

LINEARlight Colormix Overall Module

Professional LED modules



Product family features

- Design-oriented complete module with integrated optics
- Multichip RGB LEDs (LR28CA, LR18CE)
- Individual RGB LEDs (LR18CP)
- Integrated SMD plug connector (male/female) on both sides of the PCB

Product family benefits

- Very flat construction height: 13 mm
- Adequate heat removal thanks to aluminum housing
- Modules can be easily joined together to make seamless strip lighting
- The modules are compatible with each other
- Low maintenance costs thanks to a lifetime of up to 50,000 h (L70/B50)

Areas of application

- Restaurants
- Architainment
- Shops
- Mood lighting and wallwashing (LR18CP)
- Effect lighting (LR28CA)
- Background lighting (LR18CE)



Technical data

Electrical data

Product description	Nominal voltage	Type of current	Rated wattage	Input voltage range
LR28CA 560-L2050	24.0 V	DC	10.10 W	23...25 V

Photometrical data

Product description	Light color LED	Nominal dominant wavelength	Luminous flux	Light color (designation)
LR28CA 560-L2050	RGB	640 / 530 / 620 nm	126/202/ 50/378 lm	Color-changing

LED module information

Product description	Number of LEDs per module
LR28CA 560-L2050	28

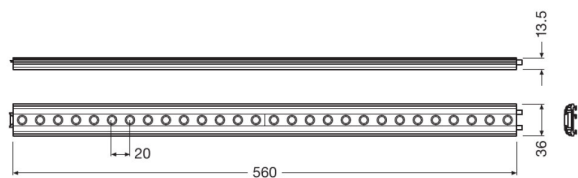
Dimensions & weight

Product description	Length	Width	Height	Product weight
LR28CA 560-L2050	560.0 mm ¹⁾	36.0 mm	13.5 mm	305.00 g

¹⁾ LED pitch 20 mm

Product family datasheet

Product line drawing



LR28CA 560-L2050

Colors & materials

Product description	Cover material	Body material
LR28CA 560-L2050	Plastic	Anodised aluminum

Temperatures & operating conditions

Product description	Maximum temperature at tc test point	Temperature range at storage	Temperature range in operation at Tc point
LR28CA 560-L2050	65 °C	-30...90 °C	-30...65 °C ¹⁾

¹⁾ At the T_c point

Lifespan

Product description	Lifespan
LR28CA 560-L2050	50000 h ¹⁾

¹⁾ L70/B50 at T_c 65 °C

Product family datasheet

Certificates & standards

Product description	Standards
LR28CA 560-L2050	CE/Acc. to EC 61347-2-13/Acc. to EN 55015/Acc. to IEC 61547/Acc. to IEC 61000-3-2/ENEC: 61347-2-13/Acc. to IEC/EN 62384

Logistical data

Product description	Commodity code
LR28CA 560-L2050	940540999000

Environmental information
Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

Product description	Date of Declaration	Primary Article Identifier	Declaration No. in SCIP database
LR28CA 560-L2050	25-01-2023	4008321978561	In work

Equipment / Accessories

- CONNECTsystem LR
- Mounting brackets LD-MB
- LT-ENDCAP-G2

Application advice

For more detailed application information and graphics please see product datasheet.

Product family datasheet




Additional product information

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Please see the relevant application guides and instructions sheets for more detailed safety and mounting information. Additional information is available on request.
- Complies with IEC/EN 61547
- Complies with IEC/EN 61000-3-2
- Complies with EN 55015, CISPR 15
- Complies with IEC/EN 61347-1
- Complies with IEC/EN 61347-2-13
- Suitable for usage in furnitures (DIN 57710).
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC OT DIM, OT DALI DIM or OPTOTRONIC 24 V power supplies with integrated 1...10 V dimming interface.
- Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is strongly discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload and damage the LED module.
- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
- In order to operate OSRAM LED modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply that protects against short circuits, overload and overheating.
- In case other power supplies than OSRAM OPTOTRONIC are used, compliance to the necessary operating parameters (voltage, current, power) has to be ensured.
- Pay attention to polarity! Wrong polarity can cause destruction or malfunction of the module.
- Use only coordinated LR-4PIN CONNECTsystem for electrical installation.
- Conducting paths on the circuit board must not be damaged or destroyed during installation.
- Luminaire must be cleaned regularly to avoid loss of luminous flux.
- The LED module itself and all its components must not be stressed mechanically.
- Operation in or under water is prohibited.
- Protect against splashes!
- The module, as manufactured, has no inherent protection against corrosion. It is the user's responsibility to provide suitable protection against corrosive agents, such as moisture, condensation and other harmful elements.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.












Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	Product Datasheet 339621_LINEARlight Colormix Advanced - LR28CA (EN)
	Product Datasheet 339622_LINEARlight Colormix Advanced - LR28CA (D)
	Certificates 345157_VDEENEC Certification - LRxxx-OM

Product family datasheet

	Certificates 345158_VDEENEC Certification - LRxxx-OM
	Declarations of conformity 341064_LINEARlight RGB Overall Modules - EC-Declaration of Conformity
	Declarations of conformity 485585_EC-DoC LS LRXXX-Linear Rigid
	Declarations of conformity 485723_EC-Man DoC LS LRXXX-Linear Rigid
	Installation guide 346226_Installation instructions for linear LED modules (DE)
	Installation guide 346227_Installation instructions for linear LED modules (GB)
	CAD data 340952_LINEARlight Colormix Advanced Overall Module – Drawing
	Eulumdat 341205_LINEARlight LR28CA-OM – BLUE
	Eulumdat 341206_LINEARlight LR28CA-OM – GREEN
	Eulumdat 341207_LINEARlight LR28CA-OM – RED
	Eulumdat 341208_LINEARlight LR28CA-OM – WHITE

Ecodesign regulation information:

- This product is considered to be a "containing product" in the sense of Regulations (EU) 2019/2020 and (EU) 2019/2015.
- Tolerances of the reported values, are according to LED Modules Performance standard IEC/EN 62717.
- In general, the replacement of the contained light sources without permanent damage to the product with the use of common available tools is possible in the final application when they can be dismantled from the installation environment and substituted for the necessary number of light sources restoring its full electrical/mechanical/thermal/optical functionality by means of a professional installer. In the contrary, and limited to the LINEARlight Flex Diffuse, LINEARlight Rigid Finesse, GINO LED Flex Diffuse and LUMINENT Milky product families, the contained light source is an integrated part of the containing product and its removal can only be done by causing a permanent damage to the containing product due to its tight mechanical, electrical, optical, thermal interaction and/or environmental protection with or from the containing product. Therefore, a replacement of the light source with the use of common available tools is not justified.
- Dismantling of light sources from containing products at end of life: Containing products with light sources which are scalable in length can be cut to the length of the contained light source and if applicable mechanically detached from protective and/or optical covers. Containing products shall be separated from building material and/or from other additional mounting accessories by means of a professional installer. Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Product family datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321978561	LR28CA 560-L2050	Shipping carton box 8	602 mm x 403 mm x 46 mm	11.16 dm ³	3404.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.