

Multichannel LED Compact Light Source



MORE THAN LIGHT

LQ-LED 180

The LQ-LED 180 is the first LED based model that swells the family of high-power compact light sources (from LEJ) from scientific and technological applications introduced in 2007. In addition to the substantial advantages of the LED technology such as long life, high switching rate, minimum noise, etc., the product offers the user a very flexible choice of wavelengths according to his needs.

Each of 6 channels can be equipped with one of the LEDs* listed. Any combination is possible because the optical technology, a joint development with the Fraunhofer IOF Jena, does not use dichroitic beam dividers. The system covers the spectral range from UV (DAPI excitation) to NIR (Cy5 excitation).



Lighting

HBO/XBO

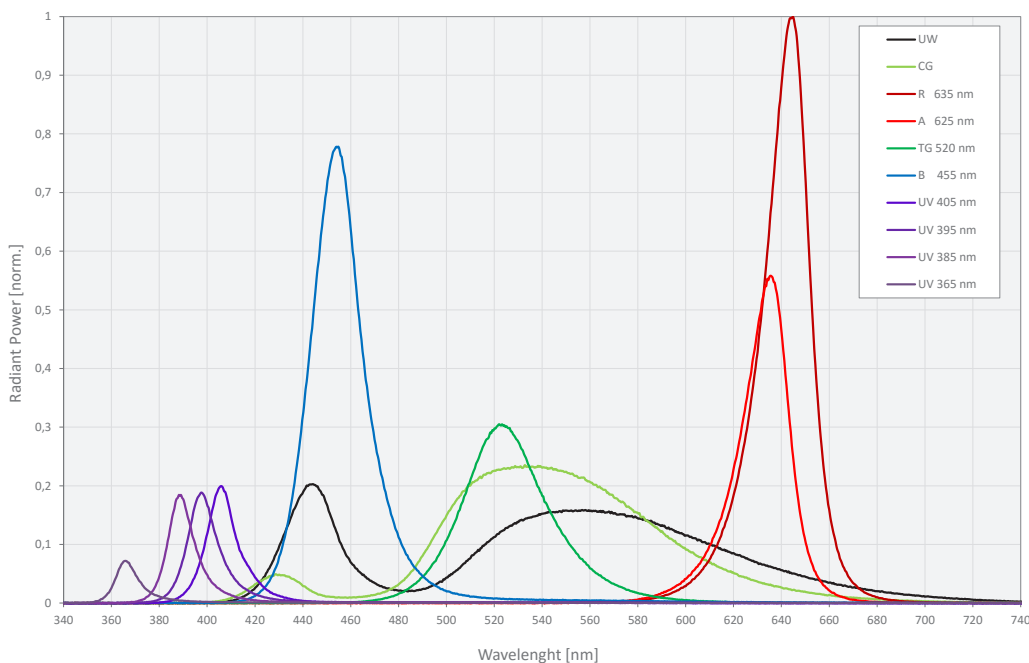
Light source

Flashlights

UV-Equip

Others

6 channels - 10 possible LEDs



Features

- 6 independently switchable LEDs
- possibility to select LEDs
- homogenous illumination using one up to six different LEDs
- maximum output power by operating six wavelengths individually, simultaneously or in a chosen combination
- sophisticated thermal management for most reliable operation
- reproducible operation
- unmatched uniformity

* The number of available LEDs is growing constantly

Applications

- Scanning-Microscopy
- Image processing
- Semiconductor production
- Material inspection
- Endoscopy
- Forensics
- Colorimetry



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Technical data LQ-LED 180

Each of the 6 channels can be equipped with:

Luminous flux and radiation flux measured at the output of a 2 meter long liquid light guide with 3 mm active diameter

| LED-Type | Wavelength [nm] | Luminous flux [lm] | Radiant power [mW] |
|-----------------------|-----------------|--------------------|--------------------|
| UW - Ultra White | | 100 | 300 |
| R - Red | 632 ± 9 | 40 | 250 |
| A - Amber | 624 ± 9 | 35 | 160 |
| CG - Converted Green | 520 ± 50 | 130 | 290 |
| TG - True Green | 520 ± 16 | 75 | 150 |
| B - Blue | 455 ± 13 | 15 | 400 |
| UV 405 - Ultra Violet | 405 ± 12 | - | 130 |
| UV 395 - Ultra Violet | 395 ± 13 | - | 100 |
| UV 385 - Ultra Violet | 385 ± 11 | - | 100 |
| UV 365 - Ultra Violet | 365 ± 9 | - | 40 |

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| Electrical connection | |
|-----------------------|---|
| Mains voltage | 100 up to 240 VAC ± 10 %, 50 up to 60 Hz |
| Power input | max. 175 VA |
| Protection class | IP 20 (EN 60529) |
| Conformity Approvals | |
| | CE, RoHS |
| | NRTL, UI/CSA (on request) |
| Dimensions | |
| Desktop device | |
| H x W x D | 210 x 138 x 290 mm ³ |
| Weight | 4,9 kg |
| Equipment | |
| Trigger | electronic, independent trigger for each channel, max. Frequency 100 kHz, min. flash time >1µs, trigger delay >1µs. Triggering via Ethernet, USB (on request), customer specified interface (on request), BNC or Sub-D Plug (TTL) |
| Intensity control | electronic, 1% increments |
| Safety | Glare protection, over-temperature protection |
| Configurations | |
| -3 | Storz long light guide mount, active diameter 3 mm |
| -5 | Storz long light guide mount, active diameter 5 mm |

Accessories

Accessories such as light guides and adapters can be found in the separate data sheet:
compactlightsource - accessories

Order

| | |
|---|---|
| Scope of delivery | device with mains cable and manual (optional accessories) |
| Order example | LQ-LED 180-2UW-1A-1CG-2UV365 |
| Since the basic device types and accessories permit numerous customer-specific configuration options, please do not hesitate to contact us. | |

Subject to errors and alterations regard to technological progress. (01-2017)