

# Electronic LED Dimming Module OPTOTRONIC® OTDIM

**Distributed by**  
**Gilway** www.gilway.com  
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**Technical Lamp** Fax:781.938.5867

## Dimming Module Guide

OTDIM operates in conjunction with the following LED Power Supplies:

- OT6/100-240/10COS
- OT6/100-240/24COS
- OT20/120-240/24S

The OPTOTRONIC OTDIM are compact electronically stabilized dimming modules with a nominal output power of 50 watts at 10 VDC and 120 watts at 24 VDC. The range of input line voltage from 10 – 24 VDC enables use on most popular LED power supply modules.

The OTDIM module provides open circuit, short circuit, overload and overheating protection.

## Key System Features

- Lightweight, low profile
- -20°C through 50°C ambient operation
- Long life
- Utilizes pulse width modulation, (PWM)
- 1 – 10 VDC control voltage
- Dimming Range: 0 – 100%
- 10V – 24 VDC Input Voltage
- Short Circuit, Overload and Overheating Protection

Newly introduced by OSRAM SYLVANIA for dimming light emitting diodes, the OT DIM control module completes the system of innovative control gear and opens up even more possibilities for dynamic control of LED based lighting solutions. It is ideal for use in color mixing applications in combination with multi-color LED modules.



## Application Information

**OSRAM OPTOTRONIC OTDIM** modules are ideally suited for:

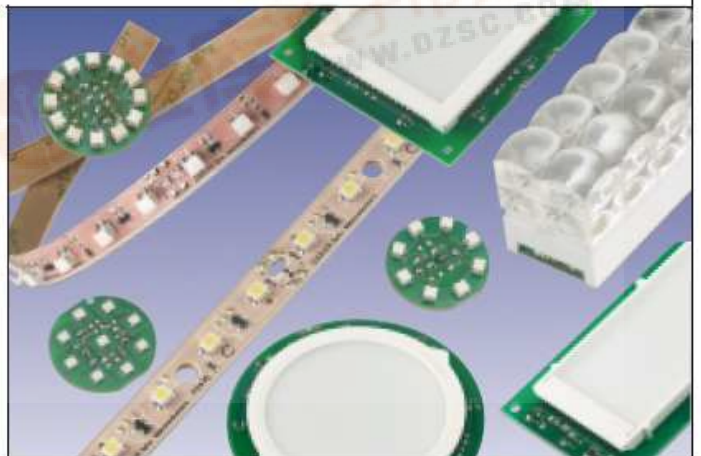
- Backlighting signs and panels
- Path and roadway marking
- Step and seat marking
- Ambience lighting inside furniture
- Effect lighting
- Panel Lighting
- Wall washing
- General lighting
- Any application where a variable amount of light is desirable
- Combining with multi-color LED modules for color mixing

## System Information

To combine with the variety of LED modules, OSRAM SYLVANIA offers specifically matched OPTOTRONIC Power Supply Units with rated voltages of 10V and 24V.

The OT DIM control module operates on the principle of pulse width modulation and is used on the secondary side of the power supply unit, i.e. wired between the OPTOTRONIC and the LED modules (diagram). The OT DIM can be controlled via a 1 ... 10V interface.

In pulse width modulation, the power supply to the LED Modules is interrupted at a frequency of 135 Hz. This permits individual adjustment of the required light output. In this context, the high frequency provides flicker-free lighting. Pulse width modulation technology guarantees a linear dimming characteristic for the eye at maximum dimming speed without any color shift from the LED.



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Item Number	Description	Nominal Input Voltage (VDC)	Nominal Input Current (A)	Control Voltage (VDC)	Output Power (W)	Max. Output Current (A)	Performance Guide
51516	OTDIM	10.5 24	5.3 5.3	0-10VDC 0-10VDC	0-52.5 0-120	5 5	Dim module shall be an LED OPTOTRONIC electronic dimming module with 10 - 24 VDC input, with 0 -10 VDC control voltage.

### Dimensions:

6.77" L x 1.65" W x 0.79" H  
(172mm L x 42mm W x 20mm H)

### Lead Lengths:

Non-lead

### Wiring Requirements:

Input, load and control wires: 14AWG solid or stranded Cu only

### Packaging:

Quantity: 20 pieces/carton  
Weight: 0.165 lbs ea. (approx.)  
3.3 lbs/carton

## Specifications

### Dim Module

**Input Voltage Range:** 9.5-25VDC

**Input Current:** 5.3 Amps max.

**Output Frequency:** 135 Hz

**Output Current:** 5 Amps max.

**Dimming Range:** 0 - 100%

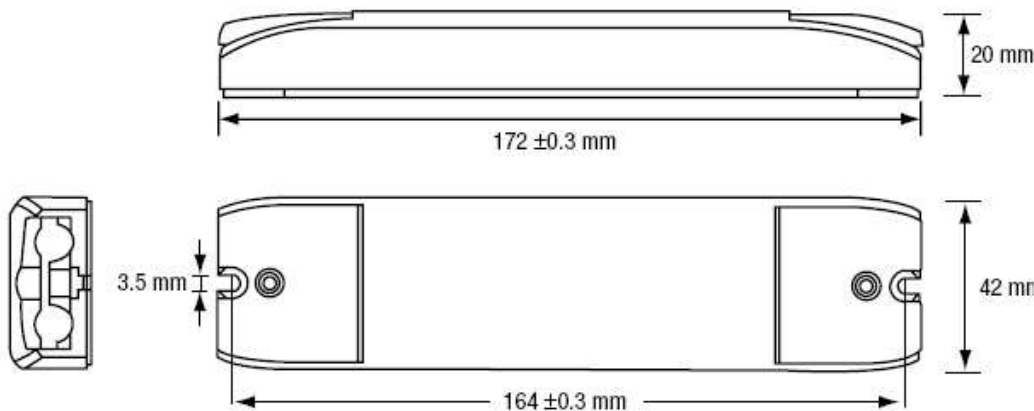
**Control Voltage:** 0 - 10 VDC,  
0.6 ma max.

**Temp. Range:** -20°C through  
+50°C

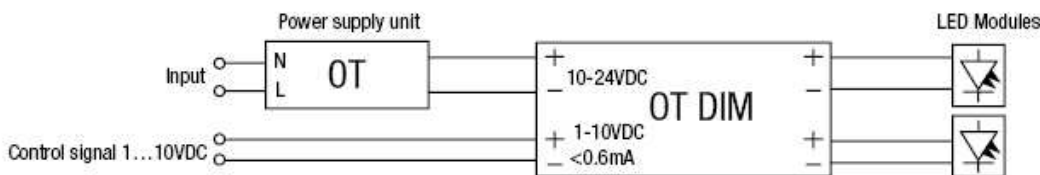
**Max. Case Temperature:** 70°C

**Color Mixing:** Yes\*

\* For compatibility information with color mixing protocols/1-10V dimming controls, contact OSRAM SYLVANIA.



### Wiring Diagram:



## System Life / Warranty

OPTOTRONIC OTDIM are warranted for 5 years. OPTOTRONIC and QUICKTRONIC Products are covered by our QUICK 60+ system warranty, a comprehensive light source, ballast and power supply system warranty. For additional details, refer to our latest version of the QUICK 60+ warranty bulletin.

Item Number ————— 51516 OT DIM  
OPTOTRONIC —————  
Dimming Module —————

## Ordering Guide

Specifications subject to change without notice.