



All the facets of curing



DESCRIPTION

The stylish **Mini L.E.D.** curing light by Satelec utilizes one single L.E.D. (Light Emitting Diode) of the latest generation. Its compact design and advanced technology allow for fast installation into any delivery system. The ergonomic handpiece is comfortable for the end user and makes handling easy during all phases of restoration. The durable housing (anodized aluminum) is self-cooling, silent (no fan), shock resistant, and easy to clean.

The **Mini L.E.D.** generates up to 2200mW/cm² over a very wide light spectrum (between 420nm and 480nm). It is compatible with most composites (camphoroquinone 470nm, PPD or PAB 430nm) but without ultraviolet (no danger to eyes) or infrared spectrum (no abnormal increase of temperature) for complete polymerization.

Mini L.E.D. is equipped with a micro-processor for perfect control of the L.E.D. and offers three different modes:

- Fast mode : Full power for 10 seconds
- Pulse mode : 10 successive one second flashes at full power
- Ramping mode : 20 second cycle (10 seconds with linear power increase and 10 seconds at full power)

The autoclavable light guide is available in different sizes:
Universal (7.5 mm) and Booster (5.5 mm)

The special single one-piece glass rod increases the light emission by 30% for fast and powerful curing (equivalent to plasma light)

The **Mini L.E.D.** is built according to the I.E.C 601 - 1 and 601 - 1 - 2 standards.

- Mini LED) Designed by Prof. Francois Duret, DDS DSO-PhD, MS, MD-PhD, inventor of the Apollo plasma lamp
- (2) 2200mW / cm² with the optional "Booster tip" 5.5 mm light guide
 - (3) 1100mW / cm² with the "universal" 7.5 mm light guide
 - (4) Laboratory testing, unpublished data (available upon request)
 - (5) Protected by several international patents

TECHNICAL FEATURES

Mini L.E.D. module

Power supply (input) : From the dental unit -
24 V AC (50 / 60Hz ± 10% 15VA or 34 V DC ± 10% 10 Watts

Power supply (output):
To supply power to the Mini L.E.D. 5 Volt DC (1250 mA Max

Module selection (remote) :
By handpiece / switch (if selection by switch is not available, use jumper).

Dimensions : Width - 72mm / Height - 26 mm / Length - 45mm

Weight : 60g

Mini L.E.D. module built according to the I.E.C. 601 - 1 standard. It must be equipped with a power supply filter to assure EMC compatibility
Classification : Class 1, type B

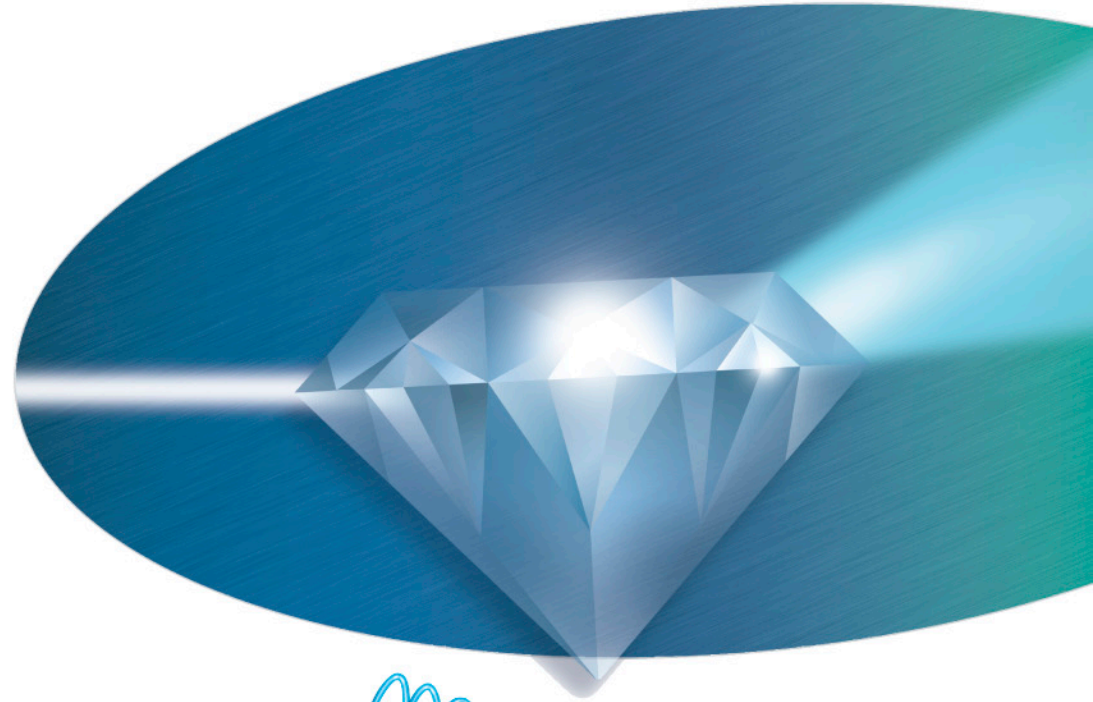
Using : Intermittent service, no automatic stand-by mode

Wavelength :
420nm to 480nm

Optical power :
1100 mW / cm² ± 10% (with "universal 7.5 mm light guide")
2200 mW / cm² ± 10% (with optional "Booster Tip" 5.5 mm light guide")

Dimensions :
7.1" x 2.7" x 1.0" (HWD)

Weight :
160 g



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OEM ML-D-05



A light guide and a curing mode for every procedure...



F02550 (Standard)
Mono Fiber 7.5 mm (45° curve)

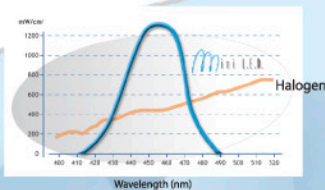
Power and surface

1250mW/cm² at a distance of 0 to 4mm over a surface of approx 1/2 cm²

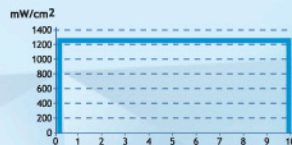
This light guide is particularly well-suited to shallow or average depth cavities. Its strong divergence of rays, combined with its power means that at a distance of 3mm, its lighting surface is 40% superior to that of the 11mm diameter regular tip of a halogen lamp. It therefore provides power and efficiency in a small size. The dentist doesn't have to use light guides that are too bulky in the mouth.

This light guide is recommended for:
0 - 4mm depth cavities
Simple stratifications (bi or tri-layer)
Preventive treatment of grooves or cracks

Mini L.E.D. emits light in the most relevant and most efficient spectrum (420 to 480nm) unlike the wavelengths of halogen lamps (over 480nm) where only 20% can be used and 80% is lost in heat.



Fast Mode -
Emits full power for 10 seconds (audible signal after 5 seconds)



F02648 (Available)
Opalescent Multi Fiber 7.5 mm (45° curve)

Power and working depth

1250mW/cm² over a surface of approx 1/2cm² at 4mm distance

This light guide has been designed to reduce ray divergence, in other words to concentrate the energy of deep rays. It enables a reduction of the working surface, but sustains the lamp's power, thus allowing efficient polymerization of composites over 5mm thick. This tip is ideal for use on substantial stratifications and allows the dentist to work in comfort.

This light guide is recommended for:
Fillings over 4mm thick
Rear brackets
Rear bondings of indirect reconstructions (inlays, cores, etc.)
Substantial reconstitution in general.



F02551 (Available)
Mono Fiber 5.5 mm (45° curve)

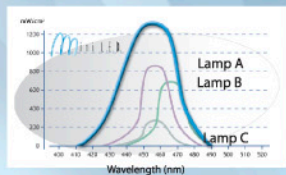
Turbo power

at 2000 mW/cm² over an area of about 1/4 cm²

This light guide should be used for all work on the surface of the teeth requiring maximum power. It allows you to use all of the power of the Mini LED without any risk of stress if the cavity is straight forward. Highly divergent beyond 3mm, it offers optimal power close to the surface. It is the high-power, quick curing light guide.

This light guide is recommended for:
Dento-facial orthopedics (brackets and bands in general)
Small posterior composites
Anterior cervical and contact-area composites
Transillumination of posts to seal them

Mini L.E.D. is the only L.E.D. lamp on the market offering such a wide emitting spectrum, allowing it to activate all photo-initiators of currently available composites: Camphoroquinone (470nm), but also PPD or PAB (430nm)



Pulse Mode -
Emits 10 successive one-second flashes at full power. (audible signal after 5 flashes)



F02652 (Available)
Opalescent Multi Fiber 5.5mm (45° curve)

Power without the dazzle

2000mW/cm² over an area of about 1/4cm²

This light guide, specifically intended for lingual orthodontics or rear brackets, provides the user with a quality light guide when optimal power needs to be maintained in places where the contrast between the light and back of the mouth can prove awkward. Less divergent than the mono-fibered version but just as powerful, it retains its main characteristics but adds to them.

This light guide is recommended for:
Lingual orthodontics
Inter-proximal composites
Cervical composites on premolar and molar areas



F02651 (Available)
Amber Multi Fiber 3.5 mm (90° curve)

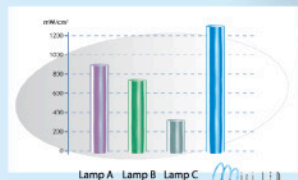
Concentrated, localized power

1100mW/cm² over approx 0.1cm² area

The purpose of this light guide is to deliver light into hard-to-reach places. In particular, it can illuminate all kinds of small surfaces, (such as the entry to root canals). Dentists find it invaluable when accessing the inter-proximal spaces. This is also the best light guide for the lingual environment. Its 90° curve, amber coating and localized illumination area enable the practitioner to sequence the luting steps for brackets and splints in hard-to-reach areas.

This light guide is recommended for:
Composites in inter-proximal spaces
Composites and bonding agents under minimal pressure
Lingual orthodontics
Pediatric dentistry
Endodontics: root canal fillings or pulpotomy

Mini L.E.D. is a very high powered lamp: it generates 1250mW/cm² light intensity with a single L.E.D.* - the most efficient L.E.D. lamp available today!



Mini L.E.D. with universal 7.5mm light guide

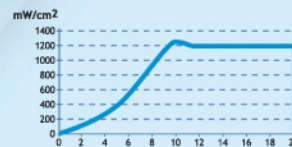
On / off



Mode Selector

Successive presses go through the different modes

Ramping Mode -
Emits 10 sec. of progressing to 10 more sec. of full power. (audible signal after 5 seconds)



* Laboratory testing: unpublished data available upon request

* Designed by Prof. Francois Duret, DD S DSO-PhD, MS, MD-PhD, inventor of the CAD-CAM and the Apollo plasma lamp

This light guide is recommended for:
Anterior dento-facial orthopedic treatments
Facings
Anterior composites
Whitening