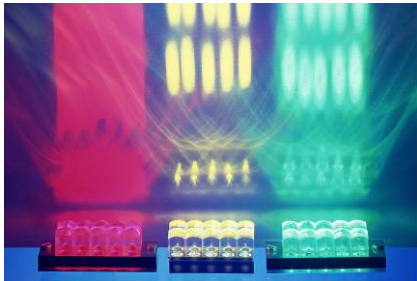


Application notes for EFFECTlight WL01B-X

1. Specification

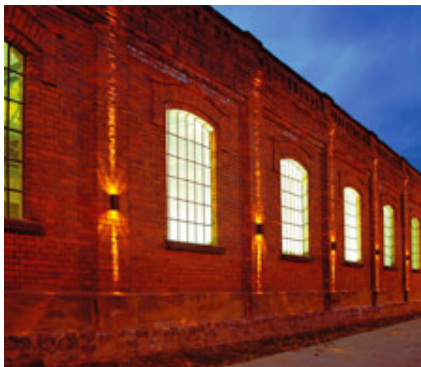


EFFECTlight

The EFFECTlight is a module with a very narrow beam for effect lighting of facades, walls or columns.

The modules are adjusted to the electronic ballasts and control gear OSRAM OPTOTRONIC®. Up to 14 modules can be connected in series.

The modules can also be combined with secondary optical elements.



EFFECTlight in application



EFFECTlight WL01B module

2. Technical Details



Product datasheet

Note:

Please read the datasheet carefully.

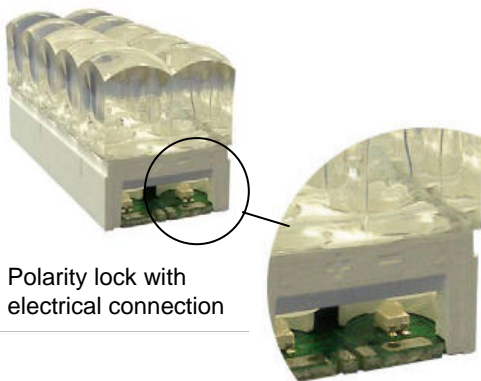
You can find detailed information about significant security and mounting notices.

For electrical installations of the ballasts please refer to the OPTOTRONIC® “Technical handbook” (download at www.osram.de/service_corner) and the datasheets of the corresponding ballasts and control gear (see also page 3).

Application notes for EFFECTlight WL01B-X

3. Electrical connection

Polarity lock



Polarity lock with electrical connection

Electrical connection with the OSRAM CONNECTsystem LM-2x is possible on both sides of the module. A polarity lock in the electrical connection secures that a polarity reversal is not possible. Additionally the polarity is marked.

Please refer to the datasheet LM-2x.



Feeder LM-2PIN

Feeder LM-2PIN:

The one side open electrical Feeder LM-2PIN is used for connection with the corresponding ballasts.



Polarity locked board to board connection system LM-2CONN

Board-to-board connector LM-2CONN:

The modules can be connected in a row without gaps.



Two modules connected

Please note: Due to the polarity lock system the feeder and connector can only be pinned in one way. If necessary flip one of the modules according to the polarity. Do not use force to connect with boards.

When connected board to board a little clearance is normal.

Application notes for EFFECTlight WL01B-X



Flexible connection
LM-2CONN-50

Flexible connector (5 cm) LM-2CONN-50:

Using the flexible connector it is possible to mount the EFFECTlight modules in edges or across cants on facades, walls or columns.

4. Power supply



EFFECTlight modules are adjusted to the electronic ballasts OSRAM OPTOTRONIC[®]. Using the OSRAM electronic control gear OSRAM OT DIM they can be dimmed with pulse width modulation (PWM).

Only parallel connection allows a secure operation of the modules. Please observe that the right polarity is used (+ +, - -). Series connection is not recommended. Unbalanced voltage drops can result in overloads in single modules.

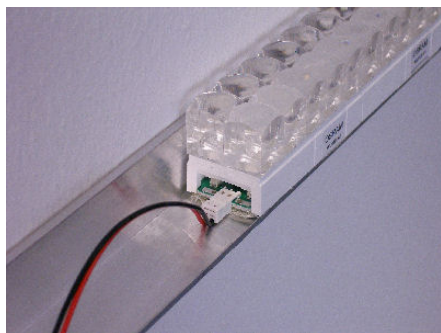
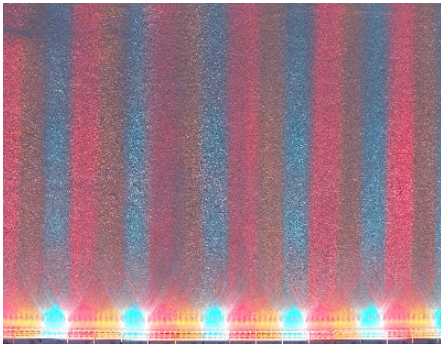
	red	yellow	verde	blue
Single power:	1,5 W	1,5 W	1,1 W	1,1 W
Number of possible modules:				
OT 6/100-120/24	4	4	5	5
OT 6/200-240/24	4	4	5	5
OT 8/200-240/24	5	5	7	7
OT 20/120-240/24 S	13	13	18*	18*
OT 20/230-240/24	13	13	18*	18*
OT 75/120-277/24 E	50*	50*	68*	68*
OT 75/220-240/24	50*	50*	68*	68*

* Due to the voltage drop and load rating of the circuit board maximum 14 modules can be connected.

Application notes for EFFECTlight WL01B-X

5. Mounting

Sample mounting



EFFECTlight modules can be mounted in plastic or metal C or L-shaped profiles.

We recommend e. g. the following manufacturers:

Sahlberg - www.sahlberg.biz

Murtfeldt - www.murtfeldt.de

Stegherr - www.stegherr.com

EFFECTlight modules can be mounted in a C-shaped profile or with mounting brackets locking in the mounting notch on the module. Additionally the modules can be glued in a L-shaped profile.

The connection of the modules can either be soldered (0,5mm²) or connected with the available CONNECTsystem accessories LM-2PIN, LM-2CONN und LM-2CONN-50 (see also 3).

It is recommended to verify the projection and adjust when necessary before locating the modules.

6. Outdoor application

Important notice

EFFECTlight modules are shipped with no anticorrosive. When using in outdoor applications they must be protected against moisture and condensation water.

LM-2x are for indoor use only.

Application notes for EFFECTlight WL01B-X

7. Thermo- management and lifetime

Temperature range:
In operation: T_c -30 to 65°C
Storage: T_c -40 to 85°C

A1: > 50thrs (T_c=40°C)
50thrs (T_c=75°C)

Y1: > 50thrs (T_c=40°C)
50thrs (T_c=75°C)

V1: in preparation

B2: in preparation

The position of the T_c spot used to measure the temperature on the LED module is shown in the datasheet.

Additional cooling surfaces are not necessary.

Please refer to the OSRAM application note „Lifetime of LED modules“.

8. Security notes

All components on the circuit board must not be mechanical stressed.

The conductors on the circuit boards must not be interrupted or damaged.

Please do not operate the LED modules under water.

9. Literature

Further literature and application notes:

- Datasheet EFFECTlight WL01B
- Datasheet CONNECTsystem LM-2x
- OPTOTRONIC® “Technical handbook”
- Application notes „Lifetime of LED modules“ (OSRAM LiveLink)
- www.osram.com/products/led-systems/
- www.osram.com/products/electrical/optotronic
- www.osram.com/service_corner/