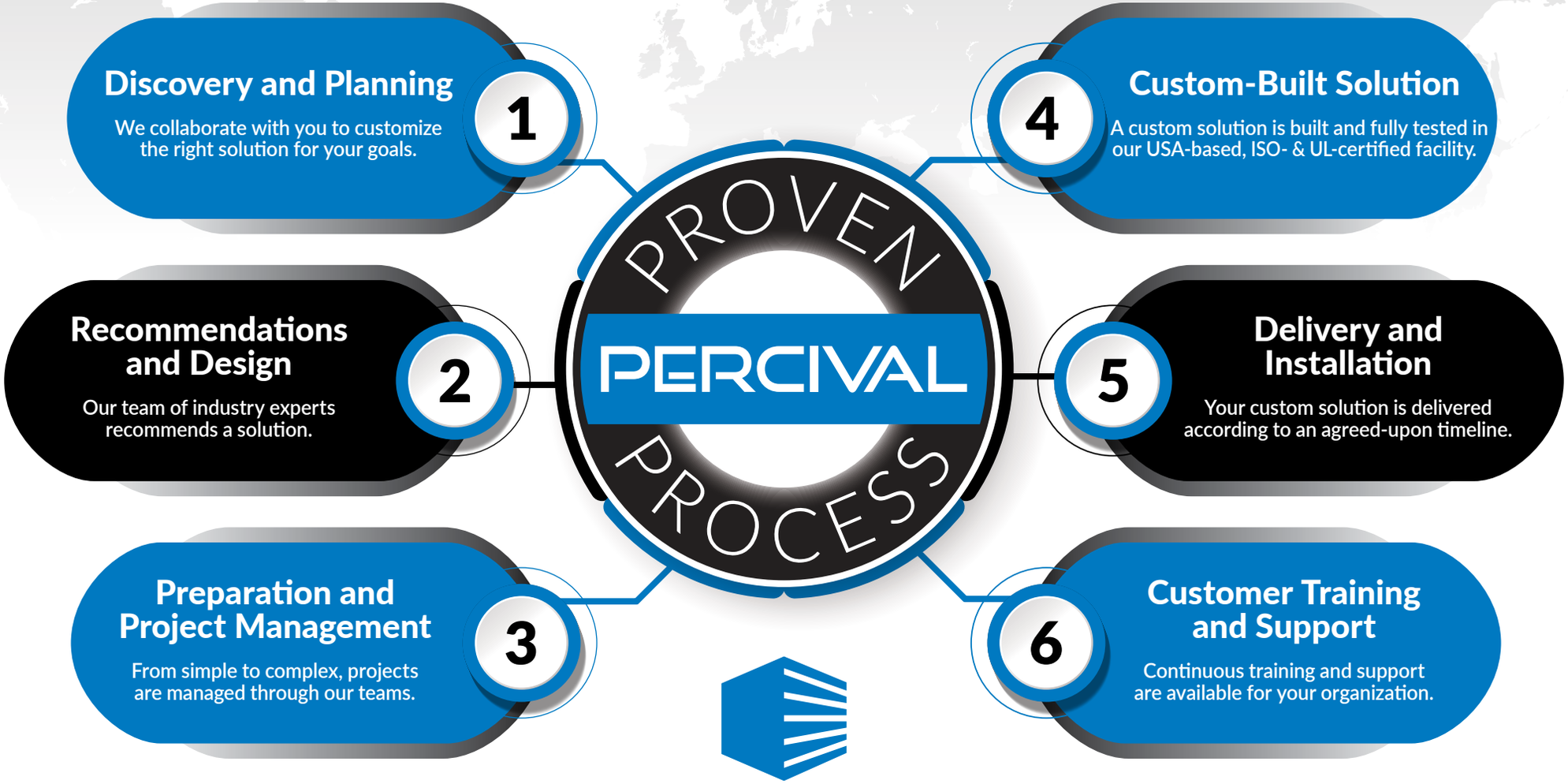
PERCIVAL

Helping You Create Better Science

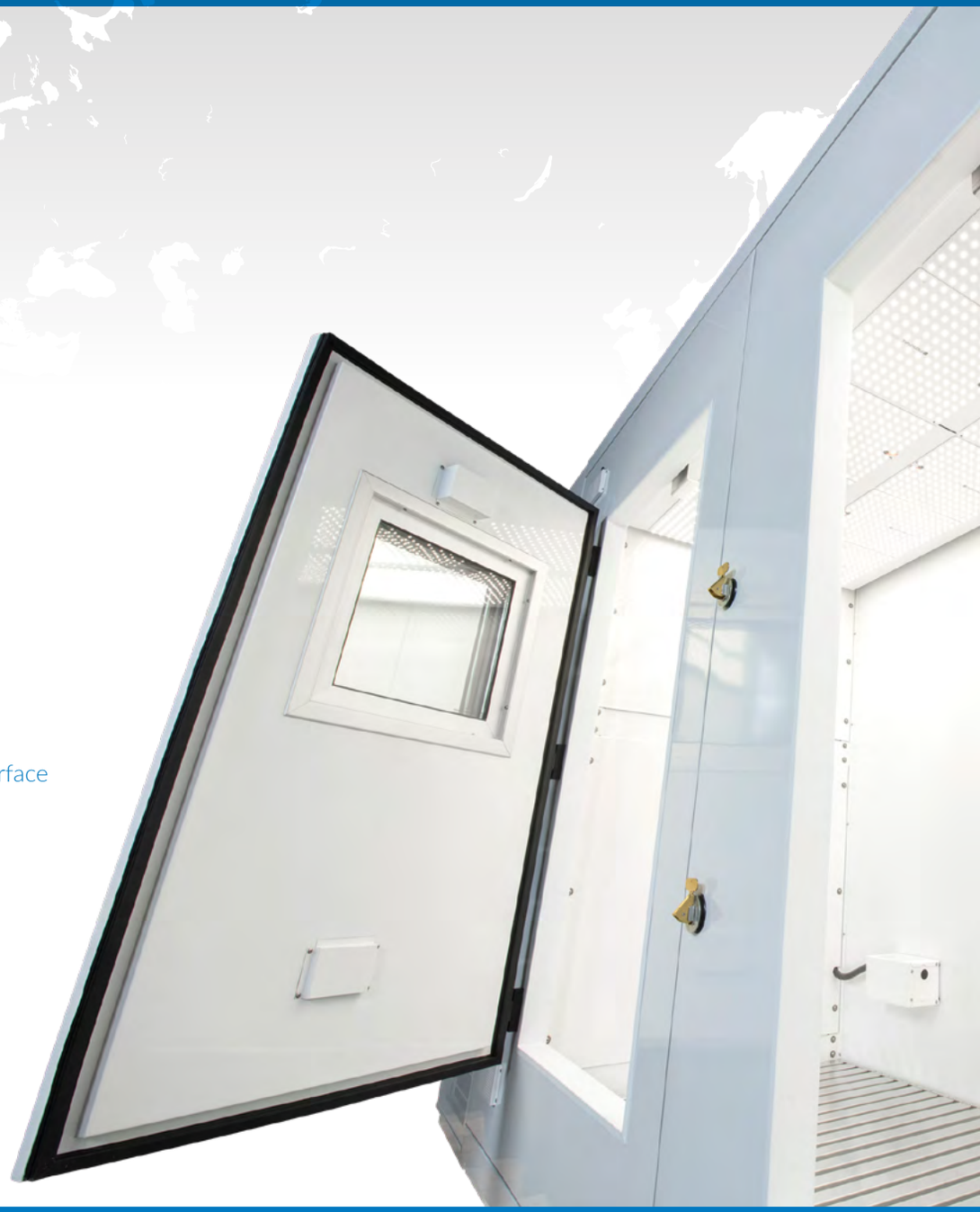
Product Catalog



Helping you create better science with customized growth chambers for your controlled environment research through our "Percival Scientific Proven Process"

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Controlled Environment Experts

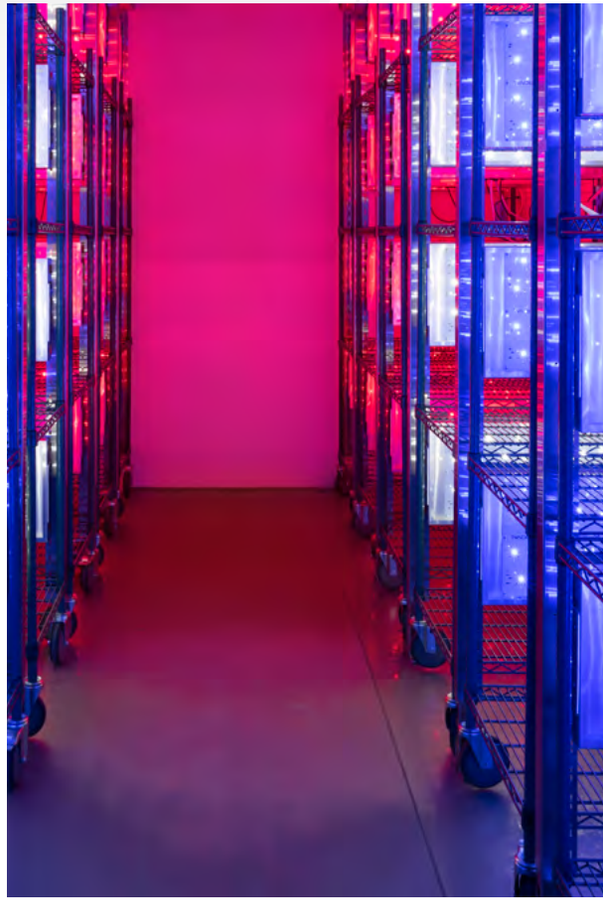
At Percival Scientific, our mission is to help you create better science with the most customized growth chambers available for your controlled environment research.

We engineer, custom-build and install durable and thoughtfully-designed controlled environments for nearly any research need. From bench-top chambers to large grow rooms, we manufacture more than 150 different models of research chambers.

We've been a global leader in the innovative design and manufacture of controlled environment chambers since 1959. Our products are used in all 50 states and in more than 79 countries. Universities, government institutions and private corporations in the U.S. and around the world trust us as a partner in accelerating research that impacts climate, human health and food production.

Located in a farm building on a 12-acre research station near Cold Spring Harbor Lab in New York, two Percival walk-in growth chambers named Mendel and McClintock stand side by side. From the outside, they look clean and industrial, but open their doors (in this video), and you'll see why the renowned lab describes them as "some of the most advanced climate-controlled technology ever developed for plant growth."

Percival designed these twin walk-in rooms with 12 columns of multi-colored SciBrite® LEDs that are independently adjustable. This allows researchers at the lab to grow plants in various environments simultaneously. Cold Spring Harbor Lab partnered with Percival to develop these chambers and advance their discoveries in sustainable farming practices.



Standards and Certifications

UL and ETL Standards

To ensure our products meet international safety and performance standards, Percival Scientific partners with nationally recognized testing labs, including Underwriters Laboratories (UL) and Intertek's Electrical Testing Laboratories (ETL).

ISO 9001:2015 Certification

In September 2019, DQS Inc. issued Percival Scientific ISO 9001:2015 certification, an international standard for a quality management system. The certification is based on Eight Principles of Quality Management, which can be used as a framework for management to guide organizations in continuous improvement. These include Customer Focus, Leadership, Involvement of People, Process Approach, System Approach to Management, Continual Improvement, Factual Approach to Decision Making and Mutually Beneficial Supplier Relationships.



At Percival, we are committed to quality work and processes. The ISO 9001:2015 certification recognizes the efforts of our entire team. It assures our customers that Percival is dedicated to producing environmental chambers that exceed customer expectations and providing continuous improvement of our products, processes and services.

10017261 UL REGISTERED FIRM ISO 9001:2015

DQS Inc.

PERCIVAL SCIENTIFIC, INC.

Walk-In Rooms

Percival Scientific excels at customizing chamber solutions for expanding research operations. Our walk-in rooms can be configured for any size production. As your operation grows and changes, we can easily add more rooms and modify your configuration. Our consultants will work closely with you to develop a tailored chamber solution perfect for virtually any application, including C_4 species plant growth, cannabis, food production, insect and reptile rearing, seed storage and stability testing.

- Adaptable for virtually any application
- Available with SciBrite® or SciWhite® LED lighting
- Wide range of optional custom-designed features and configurations
- Easy programming with IntellusUltra control system and touchscreen



Specifications

Model	Type/Use	Configuration	Humidity Control	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Total Shelving/ Growth Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
				µmoles/m²/s	°C	ft²	m²	in	cm	in	cm	in	cm	in	cm
CTH-89	Controlled Temperature and Humidity	L5 Five Tiers	40 - 85% RH ± 5%	48360 lumens	4 - 44 ± 1.0	160	14.9	16	40.6	96	243.8	108	274.3	102	259.1
IR-89L5	Incubator	L5 Five Tiers	40 - 85% (Optional)	100	7 - 44 ± 1.0	160	14.9	15	38.1	96	243.8	108	274.3	102	259.1
AR-89L3	Plant Growth	L3 Three Tiers	40 - 85% (Optional)	500	10 - 44 ± 1.0	96	8.9	24	61	96	243.8	108	274.3	102	259.1
MPR-810L3	Plant Growth	L3 Three Tiers	40 - 85% (Optional)	1020	10 - 44 ± 1.0	108	10	26	66	96	243.8	120	304.8	108	274.3
PR-106	Plant Growth	L1 One Tier	40 - 85% (Optional)	1350	10 - 44 ± 1.0	43	4	94	238.8	120	304.8	70	177.8	114	289.6
PR-1010L	Plant Growth	L1 One Tier	40 - 85% (Optional)	1450	10 - 44 ± 1.0	53	4.9	86	218.4	120	304.8	120	304.8	102	259.1
SS-810	Seed Storage	L7 Seven Tiers	30% (above 10°C)	48360 lumens	4 - 30 ± 1.0	252	23.2	12	30.4	96	243.8	120	304.8	108	274.3

SciBrite® LED Plant Growth

Percival engineered this line of SciBrite® LED plant growth chambers specifically for light quality studies and other experiments requiring specific light wavelengths. You won't find chambers with more LED color options or combinations than these. Programming our SciBrite® lighting is intuitively easy using our IntellusUltra touchscreen, making these chambers some of the best science has to offer.

- Varying light intensity by color, up to 1850 µmoles/m²/s at 6 inches from LEDs
- Independently dimmable tiers of SciBrite® lighting for superior control of light intensity
- Wide range of programmable wavelengths for specific stages of plant development
- Easy to program with the IntellusUltra control system
- Durable, long-lasting construction and sleek design



LED-36L2

Specifications

Model	Configuration		Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
			µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
Horizontal Lighting																
LED-30	L1	One tier	1400	10 - 44 ± 0.5	9.6	0.3	3.0	0.3	25.5	64.8	31	78.7	24.5	62.2	46.2	117.3
LED-36	L1	One tier	1550	10 - 44 ± 0.5	29.7	0.8	5.4	0.5	48	121.9	33.5	85.1	33.6	85.4	77.2	196.1
	L2	Two tiers	1300	10 - 44 ± 0.5	29.7	0.8	10.8	1	21.6	54.9	33.5	85.1	33.6	85.4	77.2	196.1
LED-41	L1	One tier	1850	10 - 44 ± 0.5	37.2	1.1	6.8	0.6	47.6	121	41	104.1	33.6	85.4	77.2	196.1
	L2	Two tiers	1550	10 - 44 ± 0.5	37.2	1.1	13.6	1.3	21.6	54.9	41	104.1	33.6	85.4	77.2	196.1

Each color independently dimmable by percentage and by tier – standard four colors include blue, red, white and far-red. Additional colors are available upon request.

SciWhite® LED Plant Growth

Our plant growth chambers with SciWhite® lighting feature a white spectrum enriched with red for superior light absorption in plants. The versatility and dependability of these chambers guarantee consistently high production from nearly any kind of plant, ranging from cereals, citrus, grasses and soybean to tomato, cotton, peanut and potato. Researchers have long trusted our standard plant growth chambers for a wide range of applications, including phytopathology research, seed germination, and plant growth and development.

- White spectrum with 660 nm peak red for best light absorption
- Light intensity up to 1,700 µmoles/m²/s at 6 inches from LEDs
- Dimmable light output
- Easy to program with the IntellusUltra control system
- Many sizes and configurations
- Optional SciBrite® lighting



PGC-105

Specifications

Model	Configuration		Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
			µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
Horizontal Lighting																
E-30	L1	One tier	870	7 - 44 ± 0.5	9.6	0.3	3	0.3	27	68.6	31	78.7	23.8	60.3	46.2	117.3
E-36	L1	One tier	680	7 - 44 ± 0.5	29.7	0.8	5.4	0.5	49	124.5	33.5	85.1	33.6	85.4	77.2	196.1
	L2	Two tiers	680	7 - 44 ± 0.5	29.7	0.8	10.8	1	23.6	59.9	33.5	85.1	33.6	85.4	77.2	196.1
	VL	Five tiers	515	7 - 44 ± 0.5	29.7	0.8	27	2.5	9.5	24.1	39.9	101.3	33.6	85.4	77.2	196.1
E-41	L1	One tier	800	7 - 44 ± 0.5	37.2	1.1	6.8	0.6	48.6	123.4	41	104.1	33.6	85.4	77.2	196.1
	L2	Two tiers	800	7 - 44 ± 0.5	37.2	1.1	13.6	1.3	23.6	59.9	41	104.1	33.6	85.4	77.2	196.1
	VL	Five tiers	515	7 - 44 ± 0.5	37.2	1.1	34	3.2	9.5	24.1	47.4	120.5	33.6	85.4	77.2	196.1
PGC-6	L2	Two tiers	680	7 - 44 ± 0.5	36	1	10.8	1	27	68.6	50.5	128.3	33.6	85.4	77.2	196.1
Horizontal Lighting – Large Chambers																
PGC-9/2*		One Tier	660	7 - 44 ± 0.5	34.8	1.0	11.1	1	29.8	75.7	75.8	192.6	37.8	96	79.3	201.3
E-75	L1	One tier	1360	7 - 44 ± 0.5	76.1	2.2	10.8	1	59.5	151.1	76.9	195.3	37.5	95.3	78.5	199.4
PGC-10	L1	One tier	1450	7 - 44 ± 0.5	64	1.8	10.1	0.9	48	121.9	71	180.3	38.8	98.6	78.8	200
PGC-15	L1	One tier	1520	7 - 44 ± 0.5	94.8	2.7	15.1	1.4	48	121.9	95.3	242.2	38.8	98.6	78.8	200
PGC-105	L1	One tier	1450	7 - 44 ± 0.5	108.3	3.1	17.1	1.6	56	142.2	105.9	269	38.8	98.6	78.8	200
PGC-20	L1	One tier	1600	7 - 44 ± 0.5	147.9	4.2	18.4	1.7	68.7	174.5	100.5	255.3	40.6	103.2	111.1	282.3
PGC-40	L2	Two tiers	1200	7 - 44 ± 0.5	147.9	4.2	36.7	3.4	32.7	83	100.5	255.3	40.6	103.2	111.1	282.3

** PGC-9/2 Chamber has two separately controlled compartments - specifications are per compartment unless otherwise specified. Exterior dimensions are for entire chamber including both compartments.*

Dual Chamber Series**																
E-22	L1	One tier	680	7 - 44 ± 0.5	14.6	0.4	5.4	0.5	20.2	51.3	33.5	85.1	36.6	93	77.9	197.8

*** Specifications, excluding exterior dimensions, are per compartment only.*



AR-95L2

Arabidopsis (standard with SciWhite® lighting)

Not only have we met the steady demand for our Arabidopsis chambers, but we've re-engineered them to become a preferred choice of researchers who use Arabidopsis thaliana worldwide. These chambers come standard with SciWhite® lighting, featuring a white spectrum enriched with red for superior light absorption in plants. They are also ideal for other plants that grow in low light, such as tobacco, Brassica, lettuce and spinach.

- White spectrum with 660 nm peak red for best light absorption
- Easy to program with the IntellusUltra control system
- Optional SciBrite® lighting

Specifications

Model	Configuration		Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
			µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
AR-36	L2	Two tiers	350	7 - 44 ± 0.5	29.7	0.8	10.8	1	21.8	55.2	33.5	85.1	33.6	85.4	77.2	196.1
	L3	Three tiers	350	7 - 44 ± 0.5	29.7	0.8	16.2	1.5	13.5	34.3	33.5	85.1	33.6	85.4	77.2	196.1
AR-41	L2	Two tiers	405	7 - 44 ± 0.5	37.2	1.1	13.6	1.3	23.6	59.9	41	104.1	33.6	85.4	77.2	196.1
	L3	Three tiers	405	7 - 44 ± 0.5	37.2	1.1	20.4	1.9	15.1	38.3	41	104.1	33.6	85.4	77.2	196.1
AR-66	L2	Two tiers	360	7 - 44 ± 0.5	62.4	1.8	20.3	1.9	23.1	58.7	66	167.6	33.6	85.4	77.2	196.1
	L3	Three tiers	360	7 - 44 ± 0.5	62.4	1.8	30.4	2.8	14.0	35.6	66	167.6	33.6	85.4	77.2	196.1
AR-75	L2	Two tiers	350	7 - 44 ± 0.5	71.6	2	21.5	2	27.9	71.0	76.9	195.3	37.1	94.3	78.5	199.4
	L3	Three tiers	350	7 - 44 ± 0.5	71.6	2	32.2	3	18.3	46.4	76.9	195.3	37.1	94.3	78.5	199.4
AR-95	L2	Two tiers	575	7 - 44 ± 0.5	95.9	2.7	28.6	2.7	27.5	69.9	95.9	243.5	37.1	94.3	78.5	199.4
	L3	Three tiers	575	7 - 44 ± 0.5	95.9	2.7	42.9	4	18.0	45.7	95.9	243.5	37.1	94.3	78.5	199.4
AR-100	L3	Three tiers	600	7 - 44 ± 0.5	147.9	4.2	55.1	5.1	22.3	56.6	100.5	255.3	40.6	103.2	111.1	282.3
Dual Chamber Series*																
AR-22	L1	One tier	350	7 - 44 ± 0.5	14.6	0.4	5.4	0.5	20.2	51.4	33.5	85.1	36.6	93	77.9	197.8

** Specifications, excluding exterior dimensions, are per compartment only.*

Algae (standard with SciWhite® lighting)

We designed our algae chambers with the high-intensity light required for algae to flourish. The tiers of shelving are individually lighted with our dimmable SciWhite® LEDs and are ideal for flasks or short plants. Because of their versatility, these chambers also can be used for a variety of plants in early stages of development.

Specifications

Model	Configuration	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
		µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
Vertical Lighting – Four Colors															
AL-30	L2 Two tiers	440	7 - 44 ± 0.5	9.9	0.3	6.1	0.6	10.4	26.4	31	78.7	24.4	61.9	46.2	117.3
AL-36	L4 Four tiers	350	7 - 44 ± 0.5	29.7	0.8	21.6	2	10.6	26.9	33.5	85.1	33.6	85.4	77.2	196.1
AL-41	L4 Four tiers	405	7 - 44 ± 0.5	37.2	1.1	27.2	2.5	10.6	26.9	41	104.1	33.6	85.4	77.2	196.1
Dual Chamber Series*															
AL-22	L2 Two tiers	350	7 - 44 ± 0.5	14.6	0.4	10.8	1	8.8	22.4	33.5	85.1	36.6	93	77.9	197.8

** Specifications, excluding exterior dimensions, are per compartment only.*



AL-36L4

Low Temperature (standard with SciWhite® lighting)

Our low temperature plant growth chambers give you the ability to measure cold hardiness, freeze tolerance, heat stress and exposure using a full range of seasonal temperatures. They come standard with SciWhite® lighting, featuring a white spectrum enriched with red for superior light absorption in plants. (SciBrite® lighting is optional.) By design, they consistently maintain low temperatures under high-intensity light without temperature spikes. A self-contained air-cooled condensing unit ensures precise temperature control. These chambers are frequently used for research involving vernalization, cold water algae and ocean algae.

Specifications

Model	Configuration	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
		µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
LT-41	VL Two tiers	515	-10 - 44 ± 0.5	37.2	1.1	13.6	1.3	21.5	54.6	47.4	120.5	33.6	85.4	79.9	202.9
LT-105	One tier	1450	-10 - 44 ± 0.5	122.9	3.5	16.0	1.5	56	142.2	117.3	298	38.8	98.6	78.8	200.0



LT-41VL

Tissue Culture (standard with PetriClear® lighting)

This line of chambers provides the ideal environment for plant tissue culture on plates, Petri dishes or in flasks. They're engineered with slow, vertical airflow to insulate dishes on shelves from heat generated by the lighting below and minimize condensation. This also ensures precise temperature control across shelving. They come standard with PetriClear lighting (Pat. Pend.), proven to reduce condensation on unstacked Petri dishes using a two-channel combination of SciWhite and infrared LEDs.

- Air diffuser with slow, vertical airflow insulates shelf level experiments from heat generated by the underlying light fixture
- Dimmable PetriClear lighting with low heat emission
- Precise temperature control across shelving
- Optional SciBrite® lighting

Specifications

Model	Configuration		Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*			
			µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
CU-30	L2	Two tiers	190	10 - 44 ± 0.5	9.6	0.3	6.1	0.6	9.1	23.1	31	78.7	23.8	60.3	46.1	117.2
CU-36	L4	Four tiers	170	10 - 44 ± 0.5	29.7	0.8	21.6	2.0	9.3	23.5	33.5	85.1	33.6	85.4	77.2	196.1
	L5	Five tiers	170	10 - 44 ± 0.5	29.7	0.8	27.0	2.5	6.7	17	33.5	85.1	33.6	85.4	77.2	196.1
CU-41	L4	Four tiers	200	10 - 44 ± 0.5	37.2	1.1	27.2	2.5	9.3	23.5	41	104.1	33.6	85.4	77.2	196.1
	L5	Five tiers	200	10 - 44 ± 0.5	37.2	1.1	34.0	3.2	6.7	17	41	104.1	33.6	85.4	77.2	196.1
Dual Chamber Series*																
CU-22	L2	Two tiers	170	10 - 44 ± 0.5	14.6	0.4	10.8	1	7.5	19.1	33.5	85.1	36.6	93	77.9	197.8

** Specifications, excluding exterior dimensions, are per compartment only.*



CU-36L4

Custom designed with optional SciBrite® LED lighting on fourth tier



I-36D

Dew Formation

Percival Scientific manufactures the only dew chamber available for research. We've engineered it with cutting-edge technology to closely simulate the natural dew formation process required for pathology research studies. These chambers are also useful for inoculating plants and other applications. They come standard with SciWhite® lighting, featuring a white spectrum enriched with red for superior light absorption in plants.

- Plants are maintained below dew point of air
- Heat sink below warming water causes vapor to rise and form dew on plants
- Not intended for long-term plant growth

Specifications

Model	Configuration	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
		µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
I-36D	Four tiers	No Light	10 - 32 ± .75	29.7	0.8	19.5	1.8	10.5	26.7	33.5	85.1	33.6	85.4	77.2	196.1
I-36DL	Four tiers	500	12 - 32 ± 1.0	29.7	0.8	19.5	1.8	10.5	26.7	33.5	85.1	37.4	95.1	77.2	196.1

I-36DL comes standard with SciWhite® lighting.



GR-41L

Seed Germination and Storage

Our seed germination chambers precisely control light, temperature and humidity to activate the growth of nearly any kind of seed. Their wide environmental range makes them ideal for cold-weather plants like spinach and broccoli as well as hot-weather varieties such as peppers and tomatoes. They feature IncuWhite® LED lighting, which closely matches natural light. Researchers rely on these chambers as a standard for studying the effects of climate change on the germination and development of native plant species and for many other applications.

Seed Germination Specifications

Model	Configuration	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
		µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
GR-36	L Fifteen tiers	140	5 - 44 ± 0.5	29.7	0.8	76.5	7.1	2.6	6.7	33.5	85.1	33.6	85.4	77.2	196.1
GR-41	L Fifteen tiers	120	5 - 44 ± 0.5	37.2	1.1	96.4	9	2.6	6.7	41	104.1	33.6	85.4	77.2	196.1
GR-66	L Fifteen tiers	120	5 - 44 ± 0.5	62.4	1.8	153	14.2	2.6	6.7	66.0	167.6	33.6	85.4	77.2	196.1



SS-36NL

Our seed storage chamber provides the cool, dry environment needed for long-term seed viability and other storage applications. It features:

- An extended lower humidity range
- An energy-efficient compressed air drying system
- Compact size for tight spaces

Seed Storage Specifications

Model	Configuration	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
		µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
SS-36NL	Six tiers	No Light	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

Incubators

Percival's incubators stand the test of time with durable all-steel construction and versatile features for a variety of applications. They give researchers precise control of lighting, temperature and humidity for consistent performance. They also feature IncuWhite® LED lighting, which closely matches natural light. As some of our long-time best-selling chambers, they are touted by customers as reliable, easy to maintain and a great return on investment.

- Low-Cost Germination
- Plant Seedling Growth
- Bacterial Culturing
- Low-Light Photosynthesis
- Insect and Amphibian Studies
- BOD Determination
- Algae Acclimation



I-66LLVL

Specifications

Model	Configuration	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
		µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
No Lighting															
I-30	NL Three tiers	No light	2 - 44 ± 0.5	9.6	0.3	9.1	0.8	9	21.6	31	78.7	23.8	60.3	46.2	117.3
I-36	NL Six tiers	No light	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
I-41	NL Six tiers	No light	2 - 44 ± 0.5	37.2	1.1	40.8	3.8	8	20.3	41	104.1	33.6	85.4	77.2	196.1
I-66	NL Six tiers	No light	2 - 44 ± 0.5	62.4	1.8	64.7	6	8	20.4	66	167.6	33.6	85.4	77.2	196.1
Vertical Lighting															
I-36	VL Five tiers	120	4 - 44 ± 0.5	29.7	0.8	27	2.5	9.5	24.1	33.5	85.1	33.6	85.4	77.2	196.1
I-41	VL Five tiers	120	4 - 44 ± 0.5	37.2	1.1	34	3.2	10	25.4	41	104.1	33.6	85.4	77.2	196.1
I-66	VL Five tiers	120	4 - 44 ± 0.5	62.4	1.8	54	5	9.5	24.1	66	167.6	33.6	85.4	77.2	196.1
Horizontal Lighting															
I-30	L Three tiers	125	5 - 44 ± 0.5	9.6	0.3	9.1	0.8	8.7	23.4	31	78.7	23.8	60.3	46.2	117.3
I-36	LL Four tiers	120	4 - 44 ± 0.5	29.7	0.8	21.6	2	11.3	27.8	33.5	85.1	33.6	85.4	77.2	196.1
I-41	LL Four tiers	100	4 - 44 ± 0.5	37.2	1.1	27.2	2.5	11.3	27.8	41	104.1	33.6	85.4	77.2	196.1
I-66	LL Four tiers	120	4 - 44 ± 0.5	62.4	1.8	43.1	4	11.3	27.8	66	167.6	33.6	85.4	77.2	196.1
Vertical and Horizontal Lighting															
I-36	LLVL Four tiers	230	5 - 44 ± 0.5	29.7	0.8	21.6	2	11.5	29.2	33.5	85.1	33.6	85.4	77.2	196.1
I-41	LLVL Four tiers	220	5 - 44 ± 0.5	37.2	1.1	27.2	2.5	11.3	27.8	41	104.1	33.6	85.4	77.2	196.1
I-66	LLVL Four tiers	230	4 - 44 ± 0.5	62.4	1.8	43.1	4	11.3	27.8	66	167.6	33.6	85.4	77.2	196.1
Dual Chamber Series*															
I-22L	Two tiers	120	4 - 44 ± 0.5	14.6	0.4	10.8	1	10	25.4	33.5	85.1	36.6	93	77.9	197.8

** Exterior dimensions are for entire chamber including both compartments*

Drosophila

Scientists have long trusted our traditional Drosophila chambers for rearing fruit flies and maintaining stock for research. We've designed them with a special coating to protect chamber components from the acidic environment of insect rearing. The IntellusUltra control system allows users to program and fine tune the temperature and humidity settings to perfectly match the environment required for healthy Drosophila.

Thermoelectric for Drosophila

Our TE-36VL Drosophila chamber uses thermoelectric cooling instead of refrigeration for consistent temperature control, reliability and easy maintenance.



DR-41VL



TE-36VL

Specifications

Model	Configuration		Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
			µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
DR-36	NL	Six tiers	No Light	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
	VL	Five tiers	120	5 - 44 ± 0.5	29.7	0.8	27	2.5	9.5	24.1	33.5	85.1	33.6	85.4	77.2	196.1
DR-41	NL	Six tiers	No Light	2 - 44 ± 0.5	37.2	1.1	40.8	3.8	8	20.3	41	104.1	33.6	85.4	77.2	196.1
	VL	Five tiers	120	5 - 44 ± 0.5	37.2	1.1	34	3.2	9.5	24.1	41	104.1	33.6	85.4	77.2	196.1

All DR models come standard with additive humidity.

Thermoelectric																
TE-36	VL	Five tiers	120	13 - 45 ± 0.5	29.7	0.8	25.3	2.3	11	27.9	33.5	85.1	39.3	99.8	77.2	196.1

CO_2 Incubators

Our CO_2 incubators deliver the same reliable, long-lasting performance as our standard incubators but with an expanded temperature range and additional features designed for biomedical, pharmaceutical, cosmetic and biotechnology applications. These applications encompass clinical research, mammalian cell and tissue culture, cell and gene therapy, large-scale anaerobic bacterial growth and testing, microbial production of bioactive compounds (enzymes, antibiotics), food research and more.

Percival's IntellusUltra control system adapts to almost any programming style. It includes a port that enables access to SCADA/LIMS to customize data recording and tracking to ensure compliance with regulations such as CFR21 Part 11 or GMP Annex 11.

These incubators maintain precise control over temperature, humidity and CO_2 levels through automated sensors. You can program them to simulate human physiology, create pathogen-specific conditions or conduct fermentation studies. After experiments, they can be heat-sterilized, and they feature a stainless-steel, antimicrobial interior.



B-3600

Specifications

Model	Configuration	Relative Humidity	Temperature Range	Work Area		Shelving Size		CO_2	Exterior Dimensions					
									width		*depth*		*height*	
			°C	ft^2	m^2	in	cm	°CO_2	in	cm	in	cm	in	cm
B-36	Six tiers	off, medium, high	5 above ambient -70±0.5	32.3	3	28.8 x 27	73 x 68.6	up to 10%	33.5	85.1	33.6	85.4	77.2	196.1
B-3600	Six tiers	up to 70% @ 30°C	2-70±0.5	32.3	3	28.8 x 27	73 x 68.6	ambient to 10%	33.5	85.1	33.6	85.4	77.2	196.1

Stability Chambers

Our photostability and stability chambers are designed to meet ICH guidelines for long-term stability testing in pharmaceutical, medical and cosmetic applications. These applications include clinical trials, drug development and commercialization, medical device testing, cosmetic and personal care product testing and many others. The chambers maintain precise control over temperature and humidity to ensure reliable, accurate test results.

The photostability model (RX-3000L) features specialized LED lighting to meet ICH Q1B Option 1 guidelines. The chamber exposes test contents to LED spectra that replicate visible sunlight (6500K) and near-ultraviolet (UVA) concurrently and at a higher intensity than traditional lamps, enabling compliance with ICH test requirements within a 24-hour test cycle.

Percival's IntellusUltra control system adapts to almost any programming style. It includes a port that enables access to SCADA/LIMS to customize data recording and tracking to ensure compliance with regulations such as CFR21 Part 11 or GMP Annex 11.



RX-3000L

RX-3000

Specifications

Model	Configuration	Relative Humidity	Temperature Range	Work Area		Shelving Size		Exterior Dimensions width		depth		height	
			°C	ft²	m²	in	cm	in	cm	in	cm	in	cm
RX-3000	Three tiers	up to 75% @ 40°C	2-44±0.5	9	0.8	26.5 x 16.5	67.3 x 41.9	31	78.7	23.8	60.3	46	116.8
RX-3600	Six tiers	up to 75% @ 40°C	2-44±0.5	32.6	3	28.8 x 27	73 x 68.6	33.5	85.1	33.6	85.4	77.2	196.1
RX-3600E	Six tiers	up to 75% @ 40°C	2-70±0.5	32.6	3	28.8 x 27	73 x 68.6	33.5*	85.1*	33.6	85.4	77.2	196.1

** Steam humidifier adds 7.5 in / 19.05 cm*

Model	Configuration	Temperature Range	ID 65 Channel 1 Light Intensity	UVA Channel 2 Light Intensity	Work Area		Shelving Size		Exterior Dimensions width		depth		height	
		°C	klux	W/m²	ft²	m²	in	cm	in	cm	in	cm	in	cm
RX-3000L	One tier	10-44±0.5	52	40	3	0.3	26.5 x 16.5	67.3 x 41.9	31	78.7	23.8	60.3	46.2	117.3

In Situ Drying

Developed in collaboration with industry consultants and lab technicians, our in situ drying chamber is purpose-built for drying slides used in cytogenetics (chromosome analysis). The compact Percival C-30 bench-top model takes little space while delivering precise control over temperature, humidity and air flow. It features a tightly regulated microclimate and adjustable drying speeds, promoting consistent chromosome spread quality and optimal drying rates during the critical stage prior to karyotyping.

Because drying rates are difficult to control in an open lab, the chamber is equipped with quick-access panels in the outer door, allowing minimal environmental disturbance and rapid recovery to preset climate conditions. An integrated ventilation system, with optimal carbon filtration, helps mitigate the volatile and harmful fumes from cytogenic fixing chemicals. To resist corrosion, it's designed with a stainless-steel interior, coated coils and IP68 ingress protection on all fans.

This chamber is ideal for research in genetic disorders, disease progression, oncology, prenatal and preimplantation genetic testing, as well as molecular and targeted diagnostics and a wide range of other applications. Its versatility makes it a valuable investment for cytogenetics and pharmaceutical laboratories, hospital diagnostic departments, medical clinics and research institutes.



C-30

Specifications

Model	Configuration	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
		µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
C-30	One tier	Working Light	21-30±0.2	4.7	0.13	2.8	0.3	18.6	47.2	33.5	85.1	33.2	84.3	46.2	117.3

Mycology

This incubator is purpose-built for mycology, fungal biology and select phytopathological research. Its features are optimized for *Saccharomyces cerevisiae* (yeast), *Neurospora crassa* (red bread mold), *Aspergillus nidulans* (Eidam), *Hypholoma fasciculare* (Sulphur Tuft), *Hericium erinaceus* (Lion's Mane), *Agaricus bisporus* (Champignon) and a wide range of other fungi, molds and mushrooms.

Programmable cool IncuWhite LEDs come standard with the chamber to support fruiting at the end of cultivation. Blue IncuBrite LEDs are available as a customizable option.

A large ultrasonic humidifier maintains uniform relative humidity up to 90% within optimal growth temperatures. The CO_2 removal system ensures healthy oxygen levels, while the HEPA exhaust filter protects the surrounding area from spore contamination. This incubator supports a carefully balanced environment for diverse fungal species and offers versatile conditions for additional applications.



Specifications

Model	Configuration	Light Intensity *6" from lamps*	Temperature Range *with all lights on*	Interior Space *volume*		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions *width*		*depth*		*height*	
		µmoles/m²/s	°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm
M-36VL	Four tiers	120	5-44±0.5	29.7	0.8	27	2.5	12.5	31.8	33.5	85.1	33.6	85.4	77.2	196.1

Customized Lighting Options

Percival Scientific leads the industry in specialized lighting for scientific chambers, offering more lighting options than any other chamber manufacturer. Our full range of specialty lighting features uniquely engineered lamp banks that provide maximum irradiance without sacrificing temperature control.

All of our lighting solutions can be customized for any size unit, from bench-tops to walk-in rooms. No chamber company works more closely with you than we do to match the best lighting options with your research needs.

- SciBrite® LEDs
- SciWhite® LEDs
- IncuWhite® LEDs
- IncuBrite® LEDs
- PetriClear® Lighting
- UV
- Germicidal
- Aquatic



SciBrite® by Percival Scientific

Percival Scientific's proprietary SciBrite® LEDs are backed by years of research and development. This high-intensity, dimmable lighting system offers more color combinations than most chamber manufacturers and comes in four-color or eight-color configurations.

Precise Color Control

Not only do SciBrite® LEDs allow control over the composition and intensity of each color, specific light wavelengths can be selected and controlled, making SciBrite® lighting ideal for a wide range of scientific applications.

Better Performance and Efficiency

Among their many benefits, these groundbreaking LEDs consume less energy and provide more uniform distribution throughout the chamber while introducing considerably less heat than fluorescent lamps.

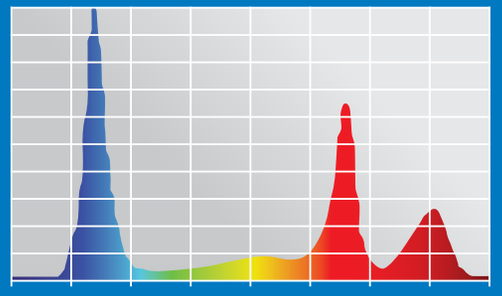
- More control over color composition and intensity
- Less demand on the temperature control system
- Improved humidity control and performance
- Improved temperature uniformity
- Improved light distribution
- Smaller day/night calibration offsets
- Reduced energy use
- Lower heat rejection to ambient
- Improved system responsiveness
- Increased lifespan of vital chamber components
- Increased growth height



SciBrite® Spectrums

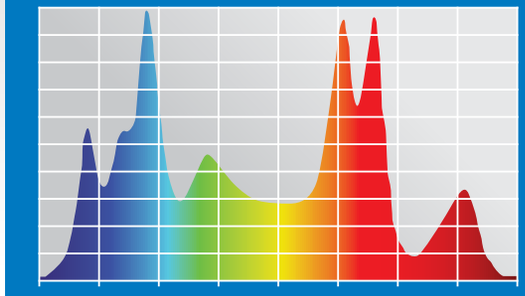
Percival chambers with SciBrite® lighting provide the correct spectral quality at the correct irradiance with exceptional environmental control. Create your own spectrum by adjusting the individual color spectrum ranges shown below. A multiple-channel dimming system allows advanced control of light output for each LED color from 1 to 100 percent in one-percent increments.

4-Color Spectrum



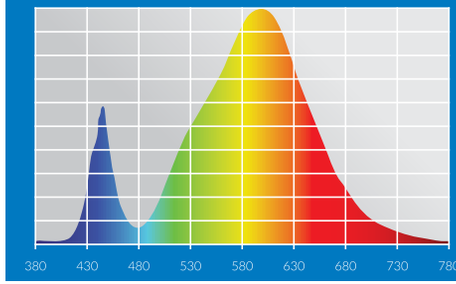
Warm White (3500K), Deep Red (660nm), Blue (450nm), Far Red (730nm)

8-Color Spectrum

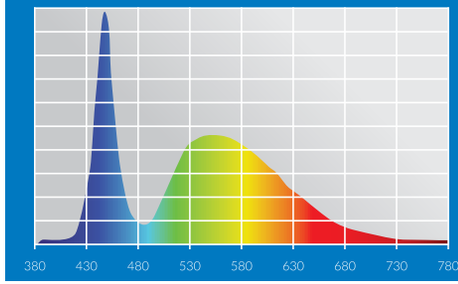


Violet (UVA 420), Warm White (4000K), Cool White (6500K), Blue (450), Red (630), Far Red (735), Deep Red (660), Green (520)

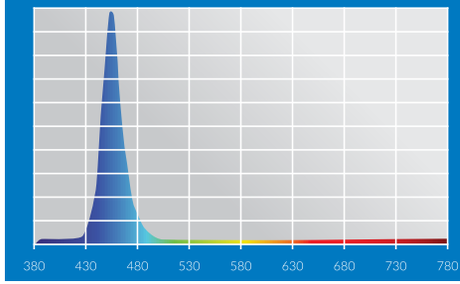
Warm White Spectrum



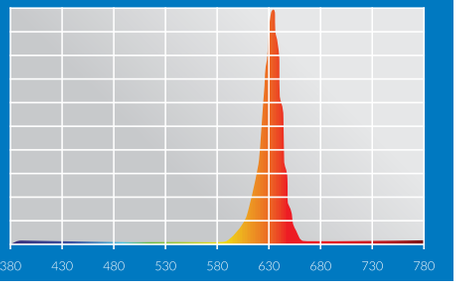
Cool White Spectrum



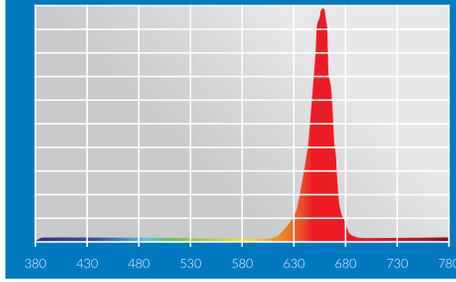
Blue Spectrum



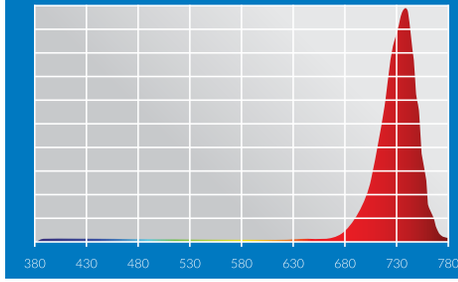
Red Spectrum



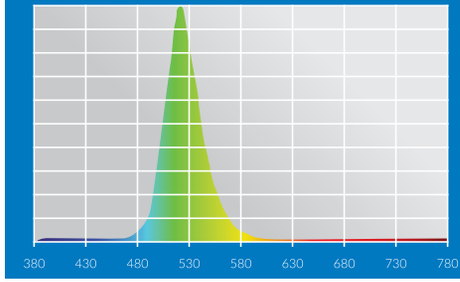
Deep Red Spectrum



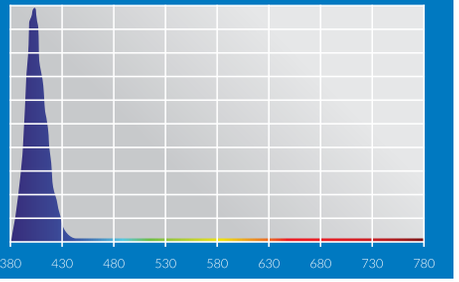
Far Red Spectrum



Green Spectrum

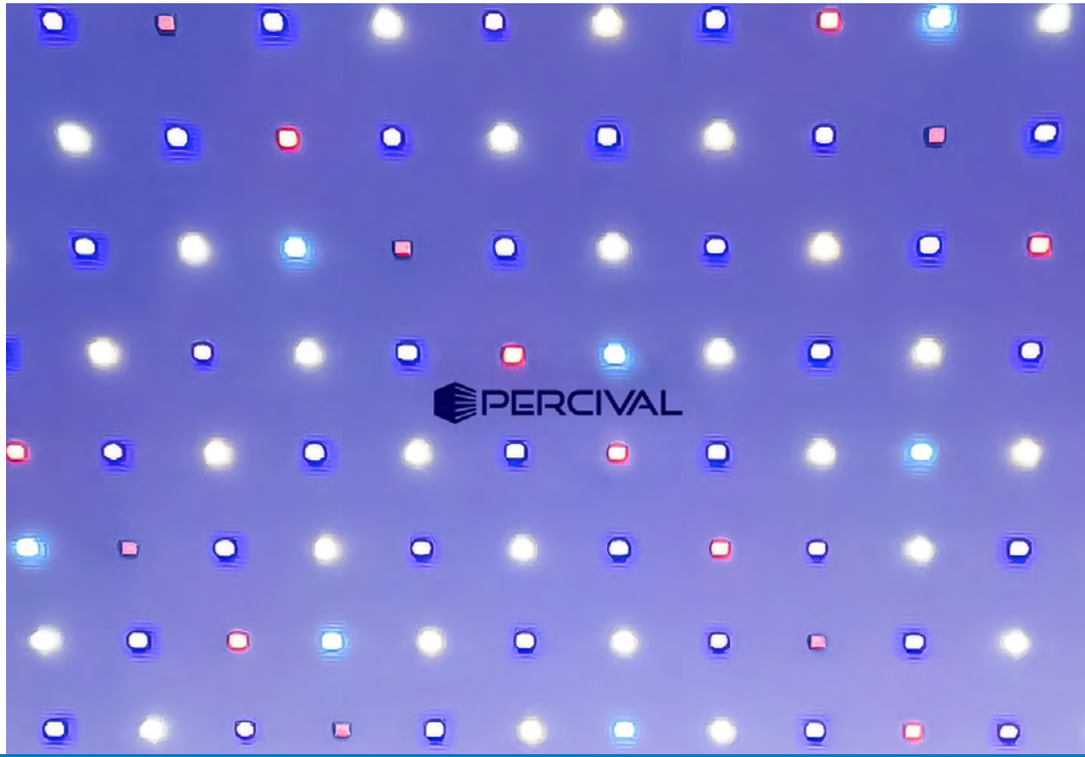


Violet Spectrum



SciWhite®
by Percival Scientific





White LEDs That Match the Sun's Spectra

SciWhite® is Percival's top-performing family of white LEDs, featuring a science-backed design that replicates the spectral quality of sunlight for a range of applications. SciWhite LED lighting delivers unparalleled uniformity and provides many of the same benefits as our SciBrite lighting, making it a cost-effective choice for plant and algal growth, marine biology research, biomedical experiments, and medical or cosmetic product testing. The light output is dimmable from 100 to 10 percent in one-percent increments and can be customized to meet specific light-output requirements.

Compared to fluorescent lamps, SciWhite LEDs offer:

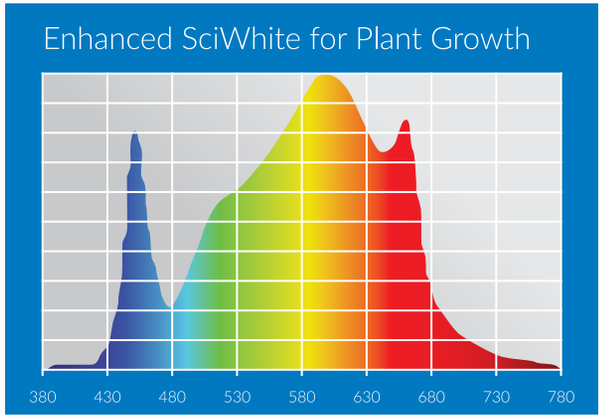
- Finer control over light intensity
- Less demand on the temperature control system
- Improved humidity control and performance
- Smaller day/night calibration offsets
- Reduced energy use
- Lower heat rejection to ambient
- Improved system responsiveness
- Increased lifespan of vital chamber components
- Increased growth height in chambers



PR-126L

SciWhite® for Plant Growth

Based on industry research, this spectrum is enhanced with red for optimal plant growth. It features a 660 nm peak red wavelength for maximum chlorophyll absorption to support photosynthesis. In addition to plant growth research, our SciWhite spectrum enriched with red is ideal for indoor farming R&D and production. Percival plant growth chambers come standard with this general-purpose white lighting system, which performs well across a variety of plant applications.



Plant Growth Spectrum
(Cool White Blue: 14%, Green: 41%, Red: 42%, Far Red: 3%)

SciWhite® for Marine

With input from marine scientists, Percival combined two SciWhite spectrums into a single lighting system to cover the broadest range of applications, including marine studies. SciWhite for Marine provides two independently controllable channels: one for coral and another for marine plants.

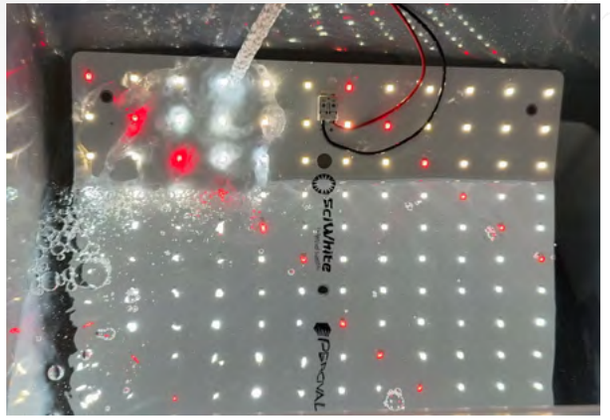
Channel One for Coral

This channel offers one of the most comprehensive blue spectra available, with a range of blue peaks that support coral health during rearing and help researchers observe changes in coral morphology. The channel avoids spectral peaks that water absorbs before coral can utilize the light, ensuring the light reaches your specimens effectively.

Channel Two for Marine Plants

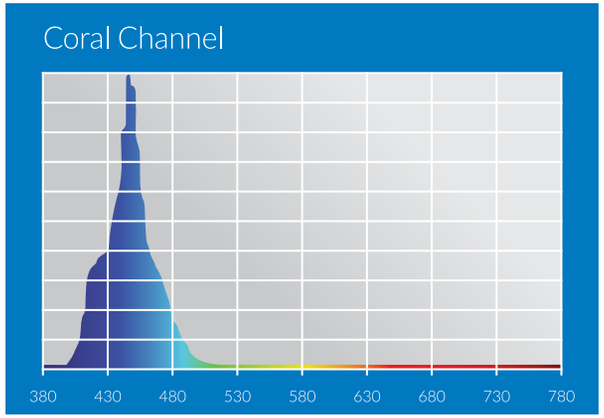
The second channel includes a white spectrum rich in red peaks to support marine plants, such as phytoplankton, kelp and algae. It features 450nm peaks for chlorophyll B absorption and 660nm peaks for chlorophyll A absorption, along with far-red 730nm peaks to optimize growth and simulate end-of-day or end-of-season light spectra.

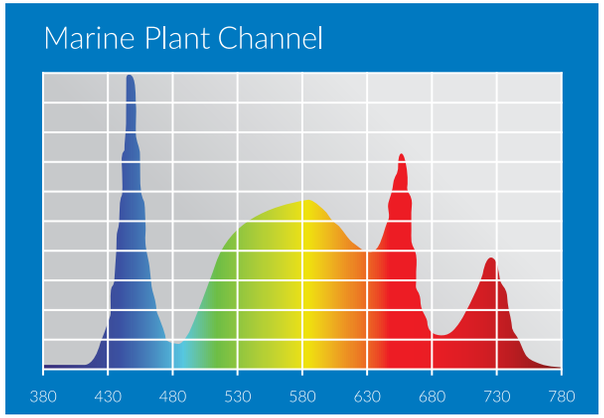
Each channel can be used alone or combined to create a third broad spectrum for general purposes or mixed coral and marine plant experiments.

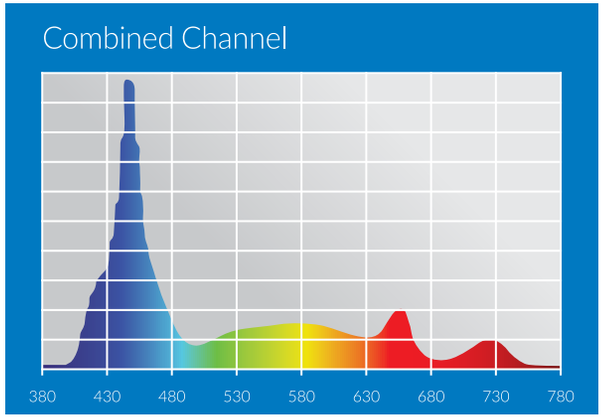


Water-Resistant Coating

As an additional feature, the SciWhite for Marine LED panels are protected with a nano coating to shield the electrical circuits from water, moisture, dust and debris.







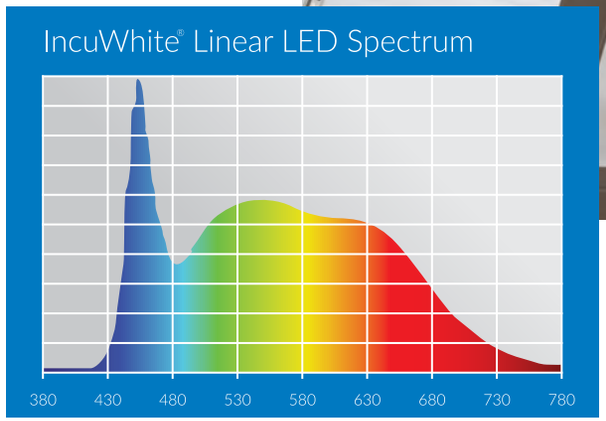
IncuWhite®
by Percival Scientific

Our engineers designed these white LEDs to match natural light inside our incubators. This creates an ideal environment for insects and other organisms. Compared to fluorescent lighting, the benefits of IncuWhite® make our best-selling, reliable incubators an even more valuable investment:

- Increased shelf space and growing height due to streamlined design
- Significantly longer light lifetime
- Brighter light intensity
- More closely matches natural light
- Flicker-free and dimmable in one-percent increments
- More resistant to dust and water (protected from low-pressure jets)
- Lower energy use



I-66LLVL



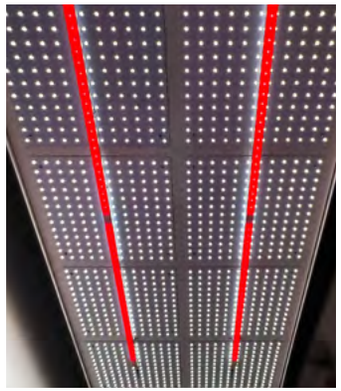
IncuBrite™
by Percival Scientific

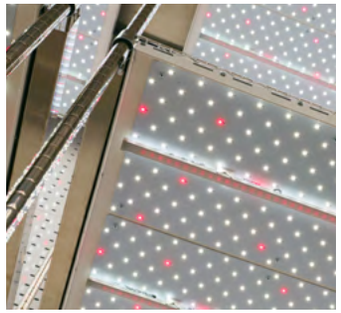
IncuBrite™ supplemental LEDs provide a cost-effective way to customize incubator lighting with additional spectra for low-light applications. For instance, since insects cannot see red, researchers can add a secondary red spectrum to prevent insects from becoming overly active or agitated during experiments. IncuBrite LEDs can be used to fine-tune the spectrum of a SciWhite® plant growth chamber. With this versatile lighting, you can isolate specific wavelengths to a designated shelf or area inside the chamber, or the entire chamber can switch between multiple light wavelengths for different experiments. These low-cost, supplemental LEDs offer a wide range of colors to accommodate many research applications and provide several of the same benefits as IncuWhite® lighting:

- Increased shelf space and growing height due to streamlined design
- Long light lifetime
- Flicker-free
- Dimmable in one-percent increments
- Resistant to dust and water
- Low energy use

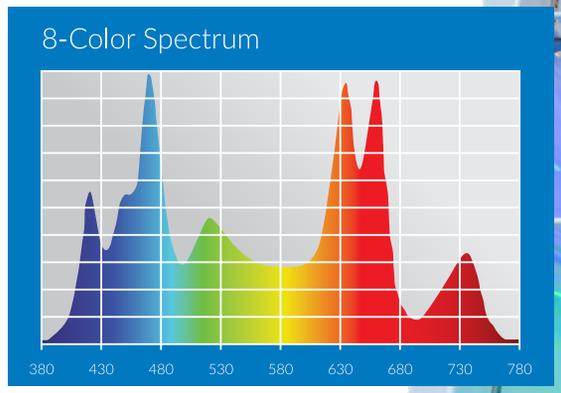
Available Colors (CRI = 90 and CCT = 5700):

- UVA - 380nm
- Violet - 420nm
- Blue - 450nm
- Green - 520nm
- Orange - 620nm
- Deep Red - 660nm
- Far-Red - 735nm









Violet (UVA 420), Warm White (4000K), Cool White (6500K), Blue (450), Red (630), Far Red (735), Deep Red (660), Green (520)



I-36LL

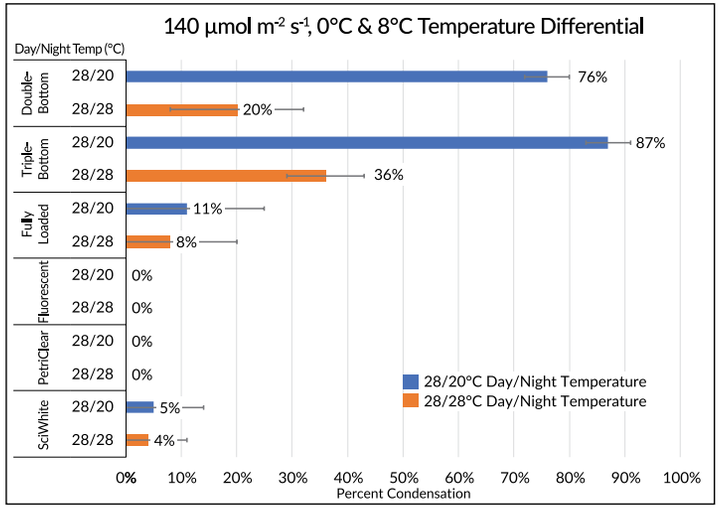
PetriClear®
by Percival Scientific



Percival Scientific designed PetriClear® as an advanced dual-channel lighting system that integrates white and infrared LEDs for plant tissue culture. The infrared LEDs* gently raise the lid temperature of unstacked Petri dishes above dew point, effectively preventing condensation. This minimizes contamination risks and creates an optimal environment for consistent, uniform growth. PetriClear replicates the color temperature (CCT: 6000K, CRI: 90) and infrared output of prior fluorescent lighting used in Percival tissue culture chambers and performs better in some cases. This innovative system is also ideal for additional microbiological applications, including the cultivation of fungi, bacteria and yeast.

- Easy to program with the IntellusUltra real-time controller
- Dimmable light output in one-percent increments
- Superior performance compared to fluorescent lighting

** Infrared lighting is invisible when energized.*



Condensation under 140 µmol m^{-2} s^{-1}, 28/20 and 28/28°C day/night temperatures



CU-36L5

Hydroponic Nutrient Film Technique (NFT) System

Option for Percival LED-41L2 (SciBrite®) and E-41L2 (SciWhite®) Plant Growth Models

Our hydroponic NFT system is designed for leafy greens (lettuce, spinach, swiss chard, arugula, kale, basil) and herbs with short growth periods and small root systems.

Chambers with this added option are ideal for studies on precise nutrient delivery for plant growth; root system architecture; plant stress response; water usage and efficiency; superior genotypes for hydroponics; sustainable ag; growing material comparisons; and others.

SciWhite by Percival Scientific

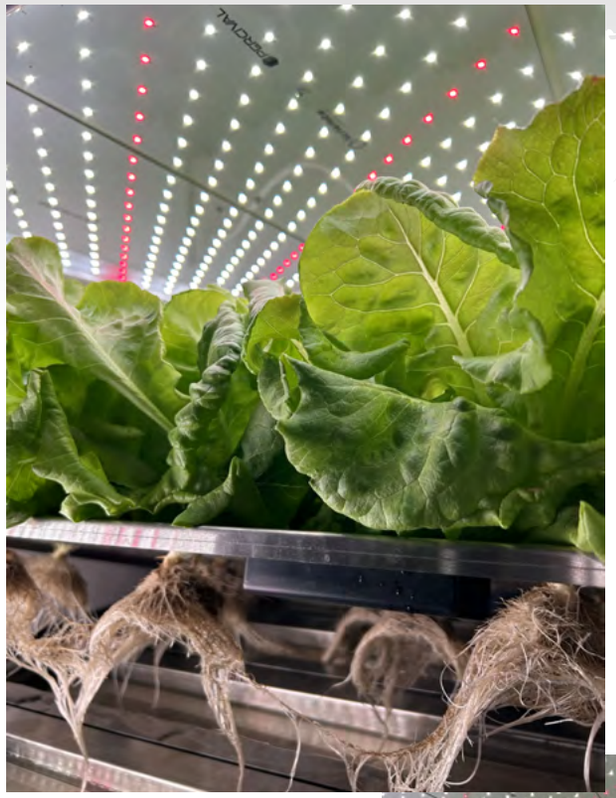
SciBrite by Percival Scientific



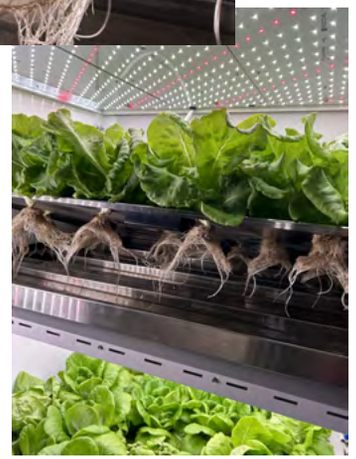
E-41L2



LED-41L2









IntellusUltra Touchscreen Interface

Most Percival Scientific chambers* come standard with a high-resolution touchscreen interface for programming the IntellusUltra (C8) or IntellusUltraConnect (C9) control system. It displays advanced settings and data for fine-tuning your research, including graphs and charts. Multi-touch sensitivity makes programming your chambers easier than ever.

- 10.1" IPS high-resolution display with 10-point multi-touch sensitivity
- Tabular and graphical presentation of chamber programs and parameters
- Highly visible process values and alarm notifications
- Enhanced user feedback menus

** Incubators and tissue culture chambers excluded*



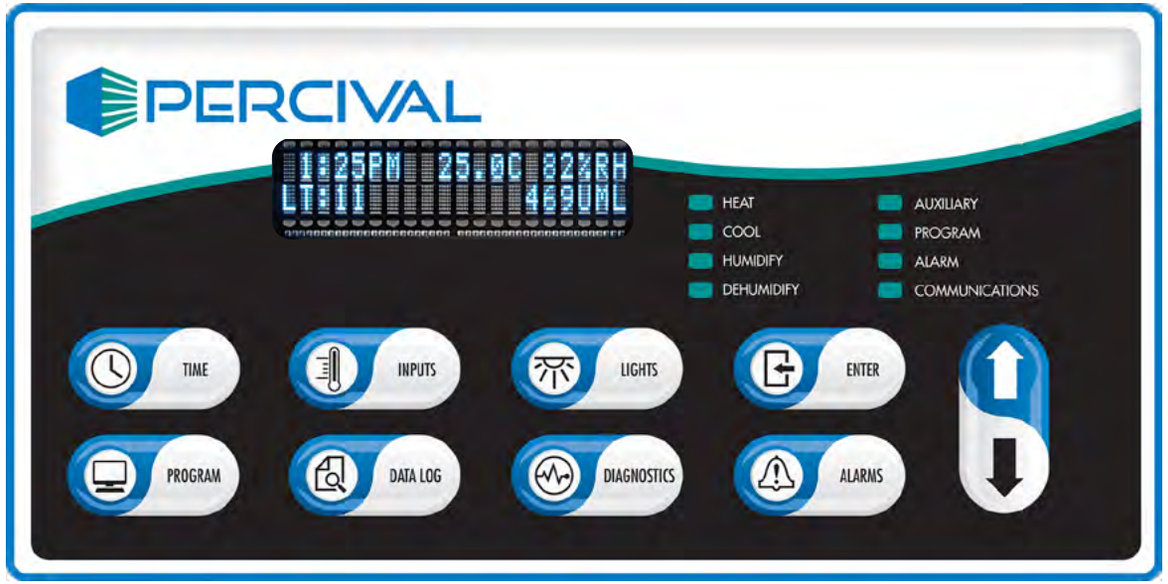
IntellusUltra Control Systems

Percival Scientific listens carefully to what our customers want from a chamber control system. In response, we've refined our IntellusUltra (C8) and our IntellusUltraConnect (C9), two of the highest standard controllers available in the life science market. Adaptive to nearly any programming style you prefer, these intuitive platforms provide built-in protection and a large range of options for more control over experiments.

- Robust and reliable industrial-grade integrated hardware design
- Highly flexible design allows for customized configurations and expansion
- Precise, simultaneous control of up to seven environmental parameters
- Industry-leading experiment protection and system diagnostics

Added Features of IntellusUltraConnect (C9)

- Remote monitoring
- Customizable system notifications
- Cloud-based data logging



IntellusUltra

WeatherEze®

Revolutionary Control System Software for Climate Based Research

Percival's exclusive WeatherEze control system software gives you the amazing ability to replicate current or past global weather patterns.

Real-Time Control

If you want to match current conditions, real-time METAR weather data, the same information used by meteorologists, can be downloaded from nearly any global location* and used to program the relative humidity, lighting and temperature for your chamber. As the METAR data changes, the chamber conditions are updated to duplicate the global location with unsurpassed realism.

** The United States and Europe produce ample METAR data; however, some data gaps exist in isolated areas of the world.*

Climate Change Scenarios

By linking to quality data, WeatherEze allows researchers to run climate change model scenarios with just a few clicks. Twenty-one different models and seven emission scenarios are currently supported through public data (World Bank: Open Data Catalog).

Historical Simulations

This program simulates the average weather conditions from a selected location beginning and ending with the historical dates you choose. Want to match the natural light, humidity and temperature of January 2000 in Brazil? WeatherEze can do that!

Customized Weather Data

Users can edit weather data generated by the software or upload their own data sets.

Contact a Percival representative or visit our website at percival-scientific.com to learn more about what WeatherEze can do to revolutionize your research.

WeatherEze®



Optional Product Features

All options are not available for every chamber. Contact sales@percival-scientific.com with questions.

CODE	OPTION DESCRIPTION	CODE	OPTION DESCRIPTION
C8T	IntellusUltra and Android-based Touchscreen	Q11	Air Filter Assembly (insect screen)
C9	IntellusUltraConnect (includes PercivalConnect® software)	Q12	Full Size Glass Door
C9T	IntellusUltraConnect and Android-based Touchscreen	Q18	Stacking Hardware for 30 Series
C12	WeatherEze Software (Compatible with Windows Only; Requires C9)	Q19	External Drip Pan
EXW	Extended Warranty (annually) - Additional 1, 2 or 3 Years	Q22	Closed Loop Dimmable Lighting Control with PAR Light Sensor
H1	Pan-type Humidifier and Electronic RH Sensor (0-1VDC)	Q23+	Open Loop Dimmable Lighting Control (each shelf is independently dimmable by percentage)
H3	Pan-type Humidifier, Dehumidifier, and Electronic RH Sensor (0-1VDC)	Q24	LED Working Light (energized when door opens)
H6	Pan-type Humidifier, Dehumidifier, and Advanced RH Sensor (0-5VDC)	Q29	Left-Hand Door Swing
H11	Ultrasonic Humidifier and Advanced RH Sensor (0-5 VDC)	Q30	Additive Carbon Dioxide Control with 2000 ppm Sensor
H12	Ultrasonic Humidifier, Dehumidifier, and Advanced RH Sensor (0-5VDC)	Q31	Additive Carbon Dioxide Control with 5000 ppm Sensor
H14	Ultrasonic Humidifier and Electronic RH Sensor (0-1VDC)	Q32	Additive Carbon Dioxide Control with 10% Sensor
H15	Ultrasonic Humidifier, Dehumidifier, and Electronic RH Sensor (0-1VDC)	Q33	Carbon Dioxide Removal System (Requires Q30, Q31 or Q32 to Operate)
S1	Locking Door, Power Switch and Dry Contacts (one door)	Q41	Heavy Duty Door Handle with Latch
S2	Locking Door, Power Switch and Dry Contacts (two doors)	Q42	1 NEMA 5-15R 1A Convenience Receptacle, Programmable via Intellus Control System
S3	Remote phone auto-dialer	WAC1	Stainless Steel Interior
S4	Dry Contact for Remote Alarm	WAC2	Water-cooled Condensing Unit
Q1	Door with Two Fresh Air Ports	WAC4	Large Observation Window (12" X 42") on Door
Q2	Observation Window with Cover (12" x 12") on Door	WAC5	Cover for WAC4
Q4	Door Lock	WAC6	Self-contained, Air-cooled Condensing Unit
Q5	Additional Epoxy Wire Shelf (each)	WAC7	Remote, Outdoor, Air-cooled Condensing Unit with All-Weather Housing
Q6	Stainless Steel Wire Shelf (each)	WTM1	Extended Temperature Range to -10°C (for non-lighted units only)
Q7	Caster Assembly with Levelers for 30 Series	WTM2	Extended Temperature Range to -10°C lights off/0°C lights on
Q9	Coated coils (required for Drosophila research)	WTM3	Extended Temperature Range to +60°C (No refrigeration above 44°C)
Q10	Additional Access Ports (1", 2", 3" or 4" increments)	WTM4	Extended Temperature Range to +60°C with Continuous Running Condenser
Contact Percival Scientific for comprehensive warranty program information.			

PERCIVAL

Helping You Create Better Science