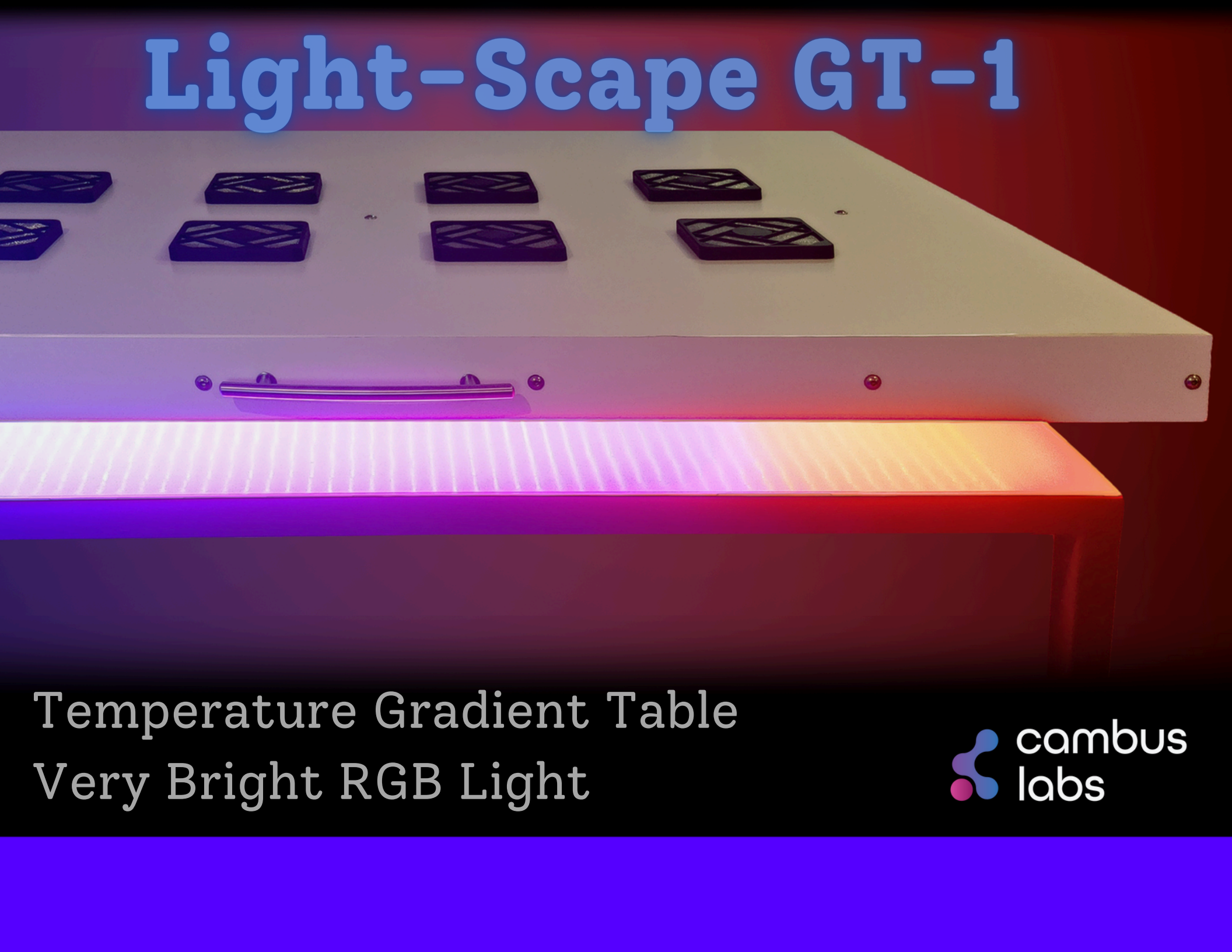
Light-Scape GT-1



Temperature Gradient Table

Very Bright RGB Light

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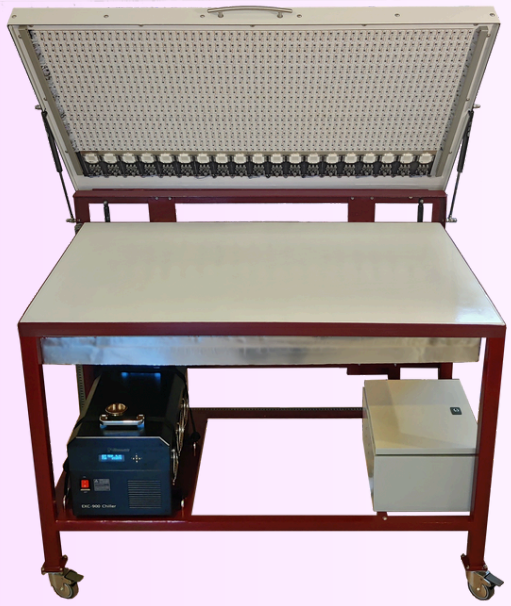
Light-Scape GT-1

Introducing our newest instrument for scientific research

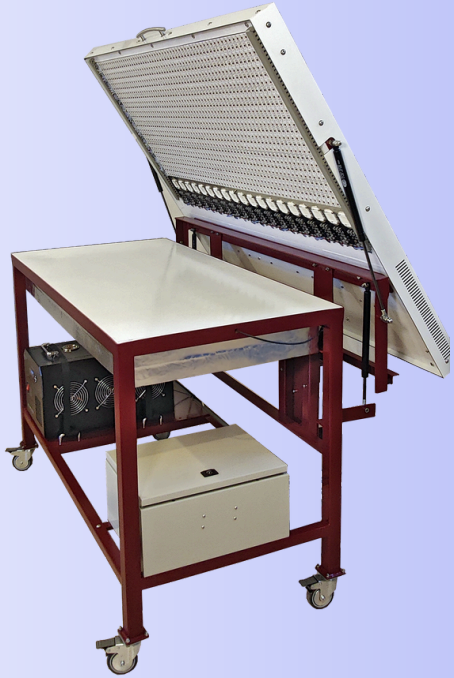
A temperature gradient table with adjustable high-power RGB lighting

This innovative table allows to maintain a temperature gradient, while easily changing light conditions to study microorganisms like algae, bacteria, seeds.

A simple yet powerful way to see how these organisms react to different environments, helping us learn more about the natural world.



- User defined light zones
- Adjustable height of the light fixture by stepper motors
- Solid design, easy to handle
- Dedicated PC software
- High brightness RGB light
- Adaptive active cooling of LEDs



Light-Scape GT-1 Technical specifications

Dimensios L x l x h (mm)	1300 x 1200 x 1200
Working area L x l (mm)	1200 x 600
Temperature gradient direction (cold – warm)	Left – Right along the 1200 dimension
Weight (kg)	200
Cold side temperature (°C)	-3
Warm side temperature (°C)	50
Power: 230 VAC, 50 Hz	Nominal 1500 W, Maximum 3300 W
Maximum white brightness (LUX)	50 000 under RGB strips, 100 000 under RGB power LEDs
Light zones – software defined	25 RGB addressable strips, 19 high power LEDs at the rear
LEDs height (mm)	25 – 200, adjustable from PC software

Light-Scape GT-1

Applications

The temperature and light gradient table offers a controlled environment for conducting experiments that require precise settings, making it an invaluable resource across a broad spectrum of disciplines.

1. Agricultural Research

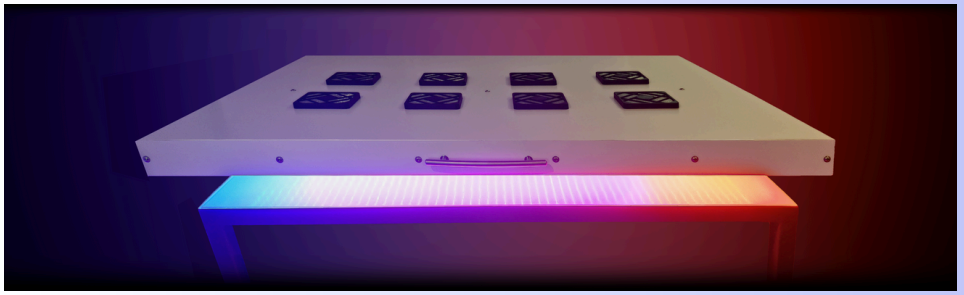
- Seed Germination Studies: To understand the optimal conditions for seed germination and early growth stages, enabling the selection of the best planting times and conditions for various crops.
- Plant Growth and Development: Investigating how different light wavelengths and temperatures affect plant morphology, flowering time, and yield.

2. Microbiology

- Microorganism Growth Studies: Examining the growth rates of bacteria, fungi, and algae under varying temperatures and light conditions to understand their ecological roles and optimize conditions for beneficial strains.
- Antimicrobial Resistance Research: Testing how environmental stressors influence the development of resistance in microbes.

3. Environmental Science

- Climate Change Research: Simulating different environmental conditions to study plant and microorganism responses to global warming and altered light conditions due to atmospheric changes.



4. Pharmacology and Biochemistry

- Compound Stability Testing: Assessing how temperature and light affect the stability of pharmaceuticals and biochemical compounds.
- Enzyme Activity Studies: Investigating how varying environmental conditions influence the activity rates of enzymes.

5. Aquaculture

- Algae Cultivation: Optimizing conditions for growing algae used in biofuels, dietary supplements, and as a food source in aquaculture.

6. Educational Purposes

- Teaching Tool: Serving as a practical educational tool in classrooms and laboratories to teach students about the effects of environmental conditions on living organisms and chemical compounds.

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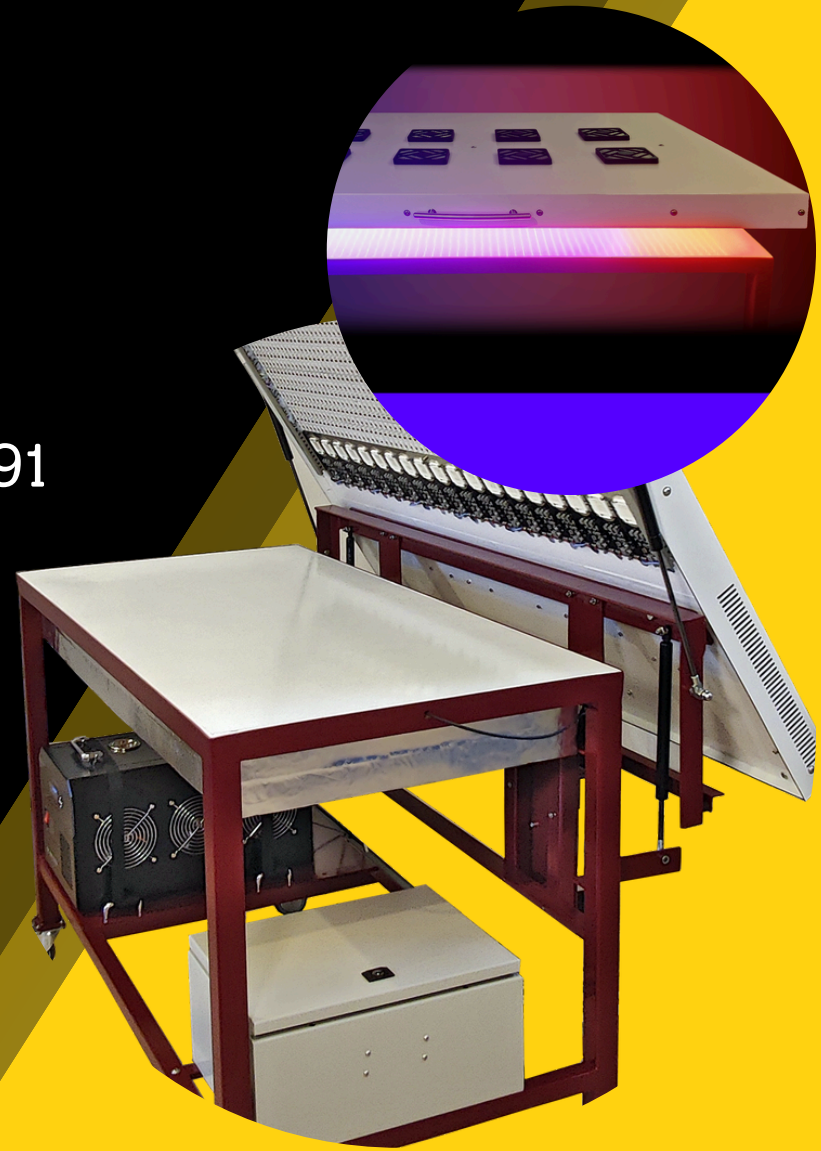

Manufacturing for industry since 1991

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