



USTRAIGHT

Air-Cooled & Powerful UV LED curing line light

Flexible length from 75mm to 375mm

Easy to integrate on automated high-speed processes



Electronics	Power supply	48 VDC \pm 10% (maximal power consumption: 500W for each 75mm increments)
	Connector	SUBD13W3 – 13pins for power and signals
	Illumination mode	Continuous with a direct DIM signal [0-10V]
Optics	Wavelength	UVC: 255, 265, 275 nm UVB: 295, 305, 325, 340 nm UVA: 365, 385, 395, 405 nm VIS: 450, 465nm (Blue), 525nm (Green), 625nm (Red), Other on request.
	Irradiance	Up to 14W/cm ² in the UVA range Up to 800 mW/cm ² in the UVB/C range
Mechanics	Width x Height	173 mm x 214 mm
	Length	25mm + 75mm increments
	Weight	1100g for each 75mm increments
	Material	Device body: Aluminum alloy / Window type: Quartz
	IP rating	IP40
Thermal	Cooling system	Air cooling
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

USTRAIGHT standard version:

USTRAIGHT - **XXX** - **ZZZ**

WAVELENGTH (nm)

- UVC: 255, 265, 275
- UVB: 295, 305, 325, 340
- UVA: 365, 385, 395, 405
- BLUE: 450, 465
- GREEN: 525
- RED: 625

- 075
- 150
- 225
- 300
- 375

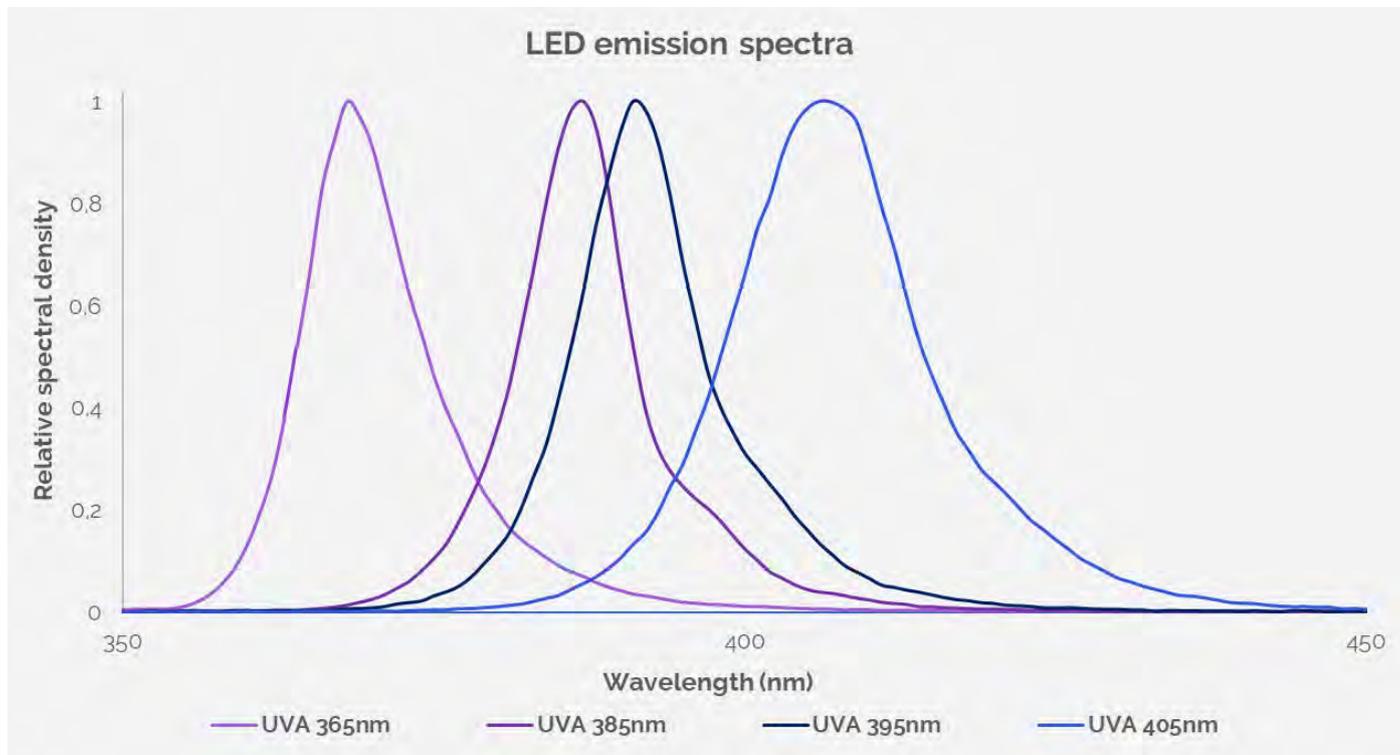
LENGTH (mm)
By 75mm steps

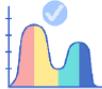




Optical considerations

LED spectra

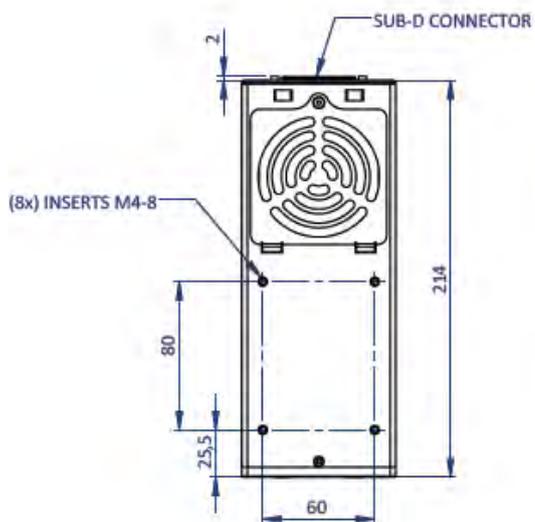
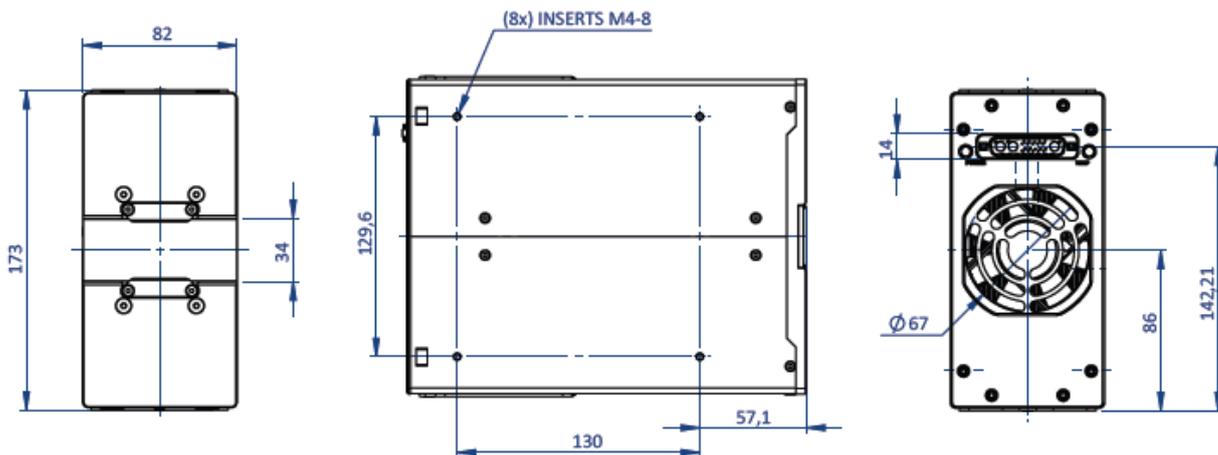


 For other wavelengths (UVC / UVB / UVA / VISIBLE / IR), feel free to ask us!

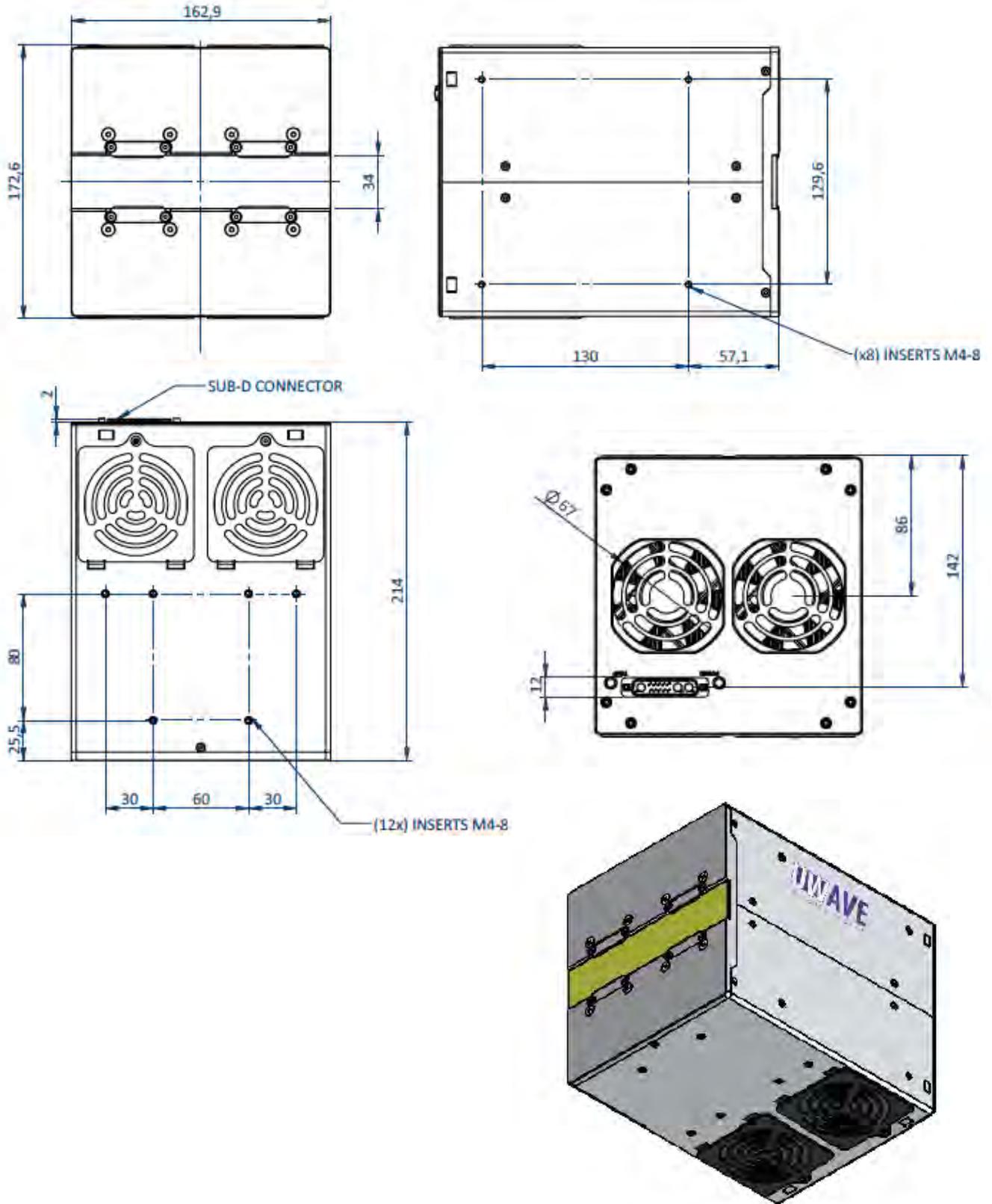


Mechanical considerations (mm)

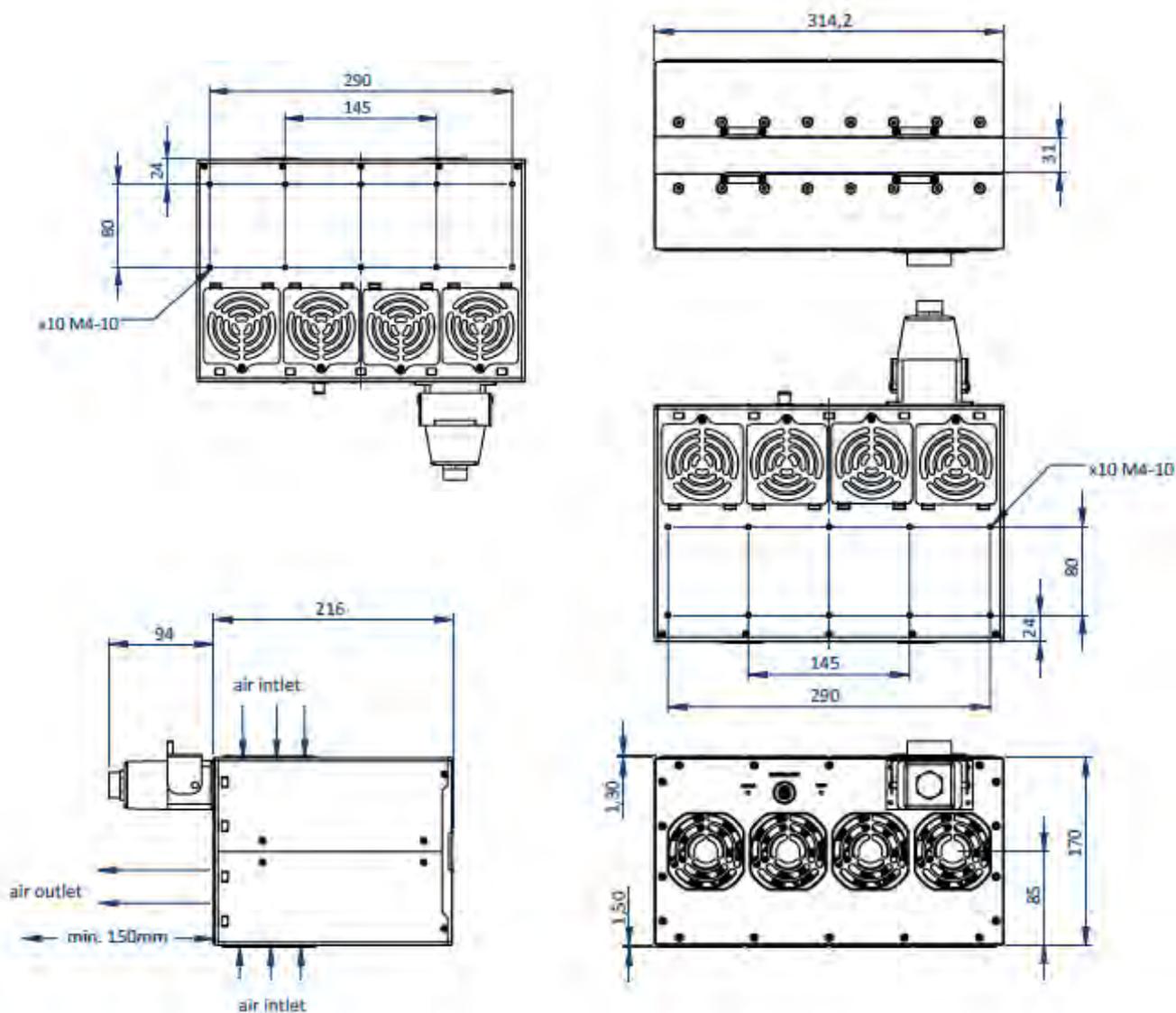
USTRAIGHT 75 mm



USTRAIGHT 150 mm



USTRAIGHT 300 mm





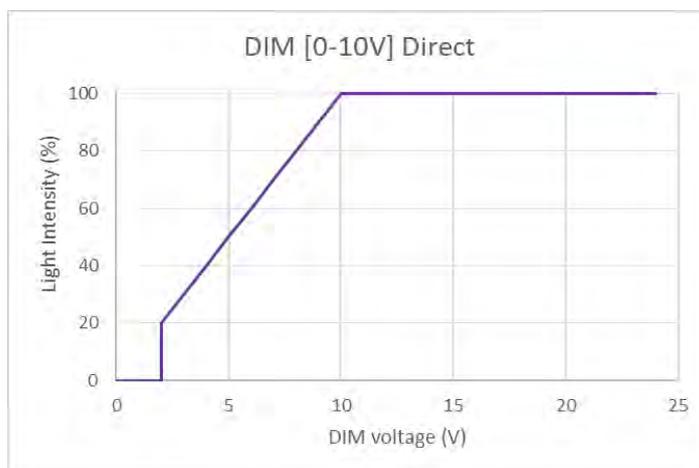
Electrical considerations

Wiring layout

The UCUBE requires 48V DC input power. It integrates smart electronical board to achieve stable optical power and exploitable output signals. The UCUBE 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 D-SUB 13W3pins</p>	A1	Brown	Power supply Input – 48V DC (1,5 A max)
	A2	Yellow & Green	Protective ground
	A3	Blue	Power supply Input – 0V DC (GND)
	1	White	Dimming Input – [0-10V] direct
	2	Blue	COMMON_OUT – Allows dry contact with pin 3, 6 and 7.
	3	White	UV LED ON output – 24V DC if device is currently emitting UV or 0V DC if UV LED are off.
	4	Blue	Enable +
	5	White	Enable -
	6	Blue	TEMPERATURE ERROR output – 24V DC if LED temperature is correct or 0V DC if device overheats.
	7	White	DRIVER ERROR output – 24V DC if drivers are working well or 0V DC if there is a driver issue.
8	Blue	Power supply input – 0V DC (GND)	

Intensity Control

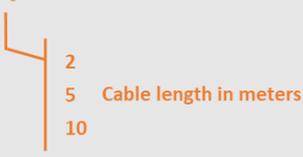


Other Dimming signals are available upon request: 0-24V indirect, 0-10V direct, 0-10V indirect, 0-5V direct or 0-5V indirect.



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 - SUBD - FD - 13W3 - D - L A</p>  <p>Both sides connector (power supply link): UCAB - SUBD - FM - 13W3 - DD - L A</p> 
<p>Advanced power supply</p>	<p>UPOWER-0600-48 to control x1 USTRIGHT-XXX-0075. UPOWER-1500-48 to control x1 USTRIGHT-XXX-0150 or x1 USTRIGHT-XXX-0225. UPOWER-3000-48 to control x1 USTRIGHT-XXX-0300 or x1 USTRIGHT-XXX-0375.</p>  <p><i>For other controlling configurations, please contact directly UWAVE team.</i></p>

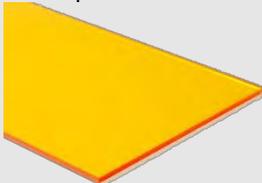


UV security

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>LEDCURE: UV values recording.</p> 	<p>URAD-PR: 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>