

# led polymerization



# start to work







### STARLIGHT PRO + STARLIGHT ORTHO

#### stop too complex

Many polymerization units are difficult to adjust and complicated in their handling – which makes it really hard to integrate them into your workflow.

#### start to work

Well, what about just starting to work? Due to its cordless design, you can use the lightweight starlight pro and starlight ortho wherever you want to – and its one-button-handling couldn't be any easier.





#### ► lithium-ion battery

The lithium-ion battery provides you with 320 working cycles of 10 seconds - after only 90 minutes of charging.



#### ► click-clack connection

Exclusive connection in metal ensures an optimal light beam transmission.



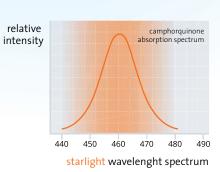
#### ► optical fiber

The sterilizable optical fiber (8 mm) is made of many single threads for maximum light power.



#### ▶ light spectrum

The light spectrum from 440 to 480 nm is focused on camphorquinone, a photoinitiator used in 98 % of dental materials.

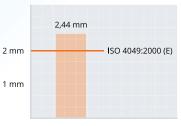


► lightweight
Only 105 g.



#### ▶ high performance level

The power of more than 1.400 mW/cm<sup>2</sup> lets you harden a 2-mm thick layer in only 10 seconds.



average polymerization depth in compliance with ISO 4049:2000 (E)



## STARLIGHT S + STARLIGHT S SLER®

#### stop hide-and-seek

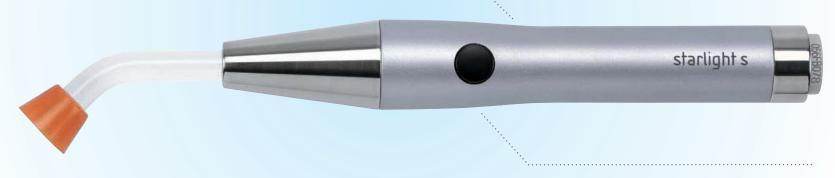
An everyday situation: You need the curing light - but who used it last? And most important: in which of all the different drawers can you find it?

#### ▶ start plug-and-cure

The solution: starlight s and starlight s sler®. Both units can easily be built into your dental unit and are simply placed in the handpiece holder – exactly where you need them.

#### ► ergonomic handpiece

The handpiece weighs only 75 g – and can simply be placed in the quiver.



#### ▶ two curing modes

The starlight s comes with two different curing modes: 10 s fast curing and 20 s slow rise (soft start) can easily be adjusted in every situation.



#### ► six operating modes

The operating modes are selected by pressing the "mode" button. Depending on how long the "start" button will be pressed, either the short or the long cycle starts. The chosen mode is indicated by LED.







#### ► sler® technology

sler® stands for "soft light energy release", a slow decrease of light intensity at the end of the cycle. This technology modulates and controls the temperature and shrinkage of the composite, improving its mechanical properties.

	STARLIGHT PRO	STARLIGHT ORTHO	STARLIGHT S
Device compliant to Dir. 93/42/CEE	Class I	Class I	Class IIa, notified body no. 0476 KIWA CERMET ITALIA S.P.A.
Classification as per EN 60601-1	II Type B IP 20 (recharging unit) IP 20 (handpiece)	II Type B IP 20 (recharging unit) IP 20 (handpiece)	II Type BF IP 20 (unit)
Power supply voltage	recharging unit: 100-230 Vac 50/60 Hz 15 VA handpiece: lithium-ion battery, 3.7 V 1100 mAh	recharging unit: 100-230 Vac 50/60 Hz 15 VA handpiece: lithium-ion battery, 3.7 V 1100 mAh	24 Vac 50/60 Hz 33 Vdc supply double insulation
Max. power absorbed			9 W
Charging time	About 2 hours	About 2 hours	
Fuses			315 mA T (Not included in the mectron supply)
Device for intermittent operation	120 sec ON 40 sec OFF Max 3 times running	120 sec ON 40 sec OFF Max 3 times running	120 sec ON 40 sec OFF
Light source	High-luminosity LED with optics Class 2 M (IEC 60825-1) LEDs Dominant wavelength: 440 - 465 nm LED light emission: > 1.400 mW/cm² Average life: 1,800,000 cycles, 20 seconds each	High-luminosity LED with optics Class 2 M (IEC 60825-1) LEDs Dominant wavelength: 440 - 465 nm LED light emission: > 1.400 mW/cm² Average life: 1,800,000 cycles, 20 seconds each	High-luminosity LED with optics Dominant wavelength: 440 - 465 nm Average life: 1,800,000 cycles of 20 seconds each
Optical fiber	Diameter 8 mm Composition: Drawn coherent fibers surfused in transparent quartz Autoclave sterilizable (max. temp. 135°C for 20 minutes - max. 500 cycles)	Diameter 8 mm Composition: Drawn coherent fibers surfused in transparent quartz Autoclave sterilizable (max. temp. 135°C for 20 minutes - max. 500 cycles)	Diameter 8 mm Composition: Drawn coherent fibers surfused in transparent quartz Autoclave sterilizable (max. temp. 135°C for 20 minutes - max. 500 cycles)
Exposure	Fast: Exposure time 10 seconds - Acoustic signals indicating start and end of exposure  Slow rise: Exposure time 20 seconds - Acoustic signal at the start, after 10 seconds and at the end of the 20 seconds  The cycles can be stopped or repeated at any time	Fast: Exposure time 5 seconds - Acoustic signals indicating start and end of exposure  Slow rise: Exposure time 10 seconds - Acoustic signal at the start, after 5 seconds and at the end of the 10 seconds  The cycles can be stopped or repeated at any time	Fast: Exposure time 10 seconds - Acoustic signals indicating start and end of exposure  Slow rise: Exposure time 20 seconds - Acoustic signal at the start, after 10 seconds and at the end of the 20 seconds  The cycles can be stopped or repeated at any time
Operating conditions	From +10°C to +35°C Relative humidity from 45% to 85% Atmospheric pressure: 800 hPa / 1060 hPa	From +10°C to +35°C Relative humidity from 45% to 85% Atmospheric pressure: 800 hPa / 1060 hPa	From +10°C to +40°C Relative humidity from 30% to 75% Atmospheric pressure: 800 hPa / 1060 hPa
Transport and storage conditions	From -20°C to +40°C Relative humidity from 45% to 85% Atmospheric pressure: 500 hPa / 1060 hPa	From -20°C to +40°C Relative humidity from 45% to 85% Atmospheric pressure: 500 hPa / 1060 hPa	From -10°C to +70°C Relative humidity from 10% to 90% Atmospheric pressure: 500 hPa / 1060 hPa
Weights and sizes	Recharging unit: Weight 555 g L - W - H 96 x 120 x 58 mm Starlight pro handpiece: Weight 105 g L 198 mm, max. Ø 23 mm	Recharging unit: Weight 555 g L - W - H 96 x 120 x 58 mm Starlight pro handpiece: Weight 105 g L 198 mm, max. Ø 23 mm	75 g L 148 mm, max. Ø 22 mm

	STARLIGHT S SLER®	
Device compliant to Dir. 93/42/CEE	Class I	
Classification as per EN 60601-1	II Type BF IP 20 (unit)	
Power supply voltage	24 Vac 50/60 Hz 33 Vdc supply double insulation	
Max. power absorbed	9 W	
Fuses	315 mAT (Not included in the mectron supply)	
Device for intermittent operation	120 sec ON 40 sec OFF	
Light source	High-luminosity LED with optics Dominant wavelength: 440 - 465 nm Average life: 1,800,000 cycles of 20 seconds each	
Optical fiber	Diameter 8 mm Composition: Drawn coherent fibers surfused in transparent quartz Autoclave sterilizable (max. temp. 135°C for 20 minutes - max. 500 cycles)	
Exposure	SLER: Exposure time 10/20 sec, SLER function at cycle end SLER+: Exposure time 11/21 sec, gradual increase during first 2 sec, SLER function at cycle end SOFT: Exposure time 10/20 sec, light emission at 70% of maximum power Possibility of cycle interruption or repetition at all times	
Operating conditions	From +10°C to +40°C Relative humidity from 30% to 75% Atmospheric pressure: 800 hPa / 1060 hPa	
Transport and storage conditions	From -10°C to +70°C Relative humidity from 10% to 90% Atmospheric pressure: 500 hPa / 1060 hPa	
Weights and sizes	122 g L 141 mm, max. Ø 25 mm	



#### ► MECTRON S.P.A

via Loreto 15/A, 16042 Carasco (Ge), Italia tel +39 0185 35361, fax +39 0185 351374 www.mectron.com.mectron@mectron.com

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