

**Radium**



## **RaLED Flex**

**Flexible LED  
Modules and  
Drivers**



## Flexible Linear LED Modules and Drivers



### Flexibility to Perfection

Linear lighting systems are state of the art technology for modern illumination concepts. With our flexible linear LED modules and electronic drivers we will have the right product for your lighting project.

#### Main Applications

- Architectural lighting
- Shop and retail
- Hotels, restaurants, bars
- Effective outdoor illumination
- Conference rooms, foyers, entrance halls

#### Targets

- „Endless“ lines of light
- Adaption to field specific conditions
- Increase quality of lighting
- Replacement of fluorescent tubes and neon
- Save energy and maintenance costs



1

**1 RaLED Flex 400**

21  
 1 900  
 120°  
 IP 20  
 Pitch 16.7 mm  
 E→A++  
 A+

			$\frac{\text{lm}}{\text{m}}$	$\frac{\text{W}}{\text{m}}$			SEU mm	$\frac{\text{LEDs}}{\text{m}}$	K	
					l mm	w mm				
4003556005532	<b>RL-FX 400 21W/827/5M</b>	RFXA0607	400	4.2	5 000	8.2	100	60	2 700	
4003556005549	<b>RL-FX 400 21W/830/5M</b>	RFXA0608	400	4.2	5 000	8.2	100	60	3 000	
4003556005556	<b>RL-FX 400 21W/840/5M</b>	RFXA0609	400	4.2	5 000	8.2	100	60	4 000	
4003556005563	<b>RL-FX 400 21W/865/5M</b>	RFXA0610	400	4.2	5 000	8.2	100	60	6 500	

**1 RaLED Flex 900**

37  
 4 000  
 120°  
 IP 20  
 Pitch 16.7 mm  
 E→A++  
 A+

4003556005600	<b>RL-FX 900 37W/827/5M</b>	RFXA0614	880	7.4	5 000	8.2	100	60	2 700	
4003556005617	<b>RL-FX 900 37W/830/5M</b>	RFXA0615	880	7.4	5 000	8.2	100	60	3 000	
4003556005624	<b>RL-FX 900 37W/840/5M</b>	RFXA0616	880	7.4	5 000	8.2	100	60	4 000	
4003556005631	<b>RL-FX 900 37W/865/5M</b>	RFXA0617	880	7.4	5 000	8.2	100	60	6 500	

44  
 24 DC  
 Ra ≥80  
 L70 20 000 h  
 SDCM ≤4



1



2

**1 RaLED Flex 1400**

52  
 6 000  
 120°  
 20  
 14.3 mm  
 E→A++  
 A+

					l mm	w mm	mm			
4003556005686	<b>RL-FX 1400 52W/827/5M</b>	RFXA0622	1380	10.4	5 000	8.2	100	70	2 700	
4003556005693	<b>RL-FX 1400 52W/830/5M</b>	RFXA0623	1380	10.4	5 000	8.2	100	70	3 000	
4003556005709	<b>RL-FX 1400 52W/840/5M</b>	RFXA0624	1380	10.4	5 000	8.2	100	70	4 000	
4003556005716	<b>RL-FX 1400 52W/865/5M</b>	RFXA0625	1380	10.4	5 000	8.2	100	70	6 500	

**2 RaLED Flex RGB 200**

27  
 900  
 120°  
 20  
 16.7 mm

4003556005570	<b>RL-FX 200 27W/RGB/5M</b>	RFXA0611	200	5.4	5 000	8.2	100	60	RGB	
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**2 RaLED Flex RGB 300**

36  
 1 400  
 120°  
 20  
 13.3 mm

4003556005648	<b>RL-FX 300 36W/RGB/5M</b>	RFXA0618	300	7.3	4 960	8.2	80	75	RGB	
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44  
 24 DC  
 ≥80  
 20 000 h  
 ≤4



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2

**1 RaLED Flex RGB 500**

W 80   
 lm 2 000   
 A° 120   
 LEDs 44   
 IP 20   
 Pitch 11.8 mm

4003556005723    **RL-FX 500 80W/RGB/5M**    RFXA0626

$\frac{\text{lm}}{\text{m}}$	$\frac{\text{W}}{\text{m}}$	l mm    w mm		SEU mm	$\frac{\text{LEDs}}{\text{m}}$	K	
480	16	4 970	10.0	70	86	RGB	
400	4.2	5 020	10.0	100	60	3 000	
400	4.2	5 020	10.0	100	60	4 000	
880	8.0	5 020	10.0	100	60	3 000	
880	8.0	5 020	10.0	100	60	4 000	

**2 RaLED Flex Protected 400**

W 21   
 lm 1 900   
 A° 120   
 LEDs 26   
 IP 65   
 Pitch 16.7 mm   
 E→A++

4003556005587    **RLP-FX 400 21W/830/5M/IP65**    RFPA0612

4003556005594    **RLP-FX 400 21W/840/5M/IP65**    RFPA0613

**2 RaLED Flex Protected 900**

W 40   
 lm 4 000   
 A° 120   
 LEDs 26   
 IP 65   
 Pitch 16.7 mm   
 E→A++

4003556005655    **RLP-FX 900 40W/830/5M/IP65**    RFPA0619

4003556005662    **RLP-FX 900 40W/840/5M/IP65**    RFPA0620

V 24 DC   
 Ra ≥80   
 L70 20 000 h   
 SDCM ≤4



1



2

**1 RaLED Flex Protected 1400**

**W** 54  
**lm** 6 000  
**A** 120°  
**IP** 65  
**Pitch** 14.3 mm  
**E-A** A+

			$\frac{\text{lm}}{\text{m}}$	$\frac{\text{W}}{\text{m}}$	l mm	w mm	SEU mm	$\frac{\text{LEDs}}{\text{m}}$	K	
4003556005730	<b>RLP-FX 1400 54W/830/5M/IP65</b>	RFPA0627	1 380	10.8	5 020	10.0	100	70	3 000	
4003556005747	<b>RLP-FX 1400 54W/840/5M/IP65</b>	RFPA0628	1 380	10.8	5 020	10.0	100	70	4 000	
4003556005754	<b>RLP-FX 1400 54W/865/5M/IP65</b>	RFPA0629	1 380	10.8	5 020	10.0	100	70	6 500	

**2 RaLED Flex Protected RGB 300**

**W** 47  
**lm** 1 400  
**A** 120°  
**IP** 65  
**Pitch** 13.3 mm

4003556005679	<b>RLP-FX 300 47W/RGB/5M/IP65</b>	RFPA0637	300	9.4	4 980	10.0	80	75	RGB	
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**V** 26  
**Ra** ≥80  
**L70** 20 000 h  
**SDCM** ≤4

## Constant Voltage LED Drivers



### RaLED Driver

#### Product Properties & Advantages:

- Preferred control gear for RaLED Flex modules
- Versatile scope of application due to output power range of up to 120 W
- High safety by overload and short circuit protection
- Integrated strain relief

#### Range of Applications:

- Suitable for constant voltage 24V LED modules
- Suitable for indoor SELV installations
- Installation in suspended ceilings possible



RaLED Driver



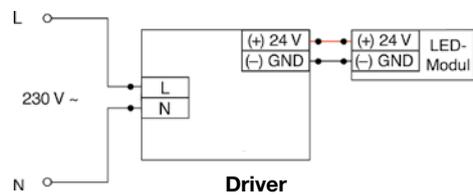
				W	V <sub>IN</sub>	Hz	Light bulb icon			°C <sub>Tc</sub>	°C <sub>Ta</sub>	Box icon
							l mm	w mm	h mm			
1	4003556005761	<b>RL-Driver 30W/220-240/24V IP20</b>	OTNA1753	30	220-240	50/60	153	41	32	80	-20...45	20
2	4003556005778	<b>RL-Driver 60W/220-240/24V IP20</b>	OTNA1754	60	220-240	50/60	180	52	30	80	-20...45	20
3	4003556005785	<b>RL-Driver 90W/220-240/24V IP20</b>	OTNA1755	90	220-240	50/60	300	40	30	80	-20...45	20
3	4003556005792	<b>RL-Driver 120W/220-240/24V IP20</b>	OTNA1756	120	220-240	50/60	300	40	30	80	-20...45	20

# Technical Specifications

## Electrical Notes

RaLED Flex LED modules are not intended for operation at 230V AC current. The modules require an LED voltage supply of 24V DC current. You will find suitable drivers on page 8.

By default, each module comes with a feed-in cable on every side. The cable lengths of the feed-in cable can be extended on site.



## Cooling

The RaLED Flex and RaLED Flex Protected products of the models '1 400', 'RGB 300' and 'RGB 500' must not be operated without any heat sink. If the modules are not operated with approved Radium accessories, Radium will not accept any liabilities or warranty.

## Length of cables

The distances between LED modules and their drivers must not exceed certain lengths. The maximum cable lengths depend on the used devices and can be found in the technical data sheets of the drivers. Long cable lengths and high currents require adequately large wire cross sections.

**IP Protection class**



To protect our RaLED Flex Protected Modules against environmental conditions, they are coated with a silicon-tube and sealed at both ends.

The IP protection class states the aptitude of electrical equipment regarding different environmental conditions.

Protection against particles / dust	Protection against water / humidity
0 Not protected	0 Not protected
1 Protection against objects $\geq 50\text{mm}$ diameter	1 Protected against dripping water
2 Protection against objects $\geq 12.5\text{mm}$ diameter	2 Protected against dripping water with suitable housing
3 Protection against objects $\geq 2.5\text{mm}$ diameter	3 Protected against spraying water
4 Protection against objects $\geq 1\text{mm}$ diameter	4 Protected against splashing water
5 Dust protected	5 Protected against water jets
6 Dust tight	6 Protected against powerful water jets
	7 Protected against immersion
	8 Protected against permanent immersion

**Mounting**

All RaLED Flex products come with two-sided adhesive tape by 3M.

After removing the protective foil, the LED module can be stuck on clean and plane surfaces.

Please note, that the surface must be free from grease, oil, silicone and any dirt. Optionally, the modules can be directly built into suitable aluminum profiles.

**SEU**



The SEU (shortest ejectable unit) is a distance defined as the smallest separable unit of the particular module. The possible operational lengths depend on the maximal operational length and the SEU. The LED module may only be cut at the designated points.

**Pitch**



The pitch is defined as the distance between each SMD LED. The smaller the pitch, the closer the SMD LEDs are arranged.

**CRI**



The colour rendering index Ra (CRI) is a characteristic number of a photometric unit, which describes the quality of a light source with same correlated colour temperature. All RaLED Flex modules have a minimum CRI of 80.



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