

254 nm UV Lamps

Light Sources and LightTech offer high-quality standard germicidal 254 nm UV lamps in both ozone free and ozone generating solutions. The type of fused quartz used to make the body of the germicidal lamp determines the emission of the wavelength in UV 254 nm energy. Light is broken into colors and measured by wavelength in nanometers with UV light in the range of 254nm proven to eliminate bacteria, viruses and harmful contaminants. 254nm UV light is highly effective in sterilization and purification applications used to disinfect air, water and surfaces.

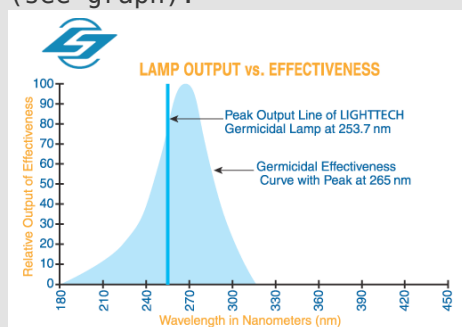
“L” or “Low ozone” generating lamps transmit up to 90% of their energy at the 254nm wavelength and typically utilize a doped fused quartz that blocks the emission of 185nm energy. “VH” or “Very high ozone” generating lamps are produced using clear fused quartz which allows for the transmission of energy at both 185nm and 254nm wavelengths.

The 185nm energy reacts with the oxygen in the air to produce ozone. In applications that require moderate amounts of ozone, we custom splice the two types of quartz together to form a custom “L” to “VH” ratio according to the customer’s specific requirements.

254 nm UV Lamp and 185nm Ozone Generating Lamp

254 nm UV Lamps

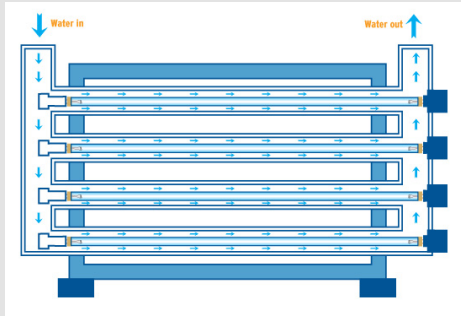
LightSources & LightTech’s low-pressure, mercury-arc germicidal 254 nm UV lamps are specially designed to produce the highest amounts of UV radiation – where 90% of the energy is typically generated at 254nm. This radiation is very close to the peak of the germicidal effectiveness curve of 265nm, the most lethal wavelength to microorganisms. UV 254 nm light is proven to destroy bacteria and viruses by altering the DNA of the cells harmful contaminants, even microorganisms naked to the human eye. (see graph).



Our 254nm germicidal lamps are used extensively in the [air and water purification markets](#) and have been utilized in applications such as food and beverage, medical, HVAC (Heating, Ventilation and Air Conditioning), pharmaceutical, the semiconductor sterilization industries and many others. Our germicidal lamps are essential components in many municipal drinking water facilities, waste water and ground water remediation industries.

185 nm Ozone Generating Lamps

- “VH” (or Very High ozone producing lamps) generate energy at 185nm in addition to the 254nm wavelength.
- The UV emission at 185nm produces abundant amounts of ozone in air. Ozone is an extremely active and effective oxidizer, destroying microorganisms as well as acting as a deodorizer.



- A primary advantage of the ozone generated by our UV germicidal lamps is that it can be carried through the air into places not easily reachable by direct UV exposure.

Interested to learn more? Check our [education section](#) and find out the many advantages of UVC radiation.

Standard Output Quartz Germicidal Lamps

	TubeDiameter	BF – BF	ArcLength	Power ¹	Current	Voltage ¹	UV output ¹ @ 254nm		Rated ¹ Life
	mm	mm	mm	W	mA	V	μW/cm ²	W	hrs.
Preheat Start LampsLow Ozone									
GPH212T5L	15	212	132	10	425	25	27	2.7	16,000
GPH287T5L	15	287	207	14	425	34	40	4	16,000
GPH303T5L	15	303	223	15	425	35	43	4.3	16,000
GPH357T5L	15	357	277	17	425	42	57	5.7	16,000
GPH436T5L	15	436	356	21	425	51	72	7.3	16,000
GPH793T5L	15	793	713	38	425	92	125	13.5	16,000
GPH843T5L	15	843	762	41	425	98	150	16	16,000
GPH1148T5L	15	1148	1067	55	425	135	180	22	16,000
GPH1554T5L	15	1554	1474	75	425	179	240	33	16,000
GPH1630T5L	15	1630	1550	79	425	189	252	34.5	16,000
Preheat Start LampsOzone Generating									
GPH212T5VH	15	212	132	10	425	25	27	2.7	16,000
GPH287T5VH	15	287	207	14	425	34	40	4	16,000
GPH303T5VH	15	303	223	15	425	35	43	4.3	16,000
GPH357T5VH	15	357	277	17	425	42	57	5.7	16,000
GPH436T5VH	15	436	356	21	425	51	72	7.3	16,000
GPH793T5VH	15	793	713	38	425	92	125	13.5	16,000
GPH843T5VH	15	843	762	41	425	98	150	16	16,000
GPH1148T5VH	15	1148	1067	55	425	135	180	22	16,000
GPH1554T5VH	15	1554	1474	75	425	179	240	33	16,000
GPH1630T5VH	15	1630	1550	79	425	189	252	34.5	16,000
Instant Start LampsLow Ozone									
G10T5L	15	357	277	17	425	42	57	5.7	16,000
G24T5L	15	692	612	32	425	77	95	11	16,000
G36T5L	15	843	762	41	425	98	150	16	16,000
G48T5L	15	1148	1067	55	425	135	180	22	16,000

G64T5L	15	1554	1474	75	425	179	240	33	16,000
G67T5L	15	1630	1550	79	425	189	252	34.5	16,000
Instant Start Lamps0zone Generating									
G10T5VH	15	357	277	17	425	42	57	5.7	16,000
G24T5VH	15	692	612	32	425	77	95	11	16,000
G36T5VH	15	843	762	41	425	98	150	16	16,000
G48T5VH	15	1148	1067	55	425	135	180	22	16,000
G64T5VH	15	1554	1474	75	425	179	240	33	16,000
G67T5VH	15	1630	1550	79	425	189	252	34.5	16,000

Note 1: Lamp data is based on measurements performed under laboratory conditions in air at room ambient temperature. Measurements were performed on a high-frequency, current limited electronic ballast and represent average values at 1 meter.

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