



UTARGET

Powerful & portable UV LED curing pen

Optical flexibility thanks to its unique optical system

Long lifetime & few maintenances thanks to LED technology

Easy-to-use manually or with a PLC thanks to integrated smart electronics.



Electronics	Power supply	24 VDC ± 10% (maximal power consumption: 4W)
	Connector	LEMO – 4pins male for power and signals
	Illumination mode	Continuous with a direct DIM signal [0-24V]
Optics	Wavelength	UVA: 365, 385, 395, 405 nm - VIS: 465 nm
	Irradiance	Up to 2000 mW/cm ²
Mechanics	Width x Height x Length	150mm x 36mm (head diameter) & 22mm (body diameter)
	Weight	130 g
	Material	Device body: Aluminum alloy
	IP rating	IP40
Environment	Operation	Temperature: 10°C to 35°C – Humidity: 20% to 80% humidity (with no condensation) – Altitude: Up to 2000m
	Regulations & marking	CE - UKCA - FCC - ICES-3/NMB-3
	Environmental standards	RoHS III Directives - REACH Regulation - WEEE Regulation



Product reference

UTARGET standard version:

UTARGET - **XXX** - AUTO

WAVELENGTH (nm)		365
		385
		395 (UVA)
		405
		465 (BLUE)



UTARGET standard version available into a complete KIT for manual use:

KIT - UTARGET - **XXX** - AUTO

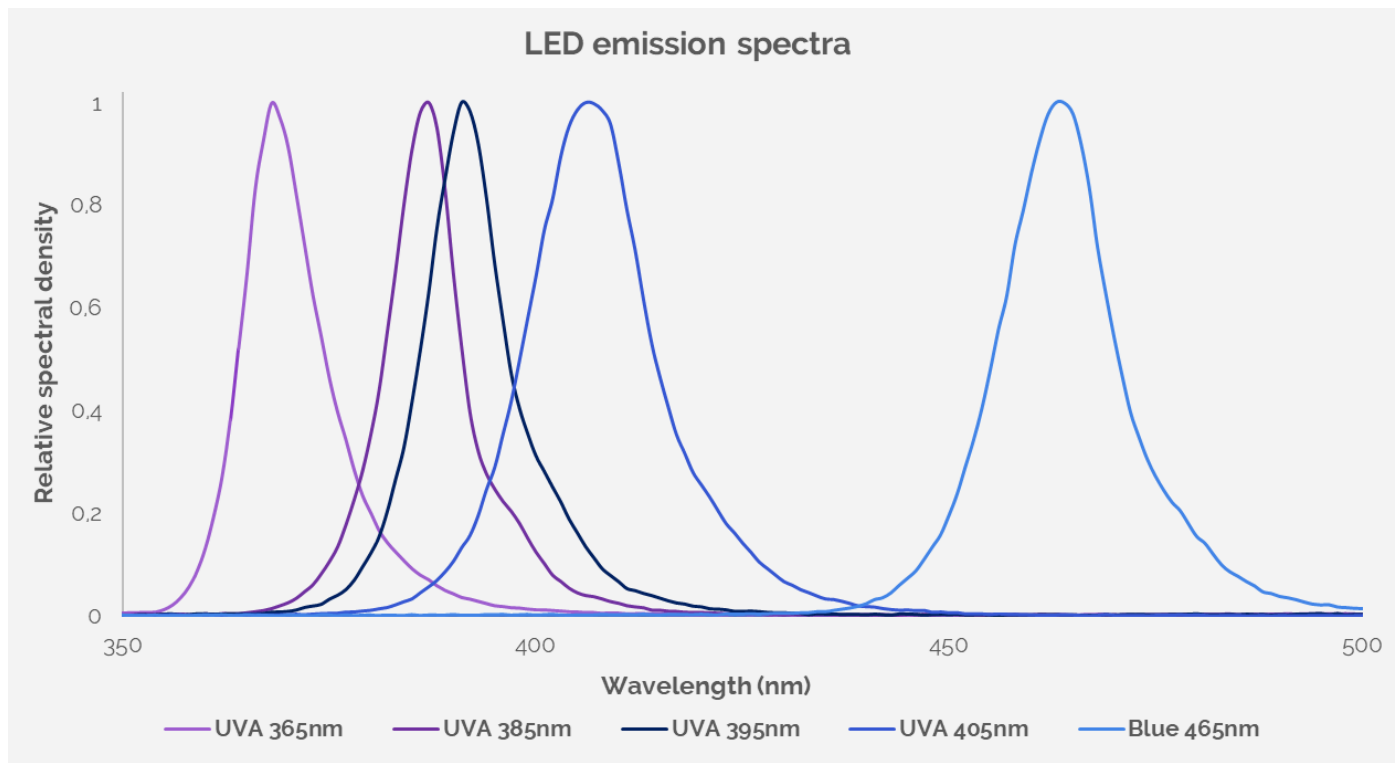
WAVELENGTH (nm)		365
		385
		395 (UVA)
		405
		465 (BLUE)





Optical considerations

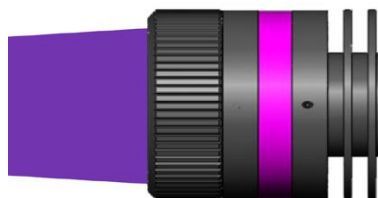
LED spectra



 For other wavelengths (UVC / UVB / UVA / VISIBLE / IR), feel free to ask us!

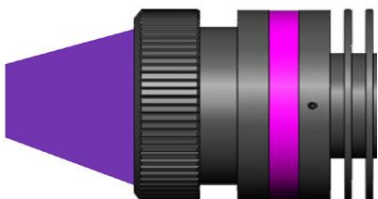
Adjustable optical system

Thanks to its own integrated optical system, this UV LED spotlight provides high irradiance and optical flexibility with two possible optical position: COLLIMATED or FOCUS.



COLLIMATED position

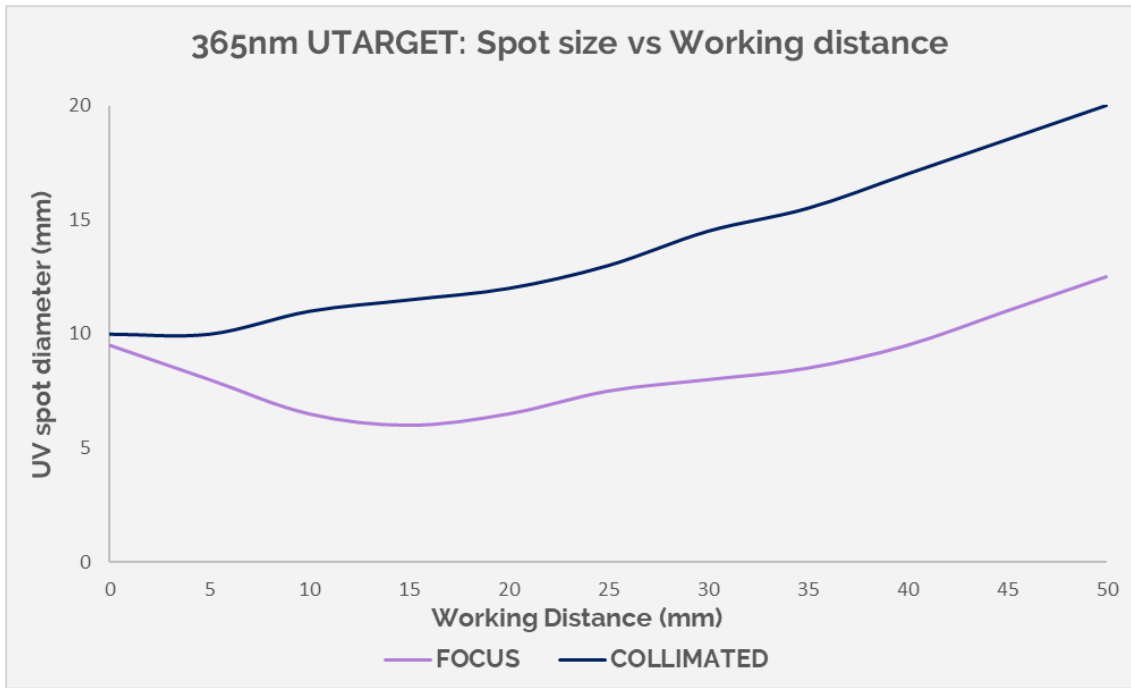
The light travels in straight lines without spreading or converging over a distance.



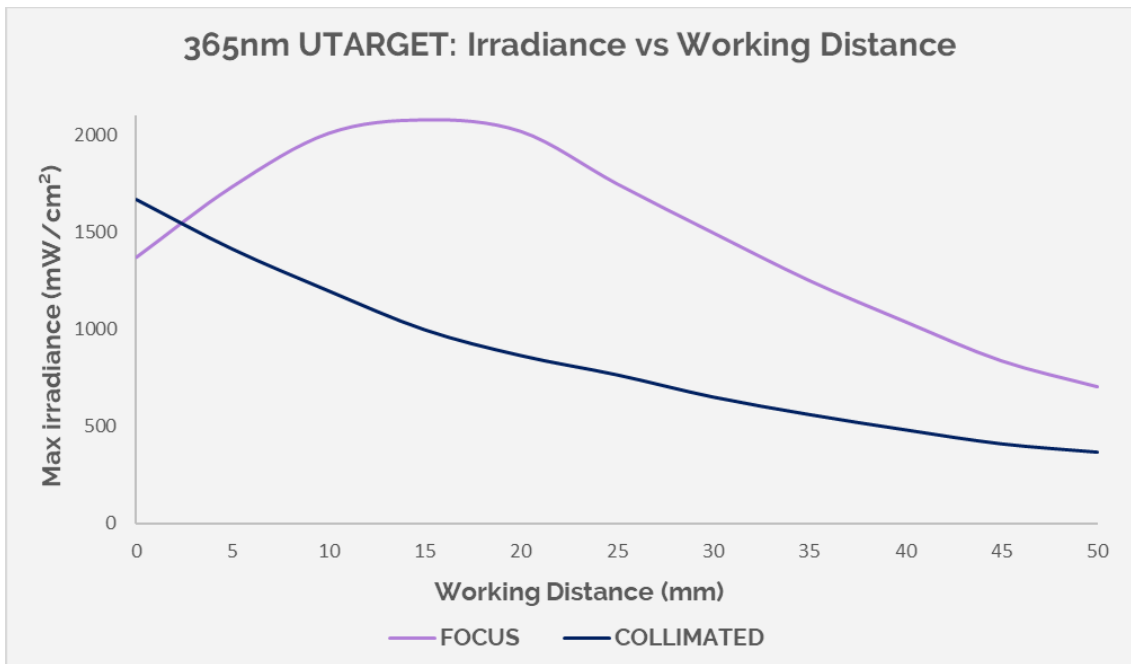
FOCUS position

The light is directed to a specific focal point to achieve more precision.

UV spot size



Photometry

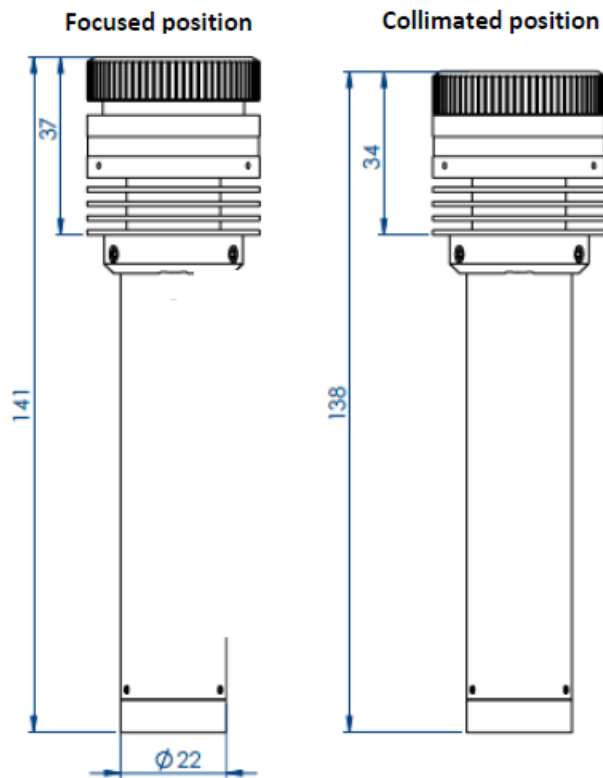
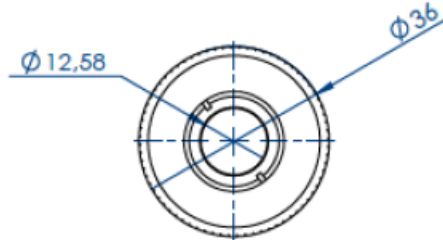


Curve plotted for UVA wavelength. Radiometer: GIGA HERTZ OPTIK RCH-116 (June 2023). For the UV spot graph, the spot size is the exposed area where the irradiance is higher than 50% of the maximum irradiance.



Mechanical considerations (mm)

UTARGET-XXX-AUTO

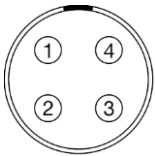




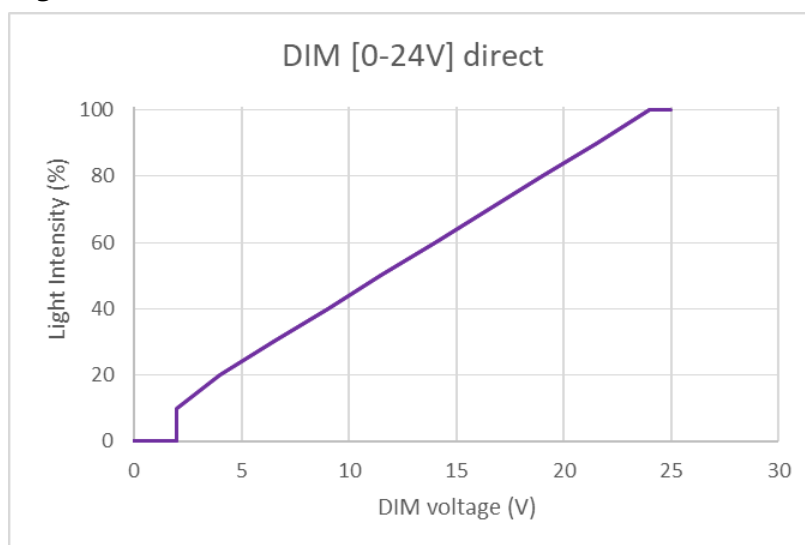
Electrical considerations

Wiring layout

The UTARGET requires 24V DC input power. It integrates smart electrical board to achieve stable optical power and exploitable output signals. The UTARGET can be managed with a control unit (UPOWER – please refer to accessories part of this datasheet) or without a control unit through PLC wiring.

Contact arrangement	Pin number	Cable color	Designation
 <p>Male LEMO 4pins</p>	1	Brown	Power supply Input – 24V DC (1,5 A max)
	2	White	TEMPERATURE ERROR output – 24V DC if LED temperature is correct or 0V DC if device overheats.
	3	Blue	Power supply Input – 0V DC (GND)
	4	Black	Dimming Input – [0-24V] direct

Intensity Control (DIM signal)



Other Dimming signals are available upon request: 0-24V indirect, 0-10V direct, 0-10V indirect, 0-5V direct or 0-5V indirect.



KIT


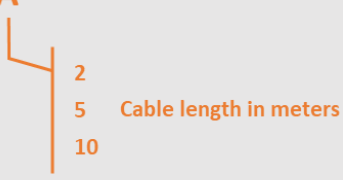





In order to allow facilitated manual use of the UTARGET-XXX-AUTO, UWAVE has developed a complete kit which contains the following components:





Accessories

UWAVE offers a wide range of accessories to complete its UV LED lighting solution:

<p>Cables</p> 	<p>One side with bare wire (towards PLC): UCAB - LEMO - FD - 5 - D - LA</p>  <p>2 5 10 Cable length in meters</p> <p>Both sides connector (power supply link): UCAB - LEMOM12 - FM - 5 - DD - LA</p>  <p>2 5 10 Cable length in meters</p>
<p>Compact power supply</p>	<p>USPWR-36W-24V-LEMO-EU for ON/OFF control of x1 UTARGET.</p>  <p>UDIMMER can be added to manually adjust UV power through dimming signal.</p> 
<p>Easy-to-use power supply</p>	<p>UPOWER-50W-24V-UTARGET for simultaneous control of up to x2 UTARGET.</p> 
<p>Advanced power supply</p>	<p>UPOWER-0050-24-xM12 for simultaneous control of x2, x4 or x6 UTARGET. UPOWER-0050-24-xM12-I for independent control of x2, x4 or x6 UTARGET.</p> 












UV security

UWAVE products come 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, our products belong to Risk Group 3 (hazardous even for momentary exposure) therefore special safety measures, detailed in the following, must be observed.



Thanks to its experience and knowledge about UV risks, UWAVE offers to its customer a wide range of UV protections & services:

<p>Eyes protection</p>	<p>UGLASS-02: To protect eyes from direct rays.</p> 	<p>UGLASS-03: To cover all the face.</p> 	
<p>Body protection</p>	<p>UGLOVE-01: to protect hands.</p> 	<p>UV-SHIELD: To protect all workers around.</p> 	
<p>UV measurement</p>	<p>EIT LEDCURE: UV values recording.</p> 	<p>GIGAHERTZ OPTIK: Direct UV value reading.</p> 	
<p>UWAVE expertise</p>	<p>EXPOSURE LIMIT VALUE</p>  <p>According to European Directive 2006/25/EC.</p>	<p>PERFORMANCES QUALIFICATION</p>  <p>Monitoring of all performances of your device.</p>	<p>MAINTENANCE & REPAIR</p>  <p>Preventive maintenance on site & LED repair service.</p>