

# PrevaLED™ CORE

## Preliminary data sheet



### Benefits

- Future-proof platform with fixed lumen output
- Uncompromised efficiency with CRI > 90
- Standardized, compact form factor
- Integrated reflector mounting with locking mechanism

### Applications

- Downlights
- Spotlights

### Technical operating data

Product	Power [W]	Lumen flux. [lm]	System efficiency [lm/W]	CCT [K]	CRI	Viewing angle [°]	Initial SCDM	Life time [h]	t <sub>c</sub> max [°]
LEP-3000-930-HD-C +	43	3000	70	3000	> 90	140	< 3	50.000	tbd
LEP-3000-840-HD-C +	43	3000	70	4000	> 85	140	< 3	50.000	tbd
LEP-2100-930-HD-C +	28	2100	75	3000	> 90	140	< 3	50.000	65
LEP-2100-840-HD-C +	28	2100	75	4000	> 85	140	< 3	50.000	65
LEP-2100-930-C +	38	2100	55	3000	> 80	140	< 4	50.000	65
LEP-2100-840-C +	35	2100	60	4000	> 80	140	< 4	50.000	65
LEP-800-930-HD-C +	11	800	75	3000	> 90	140	< 3	50.000	65
LEP-800-840-HD-C +	11	800	75	4000	> 90	140	< 3	50.000	65

\*) All data are related to the entire module

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

+) Preliminary data

\*\*) Discontinued

### Technical Features

- Standardized form factor and system interfaces
- Up to 3000 lm output
- System efficiency up to 75 lm/W including ECG and thermal losses
- Exceptional quality of light CRI >90 with uncompromised efficiency
- Maximum operating temperature t<sub>c</sub> = 65°C
- Luminous flux valid for t<sub>c</sub> = 65°C
- Module dimensions Ø50 mm x 9 mm
- Life-time 50.000 h (L70)
- Module mounting using M3 screws
- Operation by dedicated OPTOTRONIC® OTp ECG family
- Light engine connection by preconfigured cable kit

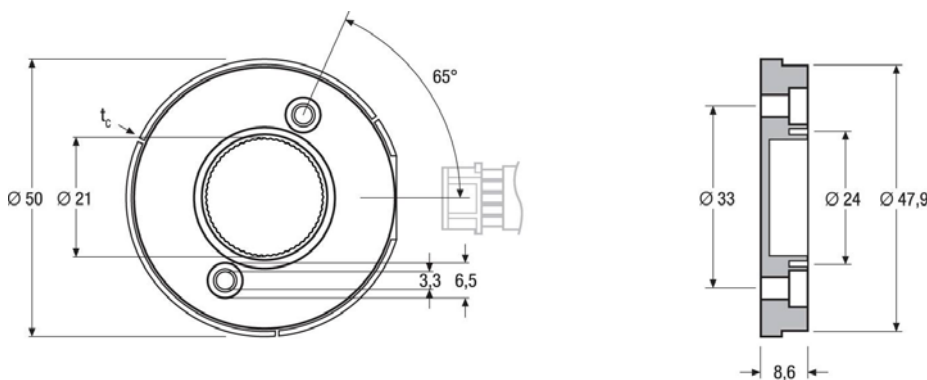
## Minimum and Maximum Ratings

Produkt	Betriebstemperatur Am Tc-Punkt [ °C ] *	Lagertemperatur [ °C ]	Max Strom [ A ] *	Rückwärtsspannung [ V dc ] *
LEP-3000-930-HD-C +	-20 ... 65	-20 ... 85		
LEP-3000-840-HD-C +	-20 ... 65	-20 ... 85		
LEP-2100-930-HD-C +	-20 ... 65	-20 ... 85		
LEP-2100-840-HD-C +	-20 ... 65	-20 ... 85		
LEP-2100-930-C +	-20 ... 65	-20 ... 85		
LEP-2100-840-C +	-20 ... 65	-20 ... 85		
LEP-800-930-HD-C +	-20 ... 65	-20 ... 85		
LEP-800-840-HD-C +	-20 ... 65	-20 ... 85		

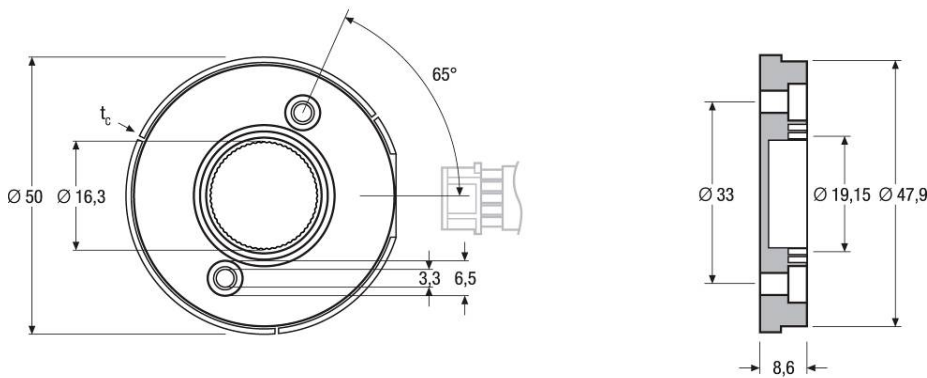
The modules are designed for operation with OTp OPTOTRONIC® ECG.

\*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Module.  
Exceeding maximum ratings for operating current will cause hazardous overload and will likely destroy the LED Module. Several modules may be connected in series up to the maximum voltage of 100 V DC (outside SELV limits).  
The temperature of the LED module must be measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label. For exact location of the Tc-point see drawing below.

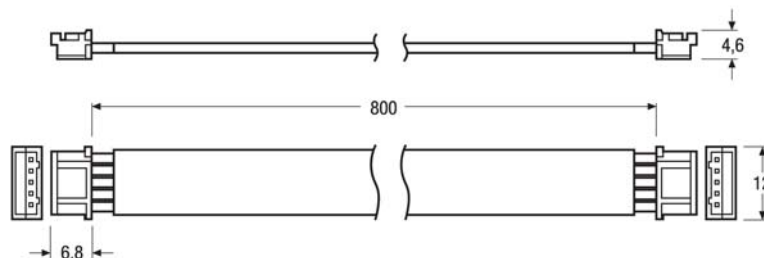
## Drawings



LEP-3000, LEP-2100



LEP-800



Cable kit 80 cm

## Safety Information

- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- The cover of the module is fixed by mounting screws. When handling the module without use of mountain screws avoid excessive force on the cover as it may separate from the PCB.
- The integrated mounting and locking mechanism on the cover of the module is intended to center and lock a reflector. Excessive force on this mechanism may cause permanent damage to the module.

**The modules are intended for operation only with matching OPTOTRONIC® of OTp series.**

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards:

CE: EC 61347-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61347-2-13 and IEC/EN 62384.

Also check for the mark of an independent authorized certification institute.

Please see the relevant brochure for more detailed information (see "Related and Further Information")

**OSRAM OPTOTRONIC® electronic control gear complies to all relevant standards and guarantees safe operation.**

- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Pay attention to standard ESD precautions when installing the module.

## Assembly Information

- The module connection is mounted to heat sink by M3 screws. Recommend torque is 0.4 – 1 Nm of mounting force for module mounting. Additional torque may be necessary if self-cutting screws are used.
- For optimum cooling a thermally conduction layers should be applied between module and heat sink.
- Further details and recommendation for mounting can be found in the application note.

## Ordering codes

Product group	Product name	EAN *	Pack size *
PrevaLED™ CORE	LEP-3000-930-HD-C +	on request	
PrevaLED™ CORE	LEP-3000-840-HD-C +	on request	
PrevaLED™ CORE	LEP-2100-930-HD-C +	on request	
PrevaLED™ CORE	LEP-2100-840-HD-C +	on request	
PrevaLED™ CORE	LEP-2100-930-C +	on request	
PrevaLED™ CORE	LEP-2100-840-C +	on request	
PrevaLED™ CORE	LEP-800-930-HD-C +	on request	
PrevaLED™ CORE	LEP-800-840-HD-C +	on request	

\*) EAN: Ordering number per single module  
S-Unit: Modules per shipping unit

Note: Typical performance data are subject to change without any further notice, particularly as LED technology evolves.

## Sales and Technical Support

### OSRAM GmbH

Hellabrunner Strasse 1  
D - 81536 München  
Deutschland

www.osram.com  
+49 89 6213-0

Sales and technical support is given by the local OSRAM subsidiaries.  
On our world wide homepage all OSRAM subsidiaries are listed with complete address and phone numbers.

## Related and Further Information

- OPTOTRONIC® Technical Guide
- OPTOTRONIC® Data Sheets
- Application Note: LED light engines

130 T008 GB [www.osram.de/evg-downloads](http://www.osram.de/evg-downloads)  
<http://catalog.myosram.com>  
in preparation