

# AvaLight-LED LED Light Source

# Parts included

Your package should contain:

- 1. AvaLight-LED
- 2. IC-DB15-2 connection cable
- 3. PS-12V/1.25A power supply, should have been ordered separately.

### Starting up

- 1. Plug the power supply into a standard 220V outlet and into the back of the AvaLight-LED
- 2. Screw an optical fiber onto the SMA connector on the front of the light source.

# **Designations and Functions of Panel Controls**



# Using the Continuous Mode

- 1. Turn the switch on the back of the AvaLight-LED to "ON" The continuous mode simply means that the light coming from the AvaLight-LED is continuous.
- 2. To Turn the lamp off, simply change the position of the switch to "OFF"

# Using the Pulsed Mode

- 1. Plug one end of the DB-15-2 accessory connector into the back of the AvaLight-LED and the other end into the back of the AvaSpec-Spectrometer.
- 2. Turn the switch of the AvaLight-LED to "TTL" for Pulsed mode of operation.
- **3.** The pulsing of the AvaLight-LED is controlled through the AvaSpec spectrometer and fixed to 1 kHz with a 50% duty cycle, the newer type AvaLight-LED-p14 uses the input from pin 14 of the controlling of the LED (only on, when spectra are acquired)

Pin	Description	
2	TTL Input (1 kHz 50% cycle) from AvaSpec	
10	GND	
14	TTL input from AvaSpec with AvaSoft 6.2-OXY	

#### Table of DB-15 connector



## LED Lamp replacement

Screws LED

LED front

holder

Socket

- 1. Plug out the power connector from the socket.
- 2. Remove screw protection caps on the frontside
- 3. Loosen 2 screws with philips screwdriver
- 4. take out the frontplate and electronics board
- 5. untighten 2 screws from LED socket
- 6. slightly bend the electrical wires out of LED socket
- 7. take out the LED from LED front holder
- 8. replace by new LED, make sure the Anode and Kathode are connected in the same way and LED legs make no short circuit.
- 9. Apply power to see if the LED is illuminating
- 10. Slide back electronics board and front plate, tighten screws and put back screw caps

Technical Data					
	AvaLight- LED380	AvaLight- LED400	AvaLight- LED475	AvaLight- LED590	
<b>Power Supply</b>	12 VDC/ 800mA				
Spectral Range*	380 nm	400 nm	475 nm	590 nm	
FWHM (nm)	15 nm	11 nm	30 nm	30 nm	
Optical power 600 µm fiber	10 µWatt	25 μWatt	25 μWatt	25 mWatt	
Connector	SMA 905				
Dimensions	175 x 110 x 44 mm				

# **Technical Data**

\* other wavelengths available on request

#### **Ordering Information**

# AvaLight-LED-XXX Light Emitting Diode Lightsource, specify wavelength XXX

AvaLight-LED-XXX-	Rackmount version of the Light Emitting Diode Lightsource, specify wavelength
RM	XXX

- IC-DB15-2 Interface cable AvaSpec to AvaLight-LED
- PS-12V/1.25A Power supply 100-240 VAC/12VDC, 1.25 A for AvaLight-LED