

# seed storage

## Percival® model SS-36NL

### applications

- This chamber is specifically engineered to replicate the cool and dry conditions necessary for extended seed storage. The Model SS-36NL is equipped with a compressed air drying system to reduce absolute humidity to a level of less than 2g water per kg dry air (14gr/lb). For instance, this translates to 40% at 4°C, 26% at 10°C, 19% at 15°C, and 14% at 20°C
- Many other applications exist for this product  
*Please compare your own requirements to the specifications listed below.*

### percival's IntellusUltra controller

Percival Scientific has built a reputation of providing flexible, customized options for research scientists around the world. We've taken that philosophy to the next level with our improved IntellusUltra Controller. Now choose from the levels of functionality that meet your research needs.

*Please refer to [www.percival-scientific.com](http://www.percival-scientific.com) for additional information regarding the control system.*

### lighting system

- No lights are contained inside the chamber (please see models I-36LL, I-36VL or I-36LLVL if lighting is desired)

### cabinet construction

- 26-gauge smooth galvanized white side walls and top reinforced with 24-gauge backer plates
- Interior floor constructed of 24-gauge #304-4 stainless steel
- 24-gauge smooth white galvanized exterior
- NSF compliant seam design
- Overall wall thickness 2"
- Foamed-in-place non-CFC insulation (refer to insulation section)



### cabinet construction (continued)

- One 1¼" diameter access port on right hand wall
- Chamber floor equipped with floor drain and hose assembly
- Contains casters assembly and adjustable leveling legs to compensate for floor unevenness in the lab

### insulation

- Woodless construction using 2" thick foamed-in-place non-CFC Urethane insulation with 93% closed cell, R-value of 12.5, K-value of 0.16 and density of 2.2 lbs/ft<sup>3</sup>

### door

- One door opening 29.3" x 57.5" (74.3 cm x 146.1 cm) provides full access to the chamber interior (magnetic gasket provides a tight seal to door frame)

## SS-36NL specifications (subject to change without notice)

Temp Range with all lights on	Interior Space volume		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions						Light Intensity 6" from lamps unless otherwise noted	Tiers
	°C	ft <sup>3</sup>	m <sup>3</sup>	ft <sup>2</sup>	m <sup>2</sup>	in	cm	width		depth		height		
2-44±0.5	29.7	0.8	32.3	3	8	20.3	33.5	85.1	33.6	85.4	77.2	196.1	µmoles/m <sup>2</sup> /s	6
													No Light	

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## interior space

- 29.7 ft<sup>3</sup> (0.8 m<sup>3</sup>) with work area of 32.3 ft<sup>2</sup> (3.0 m<sup>2</sup>) provided on six tiers

## shelving

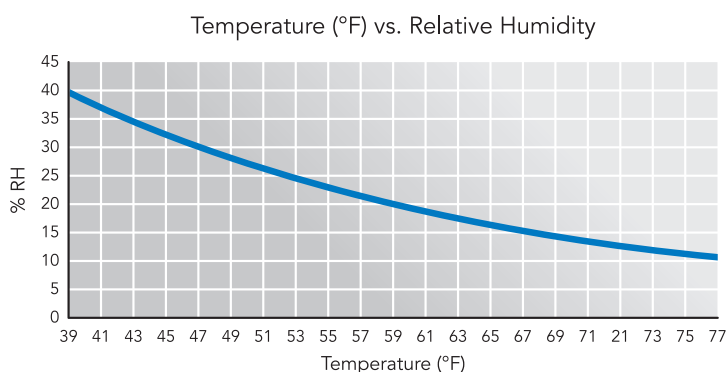
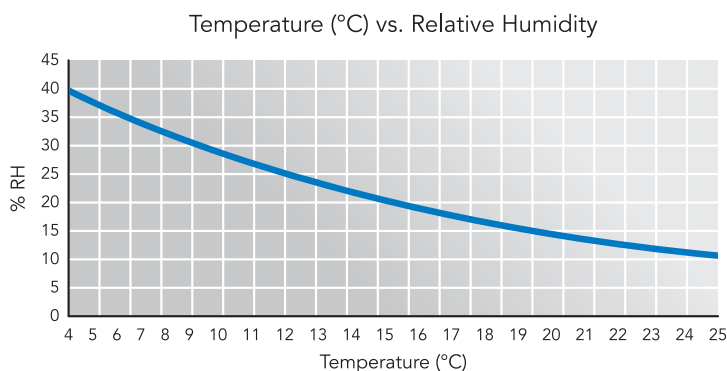
- Six tiers of white epoxy coated steel wire shelving (each shelf is 27"D x 28.8"W [68.6 cm x 73 cm])
- Shelves are supported by shelf clips allowing ½" vertical adjustments
- Maximum clearance between shelves is 8" (20.3 cm) per tier with all six shelves installed

## finish

- Interior and exterior painted with highly reflective, environmentally friendly, high temperature baked white powder coating

## humidity control

- Dehumidify control performance:



- Extended (lower) humidity ranges available
- Dehumidifier type: Compact, regenerative desiccant air dryer designed to dry compressed air to a very low dew point (-70°F ADP- atmospheric dew point)
- Requires a source of compressed air from your lab or a fractional horsepower air compressor
- Compressed air requirements: 2.8 SCFM

## temperature range

- 2°-44°C (±0.5°C)

## temperature safety limit controls

- (Experiment Protection) Adjustable high and low temperature controls, audible alarms, and visual indicators provided
- Controls shut down all power to the chamber, activating alarms (when the temperature returns to the normal range the system will automatically reset)

## refrigeration

- Self-contained air-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended life and close temperature control (this continuous running condensing unit ensures precise temperature control by alternately cycling refrigerant and hot gas to coil; this also prolongs life of compressor, and eliminates risk of ice build up in coil)
- Top mounted refrigeration system allows easy access for maintenance (e.g. cleaning)
- As heat is rejected, it rises and is dissipated into room without having any effect on inside temperature of cabinet
- Solenoid valves have extended stem for quiet and long life operation
- Ceiling mounted evaporator coil incorporates twin air circulation fans in aluminum housing: heat rejection to ambient (standard chamber) is 1865 BTU/hr. (547 watt).

## options (most popular)

- 2 H.P. Oil-free air compressor, 10 Gallon, 5.3 CFM @ 90 psi, 70 dBA
- 2 H.P. Oil-free air compressor, 10 Gallon, 5.3 CFM @ 90 psi in a Sound-Proof Cabinet, 58 dBA

*See other catalog sheets or consult factory for additional accessories.*

## electrical service requirements

- 120/1/60 with NEMA 5-15P plug provided (with standard chamber)
- RLA=9.0A (MCA=11.3A)

## helping you create better science

Percival Scientific controlled environment systems are the culmination of over 60 years of design and manufacturing experience. Our high quality products have been developed through direct partnerships with the scientific community and offer platforms that are highly customizable and provide superior performance. We understand that scientific innovation is bred through creativity, passion, technical expertise and attention to detail, and we are proud to help you create better science.



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