## Avalight-LED Light Sources for Fluorescence Applications

The AvaLight-LED is a compact, affordable light source meant for fluorescence applications. It produces continuous or pulsed spectral output at different wavelengths.

The different sources all have an SMA-905 connector to couple to fiber optics. Please note that the power supply (PS-12V/1.OA) has to be ordered separately.

The AvaLight-LED can be used as a DC source or pulsed with a programmable Pulse Width Modulation (PWM), supplied by an AvaSpec-USB2 or EVO spectrometer (IC-DB26-2 cable needed).

This LED light source is also available in a rackmountable version and is compatible with various accessories, as stated below in the ordering information table.

The CUV-DA, for instance, is a cuvette cell holder that has an integrated LED for direct illumination of the cell. This provides greater excitation energy for fluorophores with low quantum efficiency.

Benefits of the AvaLight-LED:

- Compact
- Fluorescence excitation
- · Flexible excitation wavelengths

#### **AvaLight-LED**



### **Technical Data for Avalight-LED**

|                            | AvaLight-LED-<br>355/380     | AvaLight-LED-<br>400/410/430 | AvaLight-LED-<br>450/470/490 | AvaLight-LED-<br>530/590/780 |  |  |  |  |
|----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--|--|--|--|
| Peak wavelength*           | 355/380 nm                   | 400/410/430 nm               | 450/470/490 nm               | 530/590/780 nm               |  |  |  |  |
| FWHM (nm)                  | 15 nm                        | 11 nm                        | 30 nm                        | 30 nm                        |  |  |  |  |
| Optical power 600 µm fiber | 10 μWatt                     | 25 μWatt                     | 25 μWatt                     | 25 μWatt                     |  |  |  |  |
| Connector                  | SMA-905                      |                              |                              |                              |  |  |  |  |
| Power supply               | 12 VDC, 40 mA                |                              |                              |                              |  |  |  |  |
| Dimensions, weigth         | 175 x 110 x 44 mm, 480 grams |                              |                              |                              |  |  |  |  |

<sup>\*</sup> other wavelengths available on request

#### Ordering Information

• Light-emitting diode light source, specify wavelength XXX = 355/380, 400/410/430, 450/470/490, 530/590/780

Avalight-LED-XXX-RM • Rackmount version of the light-emitting diode light source, specify wavelength XXX

• LED light source control unit with electrical connector to LED, needs extra PS-12V/1.0A and interface cable.

**CUV-LED-XXX** • LED holder for cuvette, specify LED wavelength XXX.

**CUV-DA** • Direct-attach cuvette holder for AvaLight-DHc/XE/LED

IC-DB26-2 • Interface cable AvaSpec-USB2/EVO platform to AvaLight-LED for PWM

PS-12V/1.0A • Power supply 100-240 VAC/12VDC, 1.0 A for Avalight-LED



# **AvaLight-HPLED High-power Light Sources for Fluorescence Applications**

The Avalight-HPLED is a compact, affordable LED light source meant for fluorescence applications. This high-power version was made for more demanding applications compared to our regular LED light source.

The AvaLight-HPLED light sources produce continuous or pulsed spectral output at different wavelengths. All sources have an SMA-905 connector to connect fiber optics and come with a 5V/1.6A power supply.

This high-power LED light source can be used as a DC source or pulsed with a programmable Pulse Width Modulation (PWM), supplied by an AvaSpec-USB2 or EVO spectrometer (IC-DB26-2 cable

Benefits of the AvaLight-HPLED:

- Compact
- · High power levels
- · Fluorescence excitation
- · Several excitation wavelengths

### **AvaLight-HPLED**



### Technical Data for Avalight-HPLED

|                            | Avalight-<br>HPLED-385 | Avalight-<br>HPLED-405 | Avalight-<br>HPLED-470 | AvaLight-<br>HPLED-530 | Avalight-<br>HPLED-625 | AvaLight-<br>HPLED-<br>White |
|----------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------|
| Peak wavelength            | 385 nm                 | 405 nm                 | 470 nm                 | 530 nm                 | 625 nm                 | N.A.                         |
| FWHM (nm)                  | 15 nm                  | nm                     | 25 nm                  | nm                     | nm                     | N.A.                         |
| Optical power 600 µm fiber | 3.4 mWatt                    |
| Connector                  |                        |                        | SMA                    | -905                   |                        |                              |

Power supply 5V, 500mA Dimensions, weigth 150 x 78 x 37 mm, 420 grams

### Ordering Information

• High-power light-emitting diode light source, specify wavelength XXX = 385, 405, 470, Avalight-HPLED-XXX 530, 625, White. Includes 5V/1.6A power supply

IC-DB26-2 • Interface cable AvaSpec-USB2/EVO platform to AvaLight-HPLED for PWM





