



The SkyBeam is a high-intensity cool-operation LED spot light curing system widely used in benchtop and automated production lines. The system includes a long-life light guide, supports up to 4 independently operating light guides with a variety of lens types, and features easy to use exposure time controls and foot pedal activation. The unit is compact and portable, with a built-in power supply, weight of 1.5 kg, and dimensions of 140 mm x 92 mm x 160 mm.

+ 4 Irradiation Channels

The system features 4 independent irradiation channels, each with 0-999.9 second exposure timer and 10 to 100% power adjustment range. Each channel's UV light spot size can be adjusted

by replacing the optical lens at the end of its light guide, with the service life of each irradiation channel independently recorded.

+ Built-in Power Supply

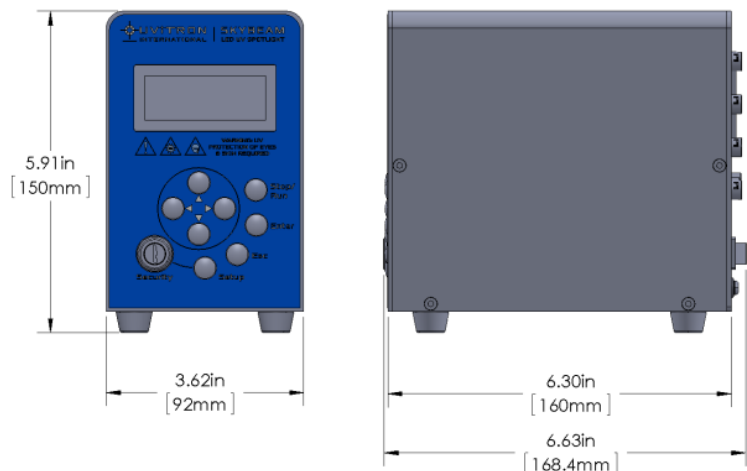
The built-in power supply and compact design ensures the unit occupies minimal space, and eliminates the need to manage an external power adapter.

+ External Control Interface

The system can be remotely monitored and controlled using isolated logic signals available at the rear panel terminals. The digital logic functions allow high-speed control of the SkyBeam for applications requiring a direct interface with machine controllers or PLCs. Control signals include LEDs on/off and a safety interlock that disables LEDs for operator protection. Monitoring signals include system ready, LEDs on and system alarm. An RS232 port is also provided for serial communication with PCs and PLCs.

+ Cool Operation

Both convection cooling and fan cooling UV LED light guides are offered. The fan cooling type has better heat dissipation and is suggested for continuous operation. The UV LED light guide has a built-in temperature sensor that monitors the



SkyBeam dimensions

connects the light guide from

overheating. The aluminum controller housing is fully sealed to prevent contamination and ensure long system life.

+ Security Key Switch

The system comes with a security key switch that prevents operators from making unauthorized changes to the approved running parameters.

+ Long-Life Flexible Light Guides

The cable of the UV LED light guides is a 2-meter flexible robot cable, tested to over 10 million bending cycles. 4 wavelengths are available, including 365, 385, 395 and 405 nm.

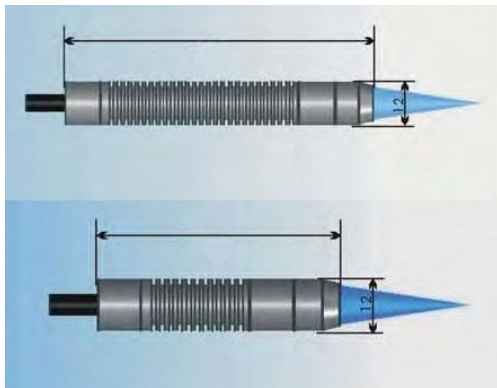


Figure 2. Convection cooled light guide

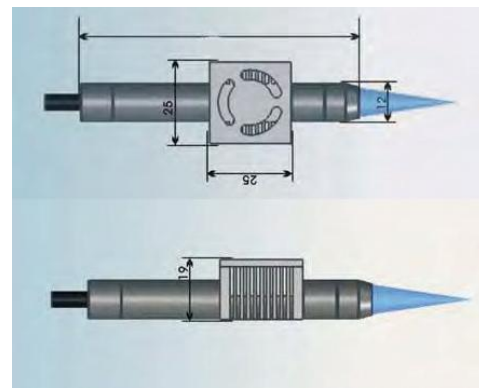


Figure 3. Fan cooled light guide

UV LED Light Guides

Part Number	LED Wavelength	Cooling Type	Details
UV4053-365F*	365 nm	Fan	w/ 6 & 12 mm lens, length=82 mm
UV4053-385F	385 nm	Fan	w/ 6 & 12 mm lens, length=82 mm
UV4053-395F	395 nm	Fan	w/ 6 & 12 mm lens, length=82 mm
UV4053-405F	405 nm	Fan	w/ 6 & 12 mm lens, length=82 mm
UV4054-365C	365 nm	Convection	w/ 6 & 12 mm lens, length=85 mm
UV4054-385C	385 nm	Convection	w/ 6 & 12 mm lens, length=85 mm
UV4054-395C	395 nm	Convection	w/ 6 & 12 mm lens, length=85 mm
UV4054-405C	405 nm	Convection	w/ 6 & 12 mm lens, length=85 mm

Light Guide Lenses

Part Number	Spot Size	Irradiance at Distance	Wavelength
UV4030-12MM*	12 mm	1.5 W/cm ² @ 27 mm	365 nm
UV4030-6MM*	6 mm	5.6 W/cm ² @ 13 mm	365 nm
UV4030-3MM	3 mm	11.0 W/cm ² @ 6 mm	365 nm
UV3982-12MM	12 mm	1.7 W/cm ² / 2.0 W/cm ² / 2.3 W/cm ² @ 26 mm	385 nm / 395 nm / 405 nm
UV3982-6MM	6 mm	5.3 W/cm ² / 6.3 W/cm ² / 7.4 W/cm ² @ 11mm	385 nm / 395nm / 405 nm
UV3982-4MM	4 mm	10.0 W/cm ² / 12.0 W/cm ² / 14.0 W/cm ² @ 5mm	385 nm / 395 nm / 405 nm

* Included by default unless otherwise specified at time of order