IMM photonics

ilumCURE 2G

ilumCURE 2G is a UV LED illumination system for hardening UV adhesives reproducibly at high intensities with a peak intensity wavelength of 365 nm or 405 nm.

The device facilitates continuous illumination as well as timer- and interface-controlled illumination with an adjustable intensity. It can be employed for both mobile and stationary applications (e.g. in automated production). For mobile usage, the built-in lithium-ion battery permits a continuous operation of up to 3.5 hours at full intensity. The USB interface is used for charging, parameterisation and process automation.

Reproducible hardening processes are ensured in real time by a controller-operated LED current measurement as well as by a heat management system with metal core technology. A robust aluminium housing and an exchangeable battery ensure the longevity of the product.

WAVELENGTH ART.NO.	365 NM 1600000106	405 NM 1600000107
UVA Power	330 mW (typ.) at 100 % adjusted intensity	340 mW (typ.) at 100 % adjusted intensity
UV LED Lifetime	7000 h at 80 % UV LED emission	

Setting options / operation

Trigger illumination	Via push-button on housing and USB
Illumination time	Timer enabled: 1.0 s – 120.0 s, resolution 0.1 s Timer disabled: limited by protection features only
Intensity	10 % - 100 %, CW-dimmed, 10 % resoltuion
Timer	Can be switched on and off
Beep signal	Can be switched on and off
Programming on hand set	Can be switched on and off
Indicator LED on near side	Orange: UV LED active

Individual. Innovative. Exceptional.

ilumCURE 2G

WAVELENGTH	365 NM	405 NM
ART.NO.	1600000106	1600000107

Software

Supported Windows versions	XP (32 bit), 7 (32aund 64 bit), 8 (32 and 64 bit), 10 (32 and 64 bit), 11 (32 and 64 bit)
Max. number of devices per PC	127

Power management

Battery	Li-Ion / 3.6 V, 2250 mAh, exchangeable
Charging time for completely dischaged battery	< 4.0 hours fast charge, < 5.5 hours standard charge
Operating time with fully charged battery	3.5 hours
Fast charge	Automatically detected
Chargers	Fast charge: USB mains adaptor 5 V / 1000 mA Standard charge: PC, various USB mains adaptors
Charge indicator (next to USB port)	Blinking red: fast charge Red: standard charge / Green: battery is fully charged

Protection features

Battery	Overvoltage and undervoltage, overcurrent, excess temperature
UV LED excess temperature	Switch-off at LED temperature > 50 °C
LED current	Intensity 10 % - 30 %: Switch-off if nominal current value is exceeded by ±15 % Intensity 40 % - 100 %: Switch-off if nominal current value is exceeded by ±5 %
Error indication	Blinking orange for 10 s, beeping: LED current error (e. g. empty battery) Blinking orange, beeping as long as UV LED too hot: excess temperature

Individual. Innovative. Exceptional.

ilumCURE 2G

WAVELENGTH	365 NM	405 NM
ART.NO.	1600000106	1600000107

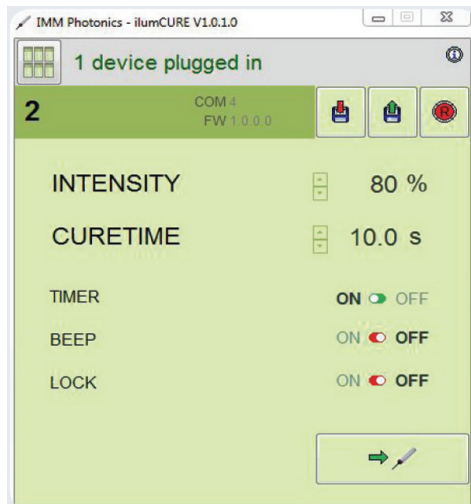### General information

Total device dimensions	Length 185 mm, max. diameter 27.5 mm	
Lighting tip dimensions	Total length of tip 53 mm, diameter 5 mm (along 8 mm)	
Weight / material	Approx. 108 g / full-metal housing, anodised aluminium	
Operating / storage temperature	+5 °C to +45 °C / -10 °C to +70 °C	
Humidity	5 % to 95 % r. h. (non-condensing)	
Delivery	• ilumCURE 2G • Mini USB cable • USB flash drive with software and instructions • Quadrosafe	• ilumCURE 2G • Mini USB cable • USB flash drive with software and instructions • Quadrosafe
Available accessories	• Fast charge USB mains adaptor (Art. No. 1600000100) • Variable collimating lens W (Art. No. 1600000064) • Variable collimating lens N (Art. No. 1600000071) • Systainer (Art. No. 1600000114)	• Fast charge USB mains adaptor (Art. No. 1600000100) • Variable collimating lens W (Art. No. 1600000064) • Variable collimating lens N (Art. No. 1600000071) • Systainer (Art. No. 1600000114)

ilumCURE 2G

SETTING OPTIONS / OPERATION

VIA SOFTWARE:
- Intensity from 10 % to 100 %
- Cure time from 1.0 s to 120.0 s
- Illumination timer on or off
- Beep signal at the end of illumination period on or off
- Time programming on hand set locked or allowed

VIA HAND SET:
- Illumination time from 1.0 s to 120.0 s
- Trigger illumination

PROCESS AUTOMATION
- Using a permanent USB connection ilumCURE 2G devices can be controlled remotely from the PC
- A Software Development Kit for the integration into proprietary code (such as Labview, C#) is available
- Major functionalities: illumination on/off, intensity profiles, status requests, up to 127 devices per PC

Subject to technical modifications. As per October 2024.

WE LOOK FORWARD to solving your challenge

Individual. Innovative. Exceptional.