



Before use, please take the time to read this datasheet and to make sure you understood the advices and caution of use.



Security of the user

- Do not watch directly the beam of light or through any optical instrument.
- Avoid any contact with the LEDs or its lens.
- Code IP40: protected against solid corpses larger than 1 mm and non-protected against water intrusion.
- Use the product in an environment where the working temperature is between 0°C and +35°C and there is little humid air (<80%): if those conditions are not respected the product can be damaged.
- Do not use the product in an environment where smokes and oil vapors are present.
- Never try to repair by yourself any potential damages on the product.
- Make sure to use the right power supply before connecting the product.
- Do not reverse the electrical polarity – check your connections and the conventions before turning on the product.
- Make sure you have the correct connector to link the product to the power supply.

Any incorrect use cancels the warranty.

Table of contents

Security of the user	1
Eyes Safety	3
Technical Overview	4
Product reference	5
Optical characteristics	6
Mechanical dimensions	8
How to use: with the UPOWER	9
Accessories	10



Eyes Safety



UV risks:

The UFIBER™ comes under the standard DIN EN 62471:2008 which classified sources of optical radiation into risk groups subject to their potential photo biological hazard. Due to the emission of high UV irradiation the UFIBER™ belongs to Risk Group 3 (hazardous even for momentary exposure) therefore special safety measures, detailed in the following, must be observed.



To protect the eyes and skin staff everyone in the area must wear protective equipment. Protective goggles and protective gloves should comply with the standard EN 170 (Personal eye-protection - Ultraviolet filters - Transmittance requirements and recommended use). The goggles must protect eyes against direct and side irradiation.



It is important that you don't look directly at the UFIBER™ output window because there is a risk of becoming blind.



Due to the high UV irradiation, any sensitive electronic component should be discarded from the area to avoid the components to age prematurely or to be damaged.

Thermal risks:

Due to the high emission power of the UFIBER™, safety rules regarding the thermal risks should be followed.



The area near the LEDs can reach high temperature during operation. Avoid touching directly the product and especially the output window.



When using the UFIBER™, make sure the ambient temperature is under 50°C. If it is not the case, there is a danger of overheating.



Technical Overview

Electronics



<i>Power supply</i>	24V DC
<i>Illumination mode</i>	Continuous with a DIM process [0-24V]
<i>Connector</i>	LEMO connector for M8 4 Pins
<i>Power consumption</i>	~ 4W

Optics



<i>Wavelength</i>	365 or 385 or 395 or 405 nanometers
<i>Irradiance</i>	Up to 1200 mW/cm ²

Mechanics



<i>Diameter</i>	12mm
<i>Length</i>	~ 95 mm
<i>Material</i>	Device body: Aluminum alloy
<i>Weight</i>	17g

Thermal



<i>Cooling system</i>	Passive air cooling
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Environment



<i>Working temperature</i>	10°C to 50°C
<i>Working humidity</i>	< 80% for temp < 30°C
<i>IP code</i>	IP40



Product reference

UFIBER - **XXX***

365

385

395

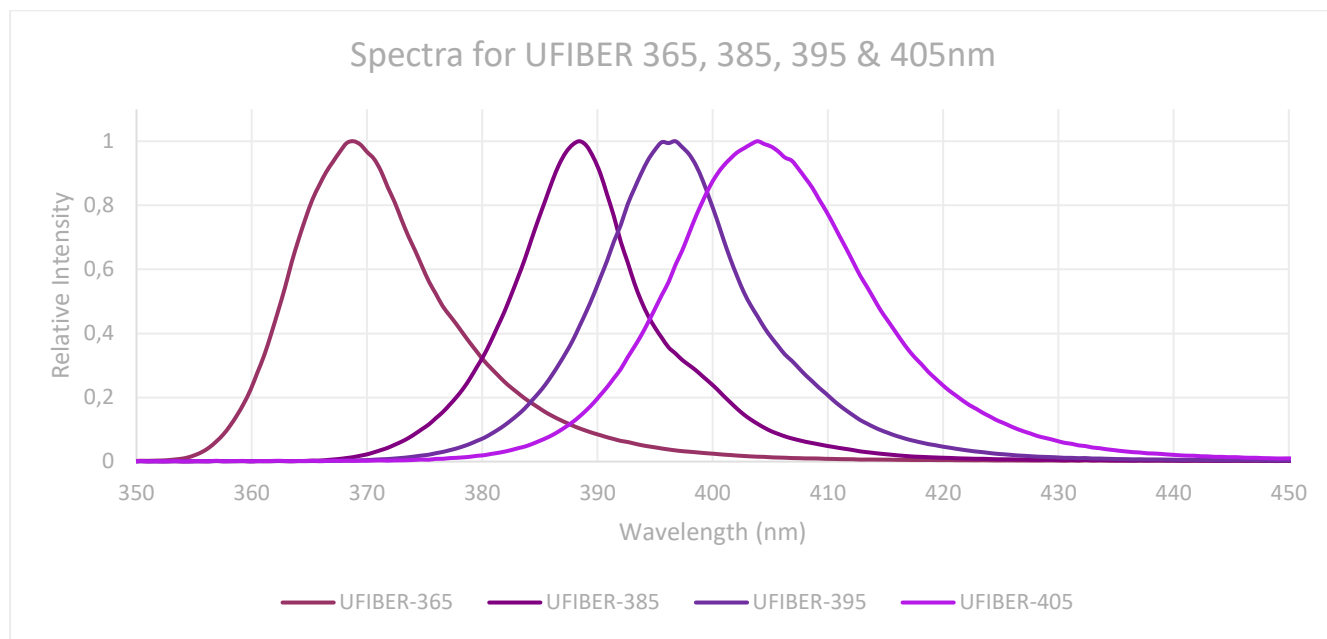
405

*XXX corresponds to the wavelength of the product



Optical characteristics

Spectra

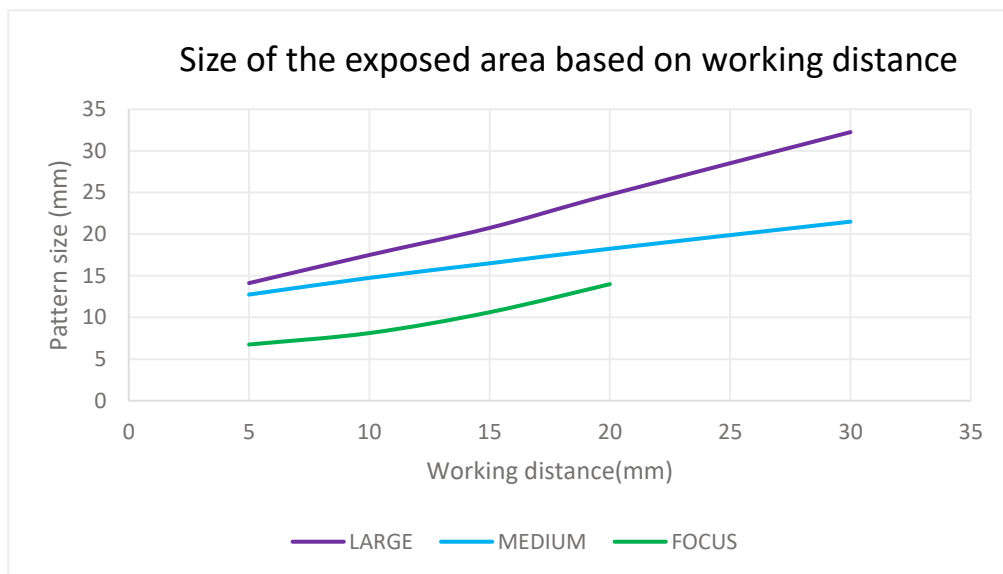


	Pic Wavelength	Full width at half maximum
UFIBER 365	368 nm	14 nm
UFIBER 385	388 nm	14nm
UFIBER 395	397 nm	14 nm
UFIBER 405	404 nm	18 nm

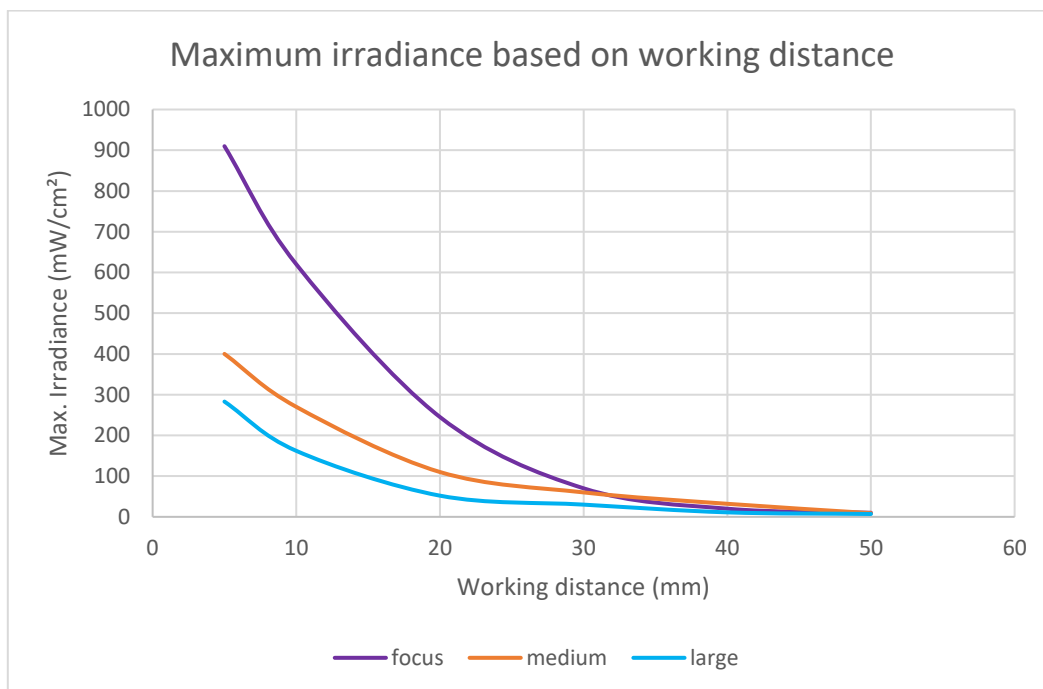
Beam size

The UFIBER™ can be used with 3 different lenses which adjust the size of the beam depending on your needs.

- Large
- Medium
- Focus



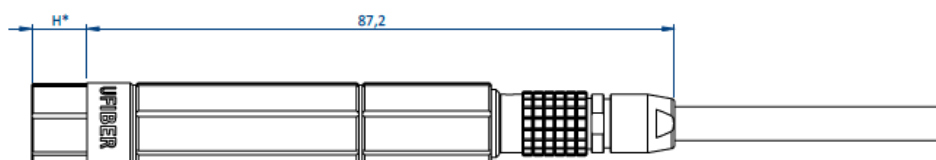
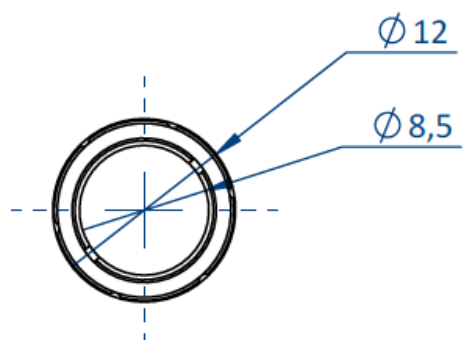
Photometry



Measures taken with the UFIBER-365.



Mechanical dimensions

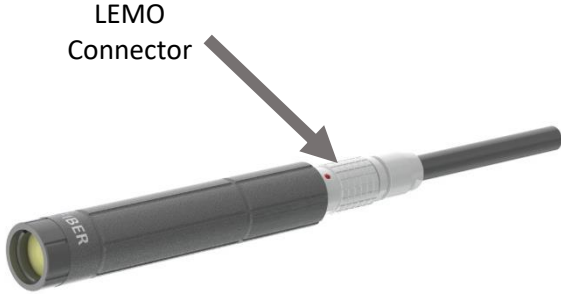


Optical system	H* (mm)	Total length (mm)
Large & Medium	4,8	92
Focus	8,2	95,4



How to use: with the UPOWER

This product can only be provided with our power supply UPOWER™ that contains the drivers.
In order to correctly use the product, please read the following steps:

Steps	Photo description
Fix the product using the dimensions given in the mechanical dimensions part.	
Put the UPOWER™ in place. Pay attention to leave a 10cm space next to the ventilation.	
Connect the product to the UPOWER™ with the cable Side UFIBER™: LEMO 4 pins Side UPOWER™: M8 4 pins	 LEMO Connector
Make sure every security connector is plugged on the back of the UPOWER™ (dry contact, door security...)	
Plug the UPOWER™ into your power supply. The plug is located on the back side of the UPOWER™.	 *
Press the red button behind the UPOWER™ to power it up. (State LEDs on the product must turn on)	
Set up the power and the insolation time on the UPOWER™. For more details refer to the UPOWER™ datasheet if needed.	 TIMER POWER STOP *
In case of emergency, press the STOP button.	

*The version of the UPOWER™ is not furnished with the product



Accessories

Cables for the UFIBER™:



Both sides connectors (UPOWER™ link):

Reference: **UCAB-M8LEMO-FM-4-DD-L5** } Depending on
the length you
want (in meters)

2

10

UPOWER™:



We are able to provide you with any kind of power supply you need, different IHM, power, control and connectors.

To build the one adapted to your needs please contact us at sales@uwave.fr

Optics:



The UFIBER™ can be used with 3 different lenses which adjust the size of the beam depending on your needs.

- Large (Ref: OPTIC-LARGE-UFIBER)
- Medium (Ref: OPTIC-MEDIUM-UFIBER)
- Focus (Ref: OPTIC-FOCUS-UFIBER)

Check out the section "Optical characteristics" for more information

Heat-sink body:



The heat sink allows the UFIBER to produce a more powerful light by improving the heat management.

Ref: HEATSINK-UFIBER

Labo-mechanics:



Mechanical fixations which fit with laboratories optical bench.

Indus-mechanics



Mechanical fixations which fix with industrial integration needs.