	5.4				
9	3.9	3.2	4.9				
10	4.3	3.8	4.9				
11	4.0	3.6	4.7				
12	4.8	4.6	5.1				
13	5.0	4.8	5.3				
14	4.5	4.1	5.1				
15	3.5	2.9	4.4				



#### **Temperature Charts**









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# Images





Dimensions							
	Width	Depth	Height	Door Swing	Total open Depth		
Exterior	54"	34 3/4"	81 3/4"	25"	58 1/8"		
Interior	49 1/4"	23 1/2"	50 3/4"				

