ABS American BioTech Supply

**Product Data Sheet**
Upright 16 cu. ft. Glass Door Refrigerator, High Performance
- Certified to NSF/ANSI 456 Standard for Vaccine Storage

# PH-ABT-NSF-S16G

## 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 Standard line provides multi-functional features in a cost-effective design.

These glass 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.

## Certifications

Intertek

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

## General Description and Application

| | |
|---|---|
| Description | Single Glass Door Pharmacy/Vaccine Upright Refrigerator |
| Operational environment | Indoor use only, +18°C to +26°C (+65°F to +78°F), <70% RH |
| Storage capacity | 16 cu. ft. gross volume |
| Door | One swing glass door, self-closing, right hinged, non-reversible, magnetic sealed gasket, keyed lock |
| Shelves | Four shelves (three adjustable/one 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 | One (1) year parts and labor warranty, excluding display probe calibration |
| Compressor warranty | Five( 5) years compressor warranty |
| Product Weight | 249 |
| Shipping Weight | 289 |
| Rated Amperage | 3 |
| Power Plug/Power Cord | NEMA 5-15 plug, 8 to 10 ft typical, conforms to UL471 requirements, Vaccine Storage power |
| Facility Electrical Requirement | 110-120V AC: 15 A (minimum) |
| Agency Listing and Certification | Compliant with the temperature performance requirements as defined in the NSF 456 Standard for Vaccine Storage for all testing scenarios. UL, C-UL, ETL, C-ETL listed and certified to UL471 standard, hydrocarbon refrigerant safety. |
| Included Accessories | Temperature monitor device (TMD) complies with the current CDC guidelines, with 3 years certification of calibration, "buffered" probe in the product simulated solution, min/max memory. F/C switchable, field installable, and visual & audible temp alarm<br>Pharmacy refrigerator/freezer toolkit and temperature logs |

## Refrigeration System

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|---|---|
| Compressor | Hermetic, high performance |
| Refrigerant | EPA SNAP compliant, R290, propane |
| Condenser | Fin and tube design, high efficiency fan |
| Evaporator | Fin and tube design, high efficiency fan |
| Defrost | Cycle optimized, zero energy |

## Performance

| | |
|---|---|
| Uniformity[1] (Cabinet air) | +/- 0.9°C |
| Stability[2] (Cabinet air) | +/- 1.0°C |
| Maximum temperature variation (Cabinet air)[2] | +/-1.2°C |
| Temperature rise after 8 sec door openings | Temperature did not exceed 6.5°C at any probe for all required NSF/ANSI 456 testing protocols[3] |
| Recovery after 3 min door opening | All probes recover to under 8°C within 4.3 min. |
| Energy consumption | 1.25 KWh/day[4] |
| Average heat rejection | 1.97 KWh/day (280BTU/h)[4] |
| Noise pressure level (dBA) | 48 or less installed |
| Pull down time to 4°C nominal operating temp | 30 min |

## Controller, Configuration, Alarms and Monitoring

| | |
|---|---|
| Controller technology | Parametric, microprocessor, LED display with 0.1°C resolution |
| 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) |
| Display probe | Calibrated, stainless steel |
| External alarm connection | State switching remote alarm contacts<br>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

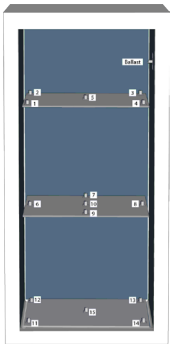
2 - Stability is defined as the maximum variance in temperature experienced by any single probe over the testing period

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

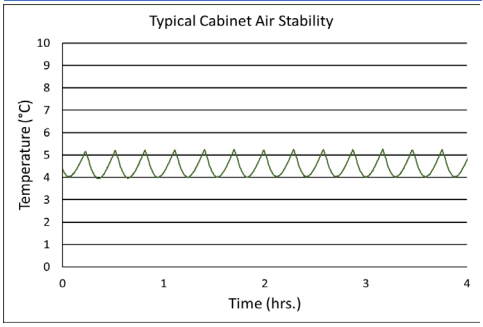
4 - Data per Energy Star test results or equivalent testing and calculation. Heat rejection based on daily averages, not continuous operation. Performance exceeds Energy Star requirements.

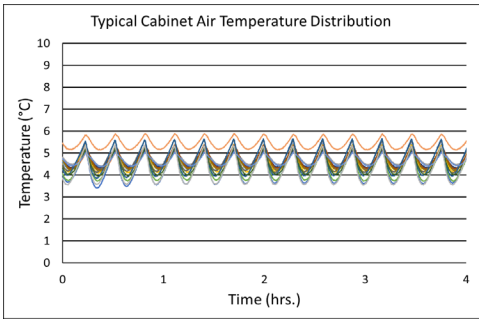
## Temperature Probes

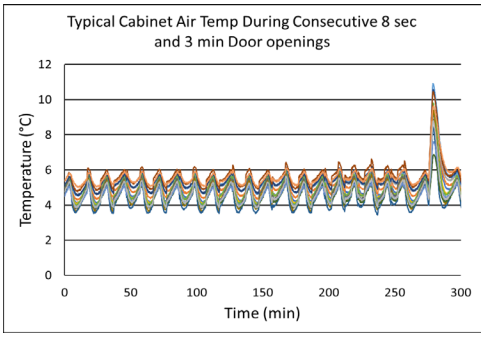
| Probe | Ave | Min | Max |
|---|---|---|---|
| 1 | 4.3 | 3.4 | 5.4 |
| 2 | 4.6 | 4.2 | 5.2 |
| 3 | 4.7 | 4.4 | 5.2 |
| 4 | 4.6 | 4.1 | 5.4 |
| 5 | 4.6 | 4.2 | 5.3 |
| 6 | 4.3 | 3.7 | 5.3 |
| 7 | 4.6 | 4.3 | 5.2 |
| 8 | 4.7 | 4.3 | 5.4 |
| 9 | 4.7 | 4.1 | 5.6 |
| 10 | 4.6 | 4.2 | 5.3 |
| 11 | 4.6 | 3.8 | 5.7 |
| 12 | 4.5 | 3.9 | 5.3 |
| 13 | 4.7 | 4.4 | 5.1 |
| 14 | 5.4 | 5.1 | 5.9 |
| 15 | 4.3 | 3.5 | 5.4 |



## Temperature Charts



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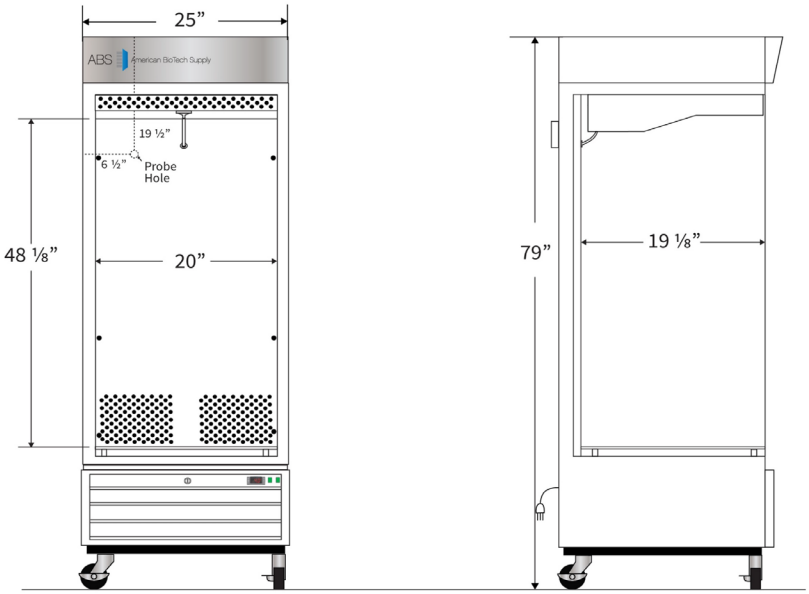
## Images

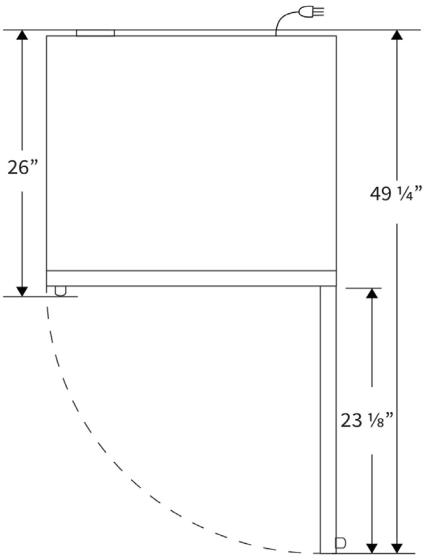





## Dimensions

| | Width | Depth | Height | Door Swing | Total open Depth |
|---|---|---|---|---|---|
| Exterior | 25" | 26" | 79" | 23 1/8" | 49 1/4" |
| Interior | 20" | 19 1/8" | 48 1/8" | | |




## Contact

| | | |
|---|---|---|
| Customer Service | 800-648-4041 Option 3 | customerservice@horizonscientific.com |
| Technical Service | 800-648-4041 Option 5, Parts Option 4 | technicalservice@horizonscientific.com |

*Rev_09302022*