

365DisInFx® LED Luminaire

LPU Series - 365DisInFx® UVC Device

Product Description

Current's 365DisInFx® LPU Series provides germicidal ultraviolet (UVC) light for continuous disinfection in occupied spaces.

Example Applications: Bathrooms, Gym Locker Rooms, Healthcare Facilities, Commercial Offices, Retail, Entrances and Lobbies.



365DisInFx® LPU is the first UL-Certified direct LED UVC luminaire for occupied spaces.





Technical Summary

Test results: Current has completed room-scale tests of its 365DisInFx® UVC disinfection technology LPU series devices that show reduction of the aerosolized viruses SARS-CoV-21 (the virus that causes COVID-19), and bacteriophage MS22.

Applying photobiological science and mathematical modeling to the results of device testing and published literature, continuous operation of a properly installed array of 365DisInFx® LPU Gen2 devices is predicted to provide 90% (1-log₁₀) inactivation of aerosolized SARS-CoV-2 in the first hour, or less of exposure and 99% inactivation (2-loq₁₀) in 2 hours or less of exposure in most spaces when configured for an 8-hour or greater Permissible Exposure Time (PET) as defined in IEC 62471 – Photobiological Safety of Lamps and Lamp Systems standards at 7 foot head height. Current continues to conduct additional supporting experiments.

Safety: When installed as directed, dosage is designed to operate below human health exposure limits per UL 8802 Outline of Investigation for UV Germicidal Equipment and Systems, IEC 62471 Photobiological Safety for Lamps and Lamp Systems standard, and American Conference of Governmental Industrial Hygienists (ACGIH®) TLVs® guidelines over an 8-hour period. For product selection and application support contact the Current Application team or refer to LED.com

Available For Ordering

Contact your local Current sales representative with order inquiries. Not approved for sale outside of the U.S.

- ¹ Testing with the SARS-CoV-2 using LPU devices with prototype refractive optics resulted in 90% inactivation of the aerosolized virus within 2 hours. This testing was then used as the basis for photobiological science and mathematical modeling. The test was conducted in an 8-by-20-by-8-foot room equipped with twelve LPU devices using prototype refractive optics, configured for 8-hour Permissible Exposure Time (PET) at head height (7 feet). SARS-CoV-2 Isolate USA-CA1/2020 was used in this testing, and results are expected to be applicable to other SARS-CoV-2 isolates or strains, including B.1.617.2 (Delta) or other Variants of Concern or Interest, as well as to seasonal human coronaviruses.
- ² Testing with the bacteriophage MS2 resulted in 88% inactivation of the aerosolized virus within 4 hours. The test was conducted in a 10-by-10-by-8foot room equipped with seven LPU prototype devices, configured for a 4-hour Permissible Exposure Time (PET) at head height. Bacteriophage MS2 is a nonenveloped virus that is commonly used as a surrogate in testing for viruses that are pathogenic to humans. It is particularly useful as a surrogate whereas published scientific testing and literature supports that bacteriophage MS2 is more resistant to UVC than certain enveloped viruses such as coronaviruses and influenza.



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Ordering Number Logic

LPU2	O		QQ			WHIE	
Family	Voltage	UVC Output	Controls	Mounting Type	Minimum Ceiling Height	Finish	Packaging
LPU2	0 = 120-277VAC	xx	QQ = No Controls	ST = Standard	76 = 7'6" and above	WHTE = White	SP = Single Pack
		Output Value (range between 500uW and		LT = T-Grid	78 = 7'8" and above		BP = Bulk Pack (5-8 per carton)
		7000uW) is selected based on design		TR = Tamper Resistant	80 = 8'0" and above		DP = Distribution Pack (16 per carton)
		parameters including room dimensions.					

Refer to on-line product selection tool at LED.com, or 1-888-694-3533 for specific UV output selection and ceiling height combinations.

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	255nm UVC LED										
Standard Catalog Selections	Family	Voltage	UVC Output	Controls	Mounting Type (See Above Options)	Minimum Ceiling Height	Finish	Packaging (See Above Options)			
	LPU2	0	05	QQ	xx	76	WHTE	XX			
	LPU2	0	07	QQ	XX	78	WHTE	XX			
	LPU2	0	09	QQ	XX	78	WHTE	XX			
	LPU2	0	12	QQ	XX	80	WHTE	XX			
	LPU2	0	15	QQ	XX	80	WHTE	XX			
	LPU2	0	19	QQ	XX	80	WHTE	XX			
	LPU2	0	23	QQ	XX	80	WHTE	XX			

For ceiling heights below 7'6", contact factory.

Notes:

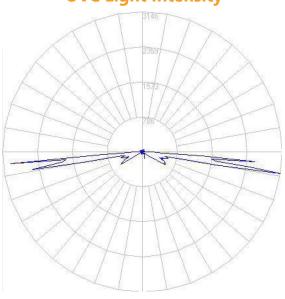
Voltage "0" includes a power pack for 120-277VAC to 24VDC.

Different Finish requests acceptable; longer lead time and setup fee will be applied.

Any quantity less than 5 will be shipped as a single pack.

For layout requests, contact your local Current sales representative. Sales and agents can submit application design requests through E*Light or Salesforce opportunities.

UVC Light Intensity



UVC is invisible to the human eye.



Product Specifications

LED & Optical Assembly

Indicator LED:

• Green = Circuit board powered on

• Red (Flash) = Overcurrent error

• Yellow = UVC LED powered on

Electrical

Input Voltage: 120-277 VAC
System Power Factor (PF): >0.9*

Input wattage: 3.88W Max input current: 0.059A

Total Harmonic Distortion (THD): <20%*

System Type: Class 2

Power Pack PN: BZ-50/BZ-50RC (Legrand)

*PF and THD may vary with options

Ratings & Evaluations

Operating Temperature: -20°C to +25°C **Storage Temperature:** -40°C to +70°C **Surge Protection:** ANSI C82.77 Compliant

Location: Damp

Safety: UL/cUL Certified

Environmental:

- Compliant with material restrictions of RoHS.

- 365DisInFx™ LPU devices meet California ozone emissions limit: CARB certified.

- EPA Est. 90375-NC-1

Construction & Finish

Housing: Polycarbonate

Reflector: Polycarbonate with metalized coating

Weight: ~0.5 lbs. Packaging: ~0.5 lbs.

Design Life & Warranty Warranty: One (1) year life (fu

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Mounting Options

Standard Mounting: Drywall/J-box direct screw

T-Grid Clips: Provided with "LT" option

Tamper Resistance: Drywall/J-box direct screw **Wiring Access:** ½" trade-size KOs on back side

Accessories & Options

Contact your Current sales representative for available options. For more information and access to all of our resources, including our design tools, visit: LED.com.

A CAUTION

UVC emitted from this product. Install in compliance with manufacturer instructions to prevent risk of personal injury from UV radiation.

Make An Informed Decision

- UV radiation can pose a risk of personal injury. Overexposure can result in damage to eyes and bare skin. To reduce risk of overexposure, equipment must be installed in accordance with manufacturer's site planning and application recommendations, including minimum ceiling height restrictions.
- UV solutions are intended for common high traffic spaces and not recommended for dwellings or home use.
- Installation of the devices should be performed by qualified professionals as detailed in Current's installation guide.
- To allow for occupancy during use, Current products comply with UL 8802 Outline of Investigation for UV Germicidal Equipment and Systems, IEC 62471 Photobiological Safety of Lamps and Lamp Systems standards, and American Conference of Governmental Industrial Hygienists (ACGIH®) TLVs® guidelines over an 8-hour period when installed as directed.
- Current's UV products are meant to be used in conjunction with other protective measures like manual cleaning and the use of proper PPE. They are not a substitute for other measures.
- Current products are not intended to be used for use as a medical device.
- If combining two or more UV solutions, whether from Current and/or other manufacturers, please consult a trained product application representative to ensure the total irradiance (UV dose) does not exceed recommended human exposure limits. To the extent UV solutions are combined, it may impact inactivation rates.

