## Heraeus



# FiberLight® L<sub>3</sub> — A new species of light The first broadband UV LED for mobile spectroscopy

Environmental field based analysis has never been easy. Current on-site measurement methods are typically very time consuming and logistically complex. A technician takes a field sample and then has to ship it to a laboratory for analysis.

**FiberLight®**  $\mathbf{L_3}$  is a new light source solution which offers the advantages of state-of-the-art LED technology combined with a true broadband spectrum. With its low power consumption and compact size, the module integrates easily into battery operated mobile and handheld devices. The plug and play feature ensures

easy integration and mobile usage, which means it reduces costs and time per measurement. And not only that, this unique UV LED solution also offers a broadband UV spectrum using a unique technology based on a single LED. This opens up completely new application fields and gives unexpected flexibility in analytical measurement methods like mobile UV spectroscopy and flash chromatography.

The result: a new species of light – and an entirely new world of possibilities for your mobile analytical measurement.

Wavelength [nm]



## First broadband UV-LED for portable spectroscopy

FiberLight®  $L_3$  is a unique and innovative light source module, which combines the features of LED technology, such as long lifetime and low power consumption with a broadband UV-spectrum for the first time. The technology to broaden the single LED spectrum is unique on the market and generates a broadband UV continuum from  $250-490\,\mathrm{nm}$ . Its small size and fiber connection enable easy integration and make Fiberlight®  $L_3$  the ideal light source for portable measurement devices.

Technical Specifications	
Product name	FiberLight® L <sub>3</sub>
Ident No.	80158546
Spectral distribution	250-490 nm
Lifetime	> 5.000 h
Optical stability	< 0,03 % p-p
Size	60 × 63 × 48 mm
Power supply voltage	3-24V
Power consumption	< 1,5 W
Operation	Pulsed or continuous
Maximum puls frequency	1 kHz
Weight	0,11 kg
Optical connection	SMA905 Fiber coupling

## **Application Fields:**

- UV-Vis Spectroscopy
  - Portable
  - Fixed installed
- Flash Chromatography

## Spectrum of FiberLight® La Relative radiant flux [%] 90 80 70 60 50 40 30 20 10 290 340 440 490 590

## Applications for FiberLight® L<sub>3</sub>

The unique feature combination of FiberLight®  $L_3$  will bring the opportunities for portable analytical measurement to the next level. The true broadband UV spectrum enables flexibility in use, to detect a wider range of substances. The light source module gives more End-Users the flexibility to detect problems in the environment. Faster results can be achieved, because measurement is at the point of sampling, which enables a true Point-of-Use analysis. The packaging and light delivery with low power consumption, make portable analytical measurement available more than ever before. FiberLight®  $L_3$  enables faster control for a cleaner environment.

## **Features and Benefits**

- Broadband UV spectrum (250–490 nm) enables the detection of a wider range of substances
- The long lifetime (> 5.000 h) allows longer maintenance cycles and reduces costs
- New application fields are possible, due to unque combination of features, like low power consumption (< 1.5 W) and the small size (60×63×48 mm)</li>
- Fiber coupling and plug & play set up for easy integration

Europe, Middle East, Africa, Rest of World\*

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