

NOR-LAKE® SCIENTIFIC

TEMPERATURE TEST CHAMBERS

GLASS DOOR

Designed to meet the demanding requirements for scientific and laboratory research. Advanced engineered design incorporates the latest in cabinet, refrigeration, temperature control and monitoring features. Provides energy efficient, convenient, safe and reliable performance for optimal storage temperature environments necessary for a wide range of life science, pharmacy, biological, medical, clinical, and industrial applications.

Standard Product Features:

- Digital 132 x 64 LED display
- Programmable logic (PLC) microprocessor temperature controller
- Audible and visual Hi/Lo temperature alarm
- Adjustable control range from +20°C to +60°C
- Programmable ramp and soak
- Remote alarm contacts
- Continuous product temperature display
- 3 sensor system; 1 product, 1 air, 1 coil
- Sensor access port 1" diameter
- Power supply breaker and convenience power switch located on facade
- Door ajar alarm, audible and visual
- Temperature transmitter (0-10 VDC) (selectable to air or product)
- RS-485 digital communications port (MODBUS-RTU)
- Password protection - set-points and factory settings
- 100 event alarm logging date/time stamp
- Integrated Hi/Lo product temperature alarm test
- Digital calibration air and product
- Real time clock with date and time display
- Door opening counter with 24 hour automatic reset
- Adjustable alarm beep or constant on (key pad selectable)
- Low battery test switch with buzzer
- Perimeter anti-condensate door frame heater (on/off temperature selectable)
- Sensor failure alarm
- Power failure alarm
- Exterior cabinet front, sides and back are powder coated
- Exterior cabinet top and bottom are galvanized steel
- Interior cabinet liner is stainless steel
- Cabinet is foamed-in-place with CFC-free high density polyurethane foam insulation
- Glass door(s), full size
- Heavy duty door pivot hinges
- Pull door handles, full length
- Magnetic door gaskets
- Centered key door lock(s) (2 keys)
- Four casters (2 locking) on one and two door models, six casters (3 locking) on three door models
- 3 coated wire shelves per door section
- Air cooled condensing unit
- Top mounted forced air refrigeration system
- Condensate evaporation
- LED lighting
- Warranties: 18 months parts and labor, 5 year compressor (US and Canada), 18 months parts (International)
- UL, C-UL listed (60 Hz models only)

Optional Features:

- Extra shelf
- Legs (6") in lieu of casters
- Reverse hinge door(s)
- Stainless steel exterior
- Stainless steel drawer (maximum 8 per door)
- Wire basket drawer (maximum 8 per door)
- Temperature chart recorder with chart paper
- 4-20ma output for product temperature (selectable to air temperature)
- Ethernet 10 baseT (HTTP) control/monitoring web card
- Secure Guard II™ Lock Prox Key (factory installed)
- Secure Guard II™ MagKey (factory installed)
- Secure Guard II™ Lock Software
- Seismic mounting kit
- Electrical duplex outlet
- Access port 2" with sleeve and cover
- Export crating



NSRI241WSG/



NSRI331WSG/

NSRI522WSG/

NSRI803WSG/

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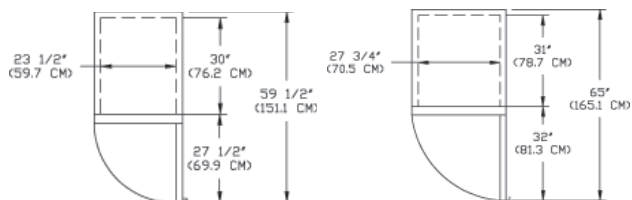


Committed to our environment



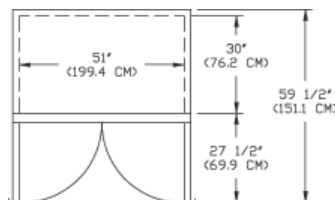
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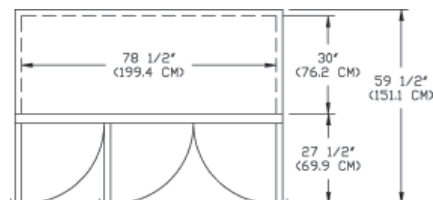


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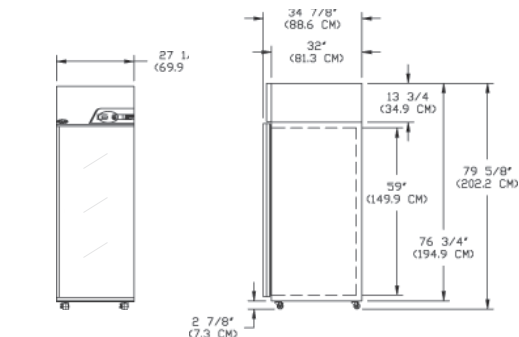
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SPECIFICATIONS

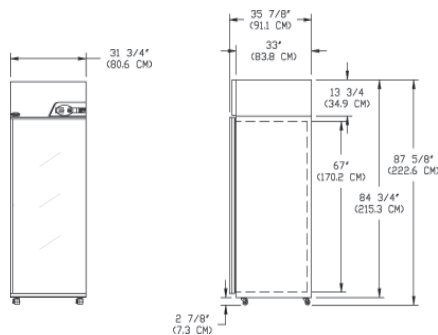
Models	NSRI241WSG/0	NSRI331WSG/0	NSRI522WSG/0	NSRI803WSG/0
NSRI241WSG/4	NSRI331WSG/4	NSRI522WSG/4	NSRI803WSG/4	NSRI803WSG/5
Crated Weight (lbs) (kg)	380 (172)	473 (199)	611 (275)	830 (377)
Crated Height (in) (cm)	83 (212)	91 (233)	83 (212)	83 (212)
Crated Width (in) (cm)	31 (79)	36-1/4 (89)	59 (149)	86-1/2 (218)
Crated Depth (in) (cm)	38-7/8 (96)	39-7/8 (99)	38-7/8 (96)	38-7/8 (96)
Interior Height (in) (cm)	59 (149)	67 (170)	59 (149)	59 (149)
Interior Width (in) (cm)	23-1/2 (59)	27-3/4 (70)	51 (129)	78-1/2 (199)
Interior Depth (in) (cm)	30 (76)	31 (78)	30 (76)	30 (76)
Overall Height (in) (cm)	79-5/8 (204)	87-5/8 (224)	79-5/8 (204)	79-5/8 (204)
Overall Width (in) (cm)	27-1/2 (69)	31-3/4 (80)	55 (139)	82-1/2 (209)
Overall Depth (in) (cm)	34-7/8 (88)	35-7/8 (91)	34-7/8 (88)	34-7/8 (88)
Gross Cubage (CuFt) (L)	24.1 (684)	33.1 (940)	51.9 (1473)	79.9 (2269)
Shelf Area (SqFt) (SqM)	12.83 (0.36)	15.85 (0.4)	28.58 (0.8)	42.88 (1.2)
Number of Shelves	3	3	6	9
Number of Casters	4	4	4	6
Condensing Unit Size	1/3 HP	1/3 HP	1/3 HP	1/3 HP
Refrigerant	R-134a	R-134a	R-134a	R-134a
Total Amp Draw /0	14.7	14.7	14.7	14.7
Total Amp Draw /4	7.5	7.5	7.5	7.5
Total Amp Draw /5	7.5	7.5	7.5	7.5

Specifications subject to change without notice.

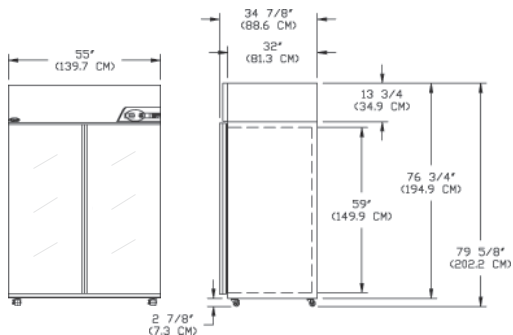
Voltage Model Suffix Code	Voltage Description	NEMA Plug	NEMA Receptacle
/0	115V, 1PH, 60HZ	5-20P	5-20R
/4	208-230V, 1PH, 60HZ	6-15P	6-15R
/5	230V, 1PH, 50HZ	Power Inlet (IEC 60320) Module	Cord Supplied Locally



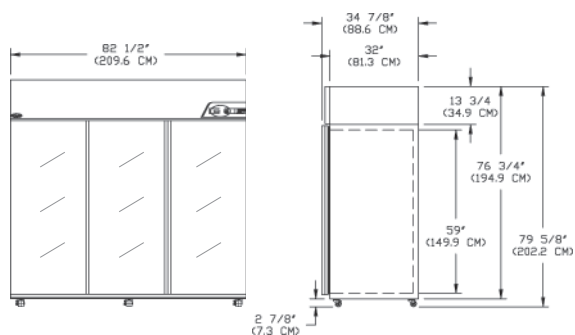
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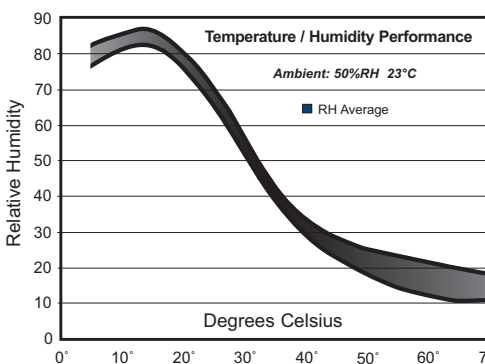
NSRI522WSG/



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Front

Side



slugs attached and no product in the chamber. Data may vary if ambient conditions change, product load is added, or other changes cause interference to chamber airflow.

Temperature Variation: $\pm 0.5^{\circ}\text{C}$ @ $+4^{\circ}\text{C}$ to $+70^{\circ}\text{C}$. The published temperature variation is derived from the maximum deviation of the thermocouple located nearest the chamber geometric center during the entire test period (i.e. $+25.0^{\circ}\text{C}$ min and $+26.0^{\circ}\text{C}$ max divided by two would be a variation of $\pm 0.5^{\circ}\text{C}$).

Temperature Uniformity: $\pm 1^{\circ}\text{C}$ @ $+4^{\circ}\text{C}$ to $+70^{\circ}\text{C}$. The published temperature uniformity is derived from the maximum deviation of 9 thermocouples placed on 3 horizontal planes, each plane having the thermocouples evenly spaced diagonally across the shelf from the left and right inner wall, and the middle sensor placed in the approximate geometric center of the shelf. Performance data is based on $+23^{\circ}\text{C}$, 50% RH ambient conditions, type T-24 Ga. thermocouples with 1.0 oz. brass



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