



# UV Light Sources LQ-xxx



Fig. 1: UV light source LQ-400

The UV light sources LQ-400, LQ-1000 and LQ-2000 are light guide coupled high-power UV-A light sources with lamp powers of 400, 1000 or 2000 W. Depending on the configuration, two to 20 light guides are coupled to the high-power lamp. This design enables a very economic irradiation of multiple spots. The use of a single lamp for all irradiated spots minimises lamp and controller costs, and it considerably reduces downtime of the system. The light sources with a power of 1000W and above are equipped with a fast exchange holder for the lamps that allows total downtime below 5 minutes including warm-up.

The irradiation time can be selected with a digital timer with 0.1 s resolution. The shutter can also be controlled by a foot switch or by a PLC system controller. Further signals for a system controller are optionally available. We recommend using the radiometer RM-12 with appropriate sensors for a calibration of the irradiance. Our sensors are calibrated against a PTB (Physikalisch-Technische Bundesanstalt) reference.

## Applications

- UV gluing, hardening and sealing
- Irradiation of biological, pharmaceutical and medical samples
- Materials testing
- Fluorescence excitation
- Trace detection

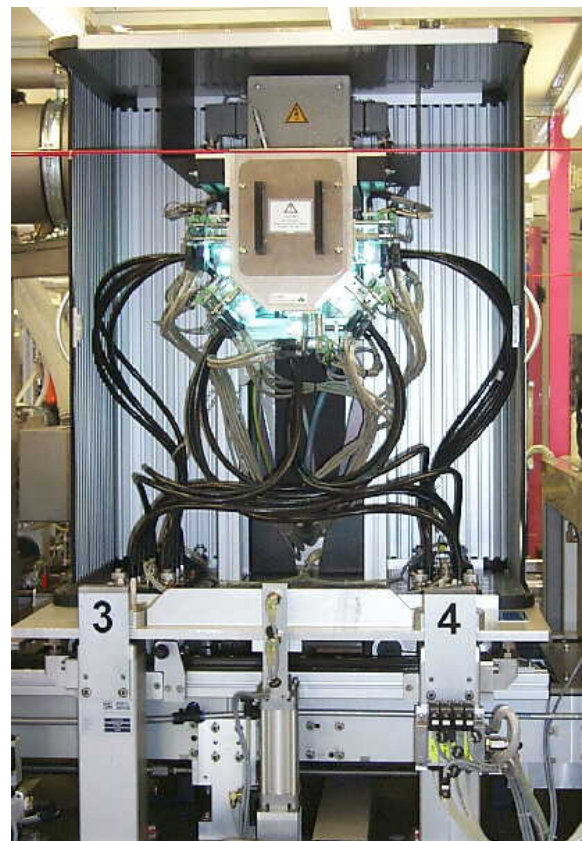


Fig. 2: LQ-2000 with 20 light guides and fast exchange holder for the lamp

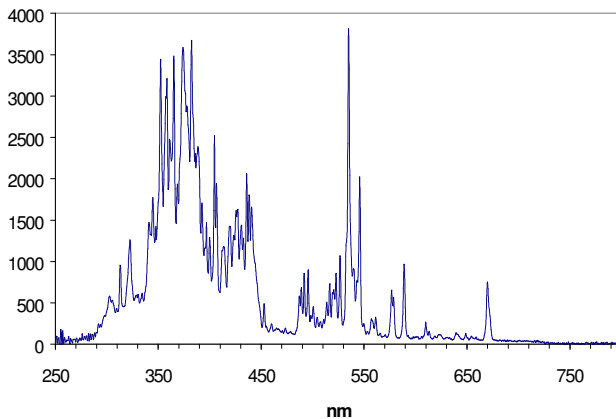


Fig. 3: UV/VIS spectrum of LQ-400

## Technical Data

Irradiance:	1.500 mW/cm <sup>2</sup> UV-A* 200 mW/cm <sup>2</sup> UV-B*
Illuminance:	3.500 kLx*
Wavelength:	280 to 600 nm (95%)
Light guides:	1 to 20 pieces Ø 8 mm
Lamp lifetime:	typical 750 hours
Dimensions:	52x30x48 cm (LQ-400)
Weight:	30 kg (LQ-400)
Operation temp.:	10 bis 40 °C
Humidity:	< 80% Non-condensing
Mains:	220 - 230 VAC
Mains frequency:	50/60 Hz
Power consumption:	depending on lamp

\* typical at shipment with 1 m light guide Ø 8 mm

## Part numbers

UV light source LQ-400	860510
with 2 light guides Ø 8 mm, 1 m long	
UV light source LQ-1000	860515
UV light source LQ-2000	860520
with 10 light guides Ø 8 mm, 1 m long	

## Options / Accessories:

- Power control and stabilization
- Custom number of light guides
- Custom length and diameter of light guides
- Collimator for larger distances between light guide and irradiated sample
- PLC interface
- Radiometer RM12
- Radiometer UV-A sensor
- Sensor plate for all light guides



Fig. 4: Sensor plate with 10 UV-sensors for 10 light guides

## Warning

UV radiation can be harmful. Please use proper protection measures.