

LINEARlight Colormix Flex

Flexible colored / color change LED modules



Product family features

- Flexible and cuttable LED strip with inline multichip RGB LEDs
- RGBW all types: full single bin on each color and white
- RGB LF200C and LF05CE: binning on white (RGB mix)
- RGB LF05CA2: binning on single colors R, G, B

Product family benefits

- Uniform color changing
- Great design freedom thanks to flexibility and cuttability of module
- Simple mounting and connection
- Type of protection: IP00
- Toolless connection with the optional CONNECTsystem for RGB
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back

Areas of application

- Effect lighting in architecture
- Injection of light into displays and low-profile light guides
- Dynamic effects in public zones



Product family datasheet

Technical data

Product description	Electrical data						
	Nominal wattage per meter - RGB	Nominal wattage per meter	Nominal voltage	Nominal current	Input voltage range	Accidental reverse input voltage protection up to	Type of current
LF200C -G3-RGB-06 ¹⁾	2.68 / 3.1 / 0.73 W ³⁾	6.5 W	24.0 V	1.63 A	23...25 V	25 V	DC
LF05CA2 -RGB3 ²⁾	6.5 / 5.0 / 4.6 W ³⁾	16.1 W	24.0 V	3 A	23...25 V	25 V	DC
LF1300RGBW -G1-822-04			24.0 V	3.15 A	23...25 V	25 V	DC
LF1300RGBW -G1-827-04			24.0 V	2.9 A	23...25 V	25 V	DC
LF1300RGBW -G1-830-04			24.0 V	2.9 A	23...25 V	25 V	DC
LF1300RGBW -G1-840-04			24.0 V	2.8 A	23...25 V	25 V	DC
LF1300RGBW -G1-865-04			24.0 V	2.83 A	23...25 V	25 V	DC
LF700RGBW -G1-822-06			24.0 V	2.675 A	23...25 V	25 V	DC
LF700RGBW -G1-827-06			24.0 V	2.45 A	23...25 V	25 V	DC
LF700RGBW -G1-830-06			24.0 V	2.45 A	23...25 V	25 V	DC
LF700RGBW -G1-840-06			24.0 V	2.4 A	23...25 V	25 V	DC
LF700RGBW -G1-865-06			24.0 V	2.4 A	23...25 V	25 V	DC

Product description	Nominal wattage	Photometrical data			Light technical data	LED module information	Dimensions & weight
		Luminous flux per meter	Luminous flux per meter	Luminous flux	Beam angle	Number of LEDs per smallest unit	Length
LF200C -G3-RGB-06 ¹⁾	39.00 W	209 lm	209 lm	1254 lm	120 °	5	6000 mm ⁴⁾
LF05CA2 -RGB3 ²⁾	65.00 W	470 lm	470 lm	1880 lm	120 °	5	4000 mm
LF1300RGBW -G1-822-04	75.70 W			1213 lm	120 °	12	3900 mm
LF1300RGBW -G1-827-04	69.80 W			1293 lm	120 °	12	3900 mm
LF1300RGBW -G1-830-04	69.80 W			1293 lm	120 °	12	3900 mm
LF1300RGBW -G1-840-04	67.90 W			1293 lm	120 °	12	3900 mm
LF1300RGBW -G1-865-04	67.90 W			1293 lm	120 °	12	3900 mm
LF700RGBW -G1-822-06	64.20 W			657 lm	120 °	12	6000 mm
LF700RGBW -G1-827-06	58.80 W			697 lm	120 °	12	6000 mm
LF700RGBW -G1-830-06	58.80 W			697 lm	120 °	12	6000 mm
LF700RGBW -G1-840-06	57.60 W			697 lm	120 °	12	6000 mm
LF700RGBW -G1-865-06	57.60 W			697 lm	120 °	12	6000 mm

Product family datasheet

Product description	Length – smallest unit	Width	Height	Temperatures & operating conditions		Lifespan
				Temperature range in operation at T _c point	Temperature range at storage	Lifespan
LF200C -G3-RGB-06 ¹⁾	150.0 mm	8.0 mm	2.2 mm	-20...75 °C ⁵⁾	-40...+85 °C	50000 h
LF05CA2 -RGB3 ²⁾	100.0 mm	8.0 mm	2.2 mm	-30...75 °C ⁶⁾	-40...+85 °C	50000 h
LF1300RGBW -G1-822-04	100.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF1300RGBW -G1-827-04	100.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF1300RGBW -G1-830-04	100.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF1300RGBW -G1-840-04	100.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF1300RGBW -G1-865-04	100.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF700RGBW -G1-822-06	150.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF700RGBW -G1-827-06	150.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF700RGBW -G1-830-06	150.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF700RGBW -G1-840-06	150.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	
LF700RGBW -G1-865-06	150.0 mm	10.0 mm	1.70 mm	-20...+85 °C ⁵⁾	-40...+85 °C	

Product description	Certificates & standards	Logistical data
	Standards	Commodity code
LF200C -G3-RGB-06 ¹⁾	CE/EAC/UL Recognized component according UL 8750	940540399000
LF05CA2 -RGB3 ²⁾	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	940540399000
LF1300RGBW -G1-822-04	CE/EAC/ENEC/UL	940540399000
LF1300RGBW -G1-827-04	CE/EAC/ENEC/UL	940540399000
LF1300RGBW -G1-830-04	CE/EAC/ENEC/UL	940540399000
LF1300RGBW -G1-840-04	CE/EAC/ENEC/UL	940540399000
LF1300RGBW -G1-865-04	CE/EAC/ENEC/UL	940540399000
LF700RGBW -G1-822-06	CE/EAC/ENEC/UL	940540399000
LF700RGBW -G1-827-06	CE/EAC/ENEC/UL	940540399000
LF700RGBW -G1-830-06	CE/EAC/ENEC/UL	940540399000
LF700RGBW -G1-840-06	CE/EAC/ENEC/UL	940540399000
LF700RGBW -G1-865-06	CE/EAC/ENEC/UL	940540399000

¹⁾ Modules perfectly matched to OSRAM OPTOTRONIC LED drivers (see relevant table)/For current photometric data and important safety, installation and application information (see www.osram.com/led-systems)./All the technical parameters apply to the entire module. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values/Color binning/With RGB wavelengths: R/G/B 625/525/465 nm

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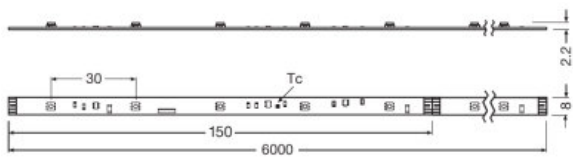
³⁾ R/G/B

⁴⁾ LED pitch 30 mm

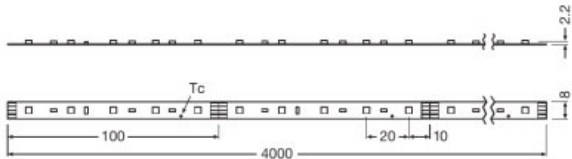
⁵⁾ Exceeding the maximum ratings will reduce expected life time or destroy the LED strip.

⁶⁾ At the T_c point

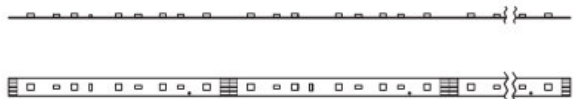
Product family datasheet



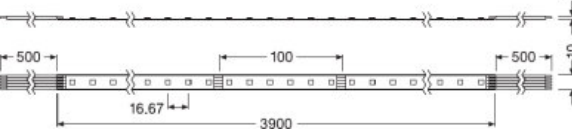
388213_LINEARlight Colormix Flex LF05CE



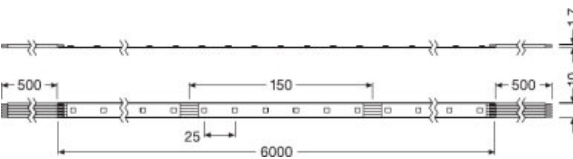
343318_LINEARlight Colormix Flex - LF05CA2



343316_LINEARlight Colormix Flex - LF05CA2



LF1300RGBW



LF700RGBW

Product family datasheet

Equipment / Accessories

- Simplified connection with optional matching CONNECTsystem for RGB
- Quick installation with optional SLIM TRACK System
- Perfectly matched to OPTOTRONIC 24 V electronic control gears

Application advice

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

Additional product information

- Some LED modules are equipped with a self-adhesive tape for attaching the LED module to suitable materials, such as aluminum profiles, which must be clean and free of oil or silicone coatings, as well as other dirt/dust particles. The adhesive tape is intended for single use and if removed may damage the material to which it is stuck and the LED module itself, which must then be scrapped. Use the adhesive tape when the installation material temperature is in the 18 °C...35 °C range. Complete adhesion takes up to 72 h.
- LED modules are designed for static installations in accordance with IPC 6013C – Use A. Take material vibrations, repetitive torsion, and elongation/compression into account.
- If the operating environment covers a broad temperature range (e.g. outdoor applications) and the operating length is longer than 2 m, the use of adequate mounting surfaces is required. The use of an additional thicker adhesive tape between LED module and mounting surface is also recommended in order to absorb the stress of any mismatch in expansion. Assure enough space for module expansion with increasing temperature.
- The manufacturer is not responsible for damage due to chemical corrosion. The user must provide suitable protection against corrosive agents such as moisture and condensation and any other harmful elements/compounds. Make certain to avoid corrosive atmospheres. According to the current state of LED technology, hydrogen sulfide (H₂S) causes accelerated corrosion which leads to shortened lifetime or premature failure. Sources of H₂S may be rubber, foam rubber, soft-foam tapes, rubber-based sealing, natural sources (e.g. sulfur springs), etc. To avoid H₂S from sulfur-vulcanized rubber use silicon-based materials or peroxide-crosslinked rubber instead. Follow the recommendations in the material datasheet of the rubber supplier.
- IP00 LED modules, as manufactured, have no conformal coating and therefore offer no inherent protection against corrosion. Conformal coating treatment is possible, however materials must be selected properly in order to avoid product damage or impaired performance; the user must also completely seal the cut parts (ends/edges).
- For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable IP protection class.
- Consult OSRAM Technical Service for further advice.
- Only a qualified electrician may install the module.
- Handle with care and ensure that there is no mechanical product damage, including damage to invisible internal electronics parts.
- Exceeding maximum operating and storage temperature ratings can reduce the expected lifetime or even destroy the LED module. The temperature of the LED module must be measured at the T_c-point in accordance with EN 60598-1 under steady-state conditions, considering the worst case; drive all channels at 100 % power. Refer to the product drawing for the exact location of the T_c-point.
- Exceeding the maximum ratings for the operating voltage causes hazardous overload and will likely destroy the LED module.
- Installation of LED modules and connection to the power supply must comply with all applicable electrical and safety standards.
- Observe correct polarity and wiring diagrams! Incorrect polarity or wrong wiring can cause unpredictable permanent damage or even failure of the product.
- Never exceed the maximum operable length, including daisy-chaining connections.
- Always ensure electrical isolation between the LED module and the mounting surface, especially in the vicinity of connections or cut ends.
- IP00 LED modules are ESD-sensitive; take adequate precautions during installation and operation of the products.
- Use only SELV LED drivers in accordance with applicable lighting standards and LED module ratings. In order to safely operate OSRAM LED modules it is necessary to supply them with an electronically stabilized power supply providing protection against short circuits, overload and overheating. To simplify the approval process of the luminaire/installation, the electronic power supplies control gear for LED modules must bear the CE and ENEC marking. In Europe the Declarations of Conformity must include at least the following standards: EN 61347-2-13, EN 55015, EN 61547 and EN 61000-3-2. ENEC certification will be based on EN 61347-2-13 and EN 62384. OSRAM OPTOTRONIC LED drivers comply with all relevant standards and guarantee safe operation; see the relevant brochure for more detailed information about OSRAM OPTOTRONIC.
- Avoid installations in rural and urban areas with high industrial activity and heavy traffic (higher than class than 4C1 according IEC 60721-3) and as well as installation in spa, areas with chlorine atmosphere, direct exposure to blown sand.

Sales and Technical Support

Product family datasheet

Sales and Technical Support www.osram.com

Country specific information

Product description	Product code	METEL-Code	SEG-No.	STK number	UK Org
LF05CA2 -RGB3	4008321851536	-	-	4030217	-
LF05CA2 -RGB3	4008321851536	-	-	4030217	-

Download Data

File
 Brochures Light is freedom of design (EN)
 Certificates EAC Certificate
 Certificates UL Certificate
 Declarations of conformity Manufacturer declaration
 Declarations of conformity Declaration of conformity
 Eulumdat Eulumdat LF200C-G3-RGB-06 All
 Eulumdat Eulumdat LF200C-G3-RGB-06 Blue
 Eulumdat Eulumdat LF200C-G3-RGB-06 Green
 Eulumdat Eulumdat LF200C-G3-RGB-06 Red
 IES data IES data LF200C-G3-RGB-06 All
 IES data IES data LF200C-G3-RGB-06 Blue
 IES data IES data LF200C-G3-RGB-06 Green
 IES data IES data LF200C-G3-RGB-06 Red
 Product Datasheet 343462_LF05CA2 - Technical Datasheet
 Brochures CONNECTION System for LINEARlight FLEX and TEC Flex IP00 - Quick installation guide

Product family datasheet

	Certificates UL Certificate
	Certificates VDE-ENEC Certificate
	Declarations of conformity Declaration of conformity
	Declarations of conformity Manufacturer declaration
	Eulumdat 346256_20121105 D012850 LF05CA2
	Eulumdat 346257_LF05CA2 D012849 LDT
	Eulumdat 346258_LF05CA2 D012848 LDT
	User instruction LINEARlight Flex
	Product Datasheet LINEARlight Flex Colormix RGBW V2
	Certificates ENEC10_VDE Certificate
	Certificates UL Certificate
	Certificates CB TEST CERTIFICATE DE1-59711
	Declarations of conformity Declaration of Conformity
	Declarations of conformity Manufacturers Declaration of Conformity
	Eulumdat Eulumdat LF1300RGBW-G1-822-04
	Eulumdat Eulumdat LF1300RGBW-G1-8xx-04 Blue
	Eulumdat Eulumdat LF1300RGBW-G1-8xx-04 Green
	Eulumdat Eulumdat LF1300RGBW-G1-8xx-04 Red
	IES data IES data LF1300RGBW-G1-822-04
	IES data IES data LF1300RGBW-G1-8xx-04 Blue
	IES data IES data LF1300RGBW-G1-8xx-04 Green
	IES data IES data LF1300RGBW-G1-8xx-04 Red
	Eulumdat Eulumdat LF1300RGBW-G1-827-04

Product family datasheet

	IES data IES data LF1300RGBW-G1-827-04
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	IES data IES data LF1300RGBW-G1-840-04
	Eulumdat Eulumdat LF1300RGBW-G1-865-04
	IES data IES data LF1300RGBW-G1-865-04
	Eulumdat Eulumdat LF700RGBW-G1-822-06
	Eulumdat Eulumdat LF700RGBW-G1-8xx-06 Blue
	Eulumdat Eulumdat LF700RGBW-G1-8xx-06 Green
	Eulumdat Eulumdat LF700RGBW-G1-8xx-06 Red
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	IES data IES data LF700RGBW-G1-8xx-06 Blue
	IES data IES data LF700RGBW-G1-8xx-06 Green
	IES data IES data LF700RGBW-G1-8xx-06 Red
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	IES data IES data LF700RGBW-G1-827-06
	Eulumdat Eulumdat LF700RGBW-G1-830-06
	IES data IES data LF700RGBW-G1-830-06
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Product family datasheet

Ecodesign regulation information:

ul>This product is considered to be a "containing product" in the sense of Regulations (EU) 2019/2020 and (EU) 2019/2015. The contained light source is intended for use in applications requiring high-quality coloured light.

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.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899501997	LF200C -G3-RGB-06	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	1253.00 g
4008321851536	LF05CA2 -RGB3	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	1279.00 g
4062172166157	LF1300RGBW -G1-822-04	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	1847.00 g
4062172166171	LF1300RGBW -G1-827-04	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	1847.00 g
4062172166195	LF1300RGBW -G1-830-04	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	1847.00 g
4062172166218	LF1300RGBW -G1-840-04	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	1847.00 g
4062172166232	LF1300RGBW -G1-865-04	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	1847.00 g
4062172166058	LF700RGBW -G1-822-06	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	2047.00 g
4062172166072	LF700RGBW -G1-827-06	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	2047.00 g

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Logistical Data

4062172166096	LF700RGBW -G1-830-06	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	2047.00 g
4062172166119	LF700RGBW -G1-840-06	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	2047.00 g
4062172166133	LF700RGBW -G1-865-06	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm ³	2047.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
LF05CA2 -RGB3	LF-LTS -2100	▶ 4008321978981
LF05CA2 -RGB3	FX -SC08-G2-CT4PJ	▶ 4052899464858

Disclaimer

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