

HIGH-QUALITY, COMPACT AND EFFICIENT LEDVANCE LED DRIVERS FOR CONSTANT CURRENT

LEDVANCE also offers the right solution for integration in LED luminaires or operation of independent indoor downlighting/spotlighting with its drivers for constant current (CC).



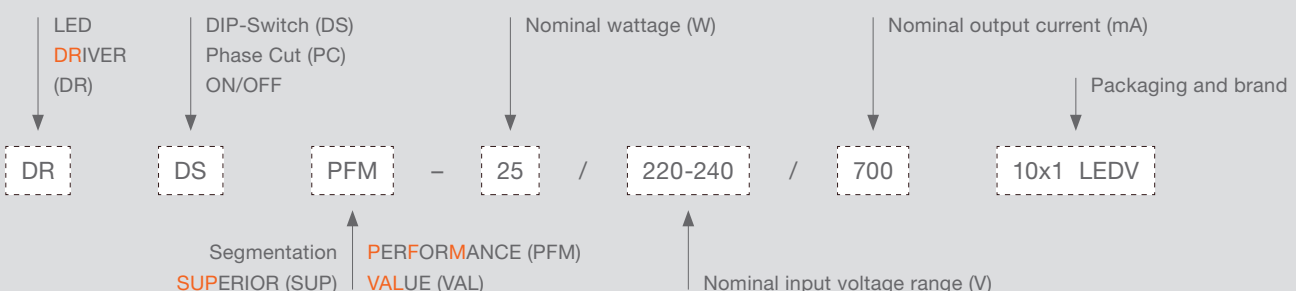
The wide range of high-quality SELV-insulated LEDVANCE constant current LED drivers with output currents of 250 mA to 1,400 mA provides you with solid options for operating virtually all standard LED modules. Flexible power

settings allow for correct integration in different LED luminaires. Leading-edge and trailing-edge phase cut options are available for dimming applications. The compact housing design, optional cable clamps and simple wiring make installa-

tion quick and easy even in tight spaces, reducing your installation time and costs. The life of up to 50,000 hours is another strong argument.

NAMING OF THE CC DRIVERS

The names of the CC drivers reveal their properties:

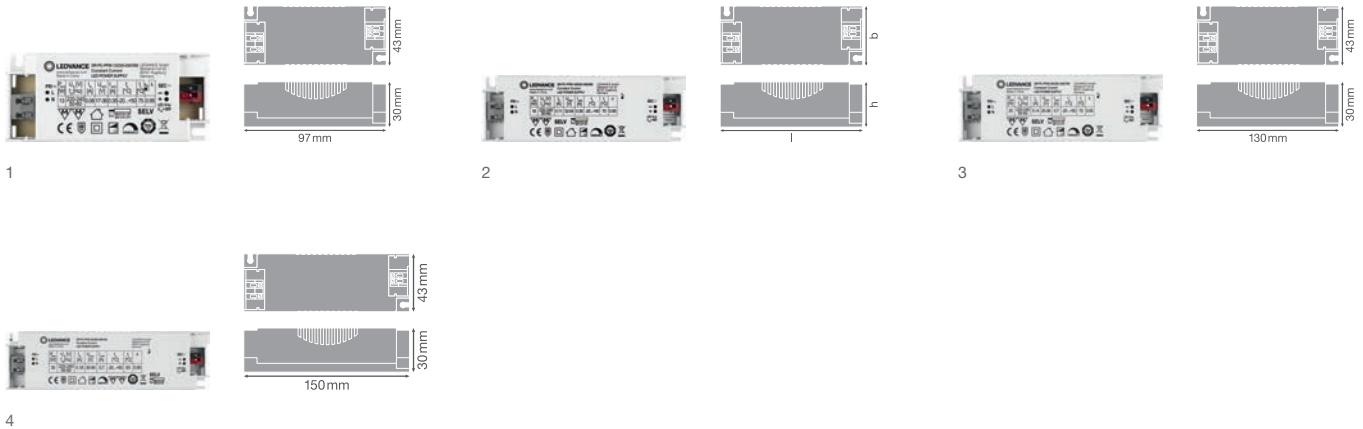


LED DRIVER PHASE-CUT PERFORMANCE



PERFORMANCE CLASS

Constant current LED driver with phase-cut dimming interface



PRODUCT BENEFITS

- Enables installation with commonly used leading-edge and trailing-edge dimmers
- 5 years guarantee
- Slim housing for narrow installations
- High efficiency and reliability

AREAS OF APPLICATION

- Suitable for LED luminaires and LED modules
- Applicable for luminaires of protection classes I and II
- For indoor SELV installations
- Offices, shopping centers, hospitals, restaurants, hotels

Product name	GTIN (EAN)	W	V	V _{OUT}	Hz		
DR PC-PFM-13/220-240/350	4058075239814	13	220...240	17...36	50/60	350	< 5
DR PC-PFM-18/220-240/350	4058075239838	18	220...240	32...54	50/60	350	< 5
DR PC-PFM-25/220-240/700	4058075239852	25	220...240	20...36	50/60	700	< 5
DR PC-PFM-35/220-240/700	4058075239876	35	220...240	30...50	50/60	700	< 5

Product name	W	t _{th} ²	T _a	T _c	PROTECTION CLASS	L × W × H [mm]	No.
DR PC-PFM-13/220-240/350	10...100	50000 ^{a)}	-20...+50	75	II	97 x 43 x 30	1
DR PC-PFM-18/220-240/350	10...100	50000 ^{b)}	-20...+50	70	II	130 x 43 x 30	2
DR PC-PFM-25/220-240/700	10...100	50000 ^{b)}	-20...+50	75	II	130 x 43 x 30	3
DR PC-PFM-35/220-240/700	10...100	50000 ^{c)}	-20...+50	85	II	150 x 43 x 30	4

EQUIPMENT / ACCESSORIES



Product name	DR AY PC-PFM-CLAMP DUO
Product type	Cable clamps for Phase-Cut LED Drivers
GTIN (EAN)	4058075313170
L × W × H [mm]	38.3 x 34 x 28.5

¹ Refer to www.ledvance.com/guarantee for precise conditions | ² a) At maximum T_c = 75°C / 10% failure rate, b) At maximum T_c = 70°C / 10% failure rate, c) At maximum T_c = 85°C / 10% failure rate



LED DRIVER DIP-SWITCH PERFORMANCE

Constant current LED driver with dip-switch current setting



PRODUCT BENEFITS

- High flexibility due to adjustable output currents via dip switch
- Low flickering enables high light quality as well as good visual comfort
- 5 years guarantee
- Slim housing for narrow installations
- High efficiency and reliability

AREAS OF APPLICATION

- Suitable for LED luminaires and LED modules
- Applicable for luminaires of protection classes I and II
- Suitable for build-in luminaires with adjustable current setting
- For indoor SELV installations
- Offices, shopping centers, hospitals, restaurants, hotels

Product name	GTIN (EAN)	W	V	V _{OUT}	Hz		
DR DS-PFM-20/220-240/500	4058075239753	20	220...240	25...42	50/60	250/350/450/500	< 5
DR DS-PFM-30/220-240/700	4058075239777	30	220...240	25...42	50/60	500/600/650/700	< 5
DR DS-PFM-40/220-240/1A0	4058075239791	40	220...240	25...40	50/60	800/900/950/1050	< 5

Product name	t _{in} ²	T _a	T _c	PROTECTION CLASS	L x W x H [mm]	
DR DS-PFM-20/220-240/500	50000	-20...+50	75	II	98 x 44 x 30	1
DR DS-PFM-30/220-240/700	50000	-20...+50	75	II	98 x 44 x 30	2
DR DS-PFM-40/220-240/1A0	50000	-20...+45	75	II	98 x 44 x 30	3

EQUIPMENT / ACCESSORIES



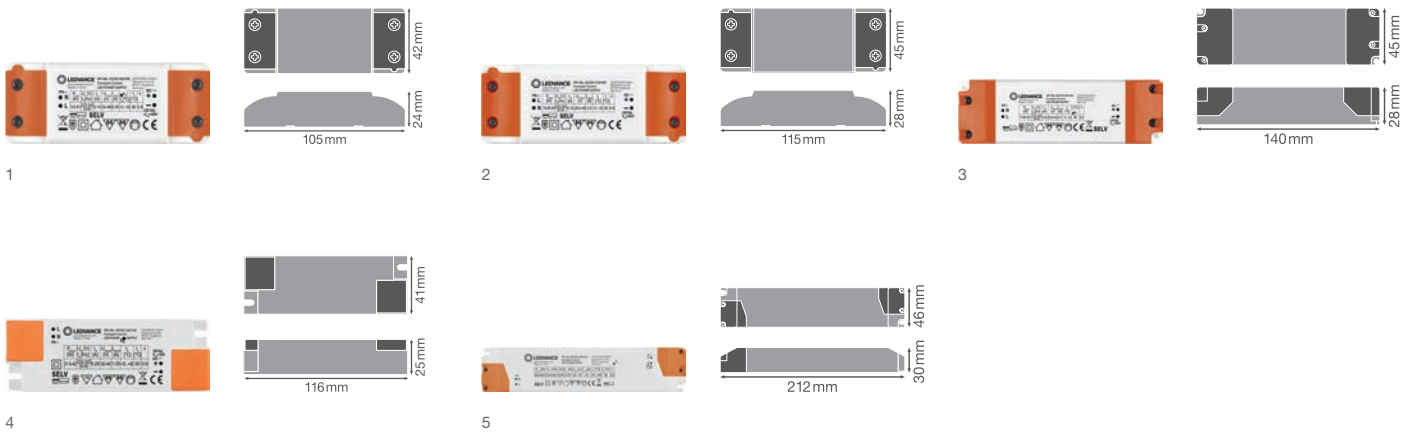
Product name	DR AY DS-PFM-CLAMP DUO
Product type	Cable clamps for DIP-Switch LED Drivers
GTIN (EAN)	4058075313200
L x W x H [mm]	35.7 x 35.2 x 28.2

¹ Refer to www.ledvance.com/guarantee for precise conditions | ² At maximum T_c = 75°C / 10% failure rate

LED DRIVER VALUE



Constant current LED driver with dedicated current



LEDVANCE ¹
3 year guarantee
 CC 350–1400 mA
 IP20

PRODUCT BENEFITS

- Suitable for operation with many discrete LED and COB LED
- Excellent price/performance ratio
- 3 years guarantee
- Quick and simple installation
- High efficiency and reliability

AREAS OF APPLICATION

- Suitable for LED luminaires and LED modules
- Applicable for luminaires of protection classes I and II
- For indoor SELV installations
- Offices, shopping centers, hospitals, restaurants, hotels

Product name	GTIN (EAN)	W	V	V _{OUT}	Hz		
DR-VAL-15/220-240/350	4058075240193	15	220...240	30...46	50/60	350	< 5
DR-VAL-20/220-240/500	4058075240216	20	220...240	28.5...48	50/60	500	< 5
DR-VAL-30/220-240/700	4058075240230	30	220...240	26...43	50/60	700	< 5
DR-VAL-45/220-240/1A0	4058075240254	45	220...240	30...40	50/60	1050	< 5
DR-VAL-60/220-240/1A4	4058075240278	60	220...240	26...43	50/60	1400	< 5

Product name	t _{bj} ²	T _a	T _c	PROTECTION CLASS	L × W × H [mm]	
DR-VAL-15/220-240/350	35000 ^{b)}	-10...+50	80	II	105 x 42 x 24	1
DR-VAL-20/220-240/500	35000 ^{b)}	-10...+50	85	II	115 x 45 x 28	2
DR-VAL-30/220-240/700	35000 ^{b)}	-10...+50	85	II	140 x 45 x 28	3
DR-VAL-45/220-240/1A0	35000 ^{c)}	-10...+45	90	II	116 x 41 x 25	4
DR-VAL-60/220-240/1A4	35000 ^{b)}	-10...+45	85	II	212 x 46 x 30	5

¹ Refer to www.ledvance.com/guarantee for precise conditions | ² a) At maximum T_c = 80°C / 10% failure rate, b) At maximum T_c = 85°C / 10% failure rate, c) At maximum T_c = 90°C / 10% failure rate



LIGHTING CONTROL FROM OSRAM: DYNAMICS MEETS EFFICIENCY

THE SYSTEM APPROACH TO GOOD LIGHT – LIGHT MANAGEMENT SYSTEMS

Light management systems (LMS) comprise all the components needed for dynamic and intelligent lighting. These include LED drivers with DALI interfaces integrated in the luminaires. Other components in light management systems ensure that the luminaires are operated at high levels of comfort, convenience and energy efficiency. For example, light and motion sensors dim the light as soon as a room lit by natural light. They also switch the light on only if there is someone in the room. Considerable energy savings can therefore be achieved.

OSRAM

Products of OSRAM GmbH,
distributed by LEDVANCE

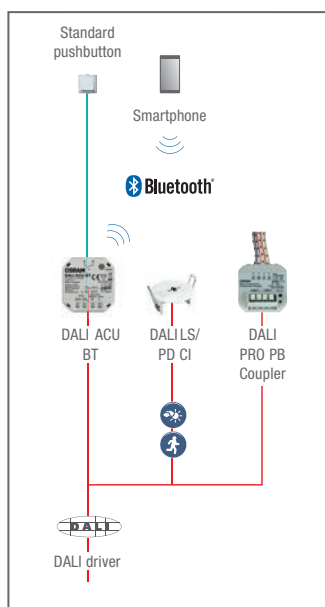
SMARTPHONE CONTROL

DALI ACU BT or LUXeye control units together with appropriate DALI luminaires and sensors (e.g. OSRAM DALI LS/PD CI) form a unit that is both effective and user-friendly. Not least because the parameters of the system can be conveniently operated from a smartphone or tablet. An ideal solution for everything from spotlighting and panel lighting to linear light.



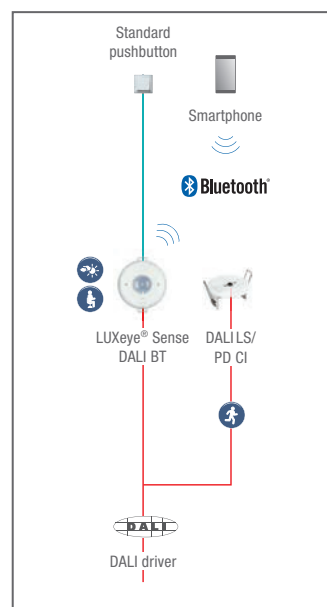
OSRAM DALI ACU BT

Dynamic and efficient
lighting control



OSRAM LUXEYE SENSOR LS/PD

Additional sensor-based
energy savings



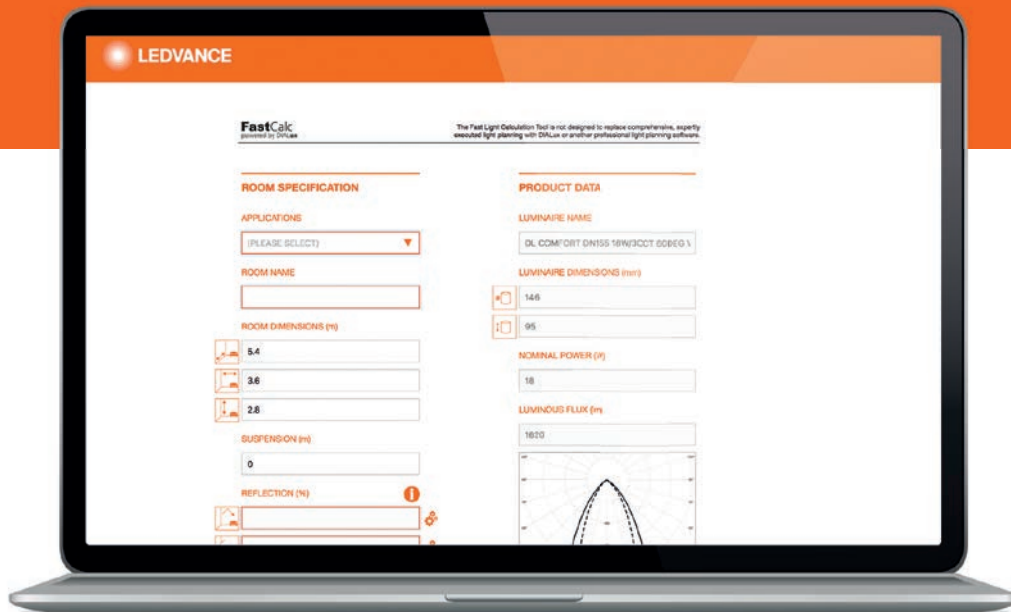
TAILOR-MADE CALCULATIONS – WITH OUR FAST LIGHT CALCULATION TOOL OR

We have put together our tools and services for achieving accurate calculations for your projects. Do you want quick information from the Fast Light calculation tool or detailed professional planning with DIALux and RELUX? We'll give you individual advice and, together with you, we'll plan the optimum lighting for your complete project.

QUICK & EASY

FAST LIGHT CALCULATION TOOL

With the handy calculation tool on our website, we offer installers and lighting professionals a quick and easy way to plan lighting projects successfully. The results are compiled in a PDF document which you can attach to your email tenders, for example. For more information go to ledvance.com/flct



THE INFORMATION PROVIDED BY THE TOOL INCLUDES THE FOLLOWING:

- Number of luminaires needed
- Floor plan showing the distribution of the luminaires
- Illuminance, total power (W) and specific load (W/m²)
- Light distribution curve for every luminaire

The Fast Light Calculation Tool is no substitute for comprehensive professional planning with DIALux or any other professional light planning software.

MORE BENEFITS FOR YOU:

- Intuitive operation of the tool
- Preselection of application areas with minimum lux values
- Info boxes explaining the values to be entered
- Generation of a final PDF with the results, including a floor plan showing the distribution of the luminaires

DIALUX/RELUX

PROFESSIONAL

DIALUX AND RELUX

Good news for DIALux and RELUX users: Since the start of 2018 LEDVANCE has been working with the software producers. DIALux and RELUX users can now easily integrate LEDVANCE products in their lighting plans. Our luminaire data is also BIM-compatible. We also support users with customized advice on planning their lighting systems and offer tailored solutions for an extremely wide variety of lighting requirements – all entirely from a single source.

SAMPLE DIALUX CALCULATION WITH TRUSYS® PFM 50 W/4000 K

ROOM DEFINITION

Industrial storage

ROOM DIMENSIONS

- Floor area: 1,500 m²
- Ceiling height: 8 m
- Installation height: 7 m

REFLECTANCE

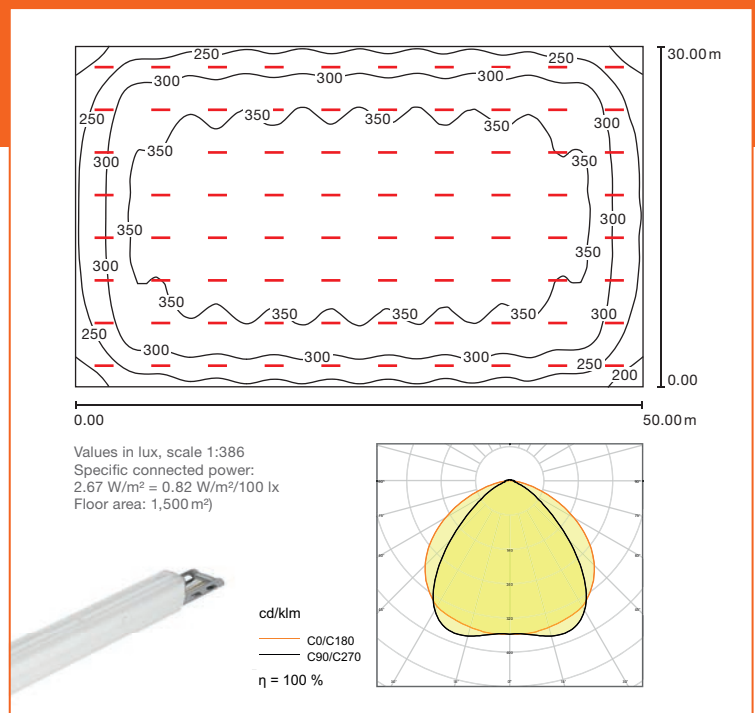
- Ceiling: 70 %
- Walls (4): 50 %
- Flooring: 20 %

BASIS FOR CALCULATION

- Relevant standard DIN EN12464-1
- Required illuminance E_m : 300 lx
- Required uniformity E_{min}/E_m : 0.40
- Maintenance factor: 0.80
- Boundary zone: 0.00 m

RESULTS: ILLUMINANCE IN THE STORAGE ROOMS

Area	Average (target)	Min	Max	Uniformity E_{min}/E_m (target)
work level, storage space	325 lx (300 lx)	168 lx	385 lx	0.516 (0.4)



YOUR BENEFITS AT A GLANCE

Tailored calculation for accurate planning of your project:

- Uniformly good light distribution
- Precise wattage per sqm
- Maximum efficient calculation of required number of luminaires

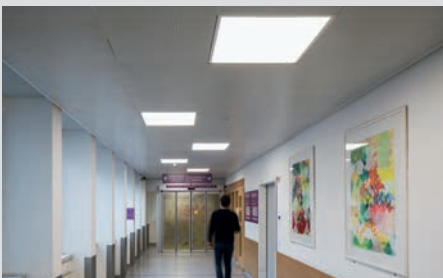
See for yourself.

CASE STUDY: TYROL CLIN MODERN LED SOLUTIONS

PROJECT:

Upgrade to LED lighting at Innsbruck hospital
VERTICAL: Facility management – Health care
APPLICATION: Lighting for hospitals and clinics
TECHNOLOGY: LED technology

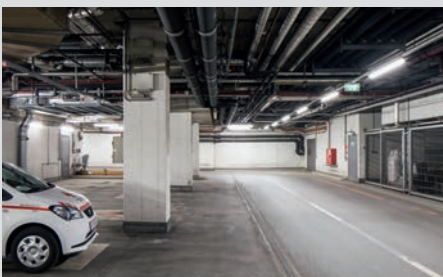
LEDVANCE PRODUCTS:



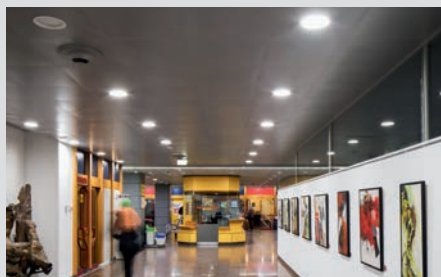
LED Panel 625



LED Panel 1200



LED Damp Proof



LED Downlight



ICS – FROM A SINGLE SOURCE

The Tyrol clinics in the Innsbruck, Hall and Hochzirl-Natters hospitals are committed to sustainability – especially in terms of energy management. The lighting at Innsbruck hospital has consequently been upgraded step-by-step to LED technology since 2016. Among other things, about **6,000 modern LED luminaires from LEDVANCE** have been installed in that time, for example in the corridors of the central supply building, in the underground garage, in the lift areas and in the canteen. Patients, visitors and employees benefit not only from better quality of light. The LED luminaires also achieve **energy savings of up to 50 %**. Other advantages for the Tyrol clinics include simple installation, longer **service life for the luminaires of up to 50,000 hours** and hence reduced expenditure for installation and maintenance.

THE MOST IMPORTANT FACTS AT A GLANCE:

- Around 6,000 new LED luminaires for Innsbruck hospital
- Energy savings for the lighting: up to 50 %
- Cost savings: up to 50 % including light source replacement costs
- Improved quality of light in various areas
- Simple installation, low maintenance

LEDVANCE: ADVANCING LIGHT

BAD LIGHT MAKES YOU SCREAM? WE'VE GOT A SOLUTION FOR THAT!

As a trusted partner for general lighting, all our actions are directed at the fight against bad light. At LEDVANCE we combine traditional and modern, future-oriented lighting technologies. We build on long-term customer relationships and a strong sales network. We are experts in general lighting throughout the world, in technology trends and in the rapidly changing requirements for good light.

As a strong local partner, we are represented in over 140 countries. Our team of specialists focuses on the specific demands of our customers – whether they need luminaires, lamps or electronic components. The extensive LEDVANCE portfolio covers virtually every professional and residential application – from basic to sophisticated lighting.

The LEDVANCE luminaire portfolio is geared toward the wishes of our customers. Each product development is based on our core philosophy: to offer user-friendly, intelligent lighting solutions that aim to improve the well-being of people. And all this in the context of an LED product range that combines extensive options, technical innovation and reliable performance.

Because we always focus on the practical benefits for you as a lighting professional, our luminaires are also easy to plan, easy to install and easy to combine.

Based on these principles, we will continue to develop sophisticated products and provide you with optimum support in your personal fight against bad light.



GOOD LIGHT ALL ROUND

THE FULL LEDVANCE RANGE

LEDVANCE is leading the fight against bad light in every area. That's good news for you because when it comes to luminaires and lamps, but also for electronic components and Smart for Residential products you have a competent partner in LEDVANCE on your side for your complex lighting projects. You can always rely on LEDVANCE for excellent brand quality, professional service and a good price/performance ratio.



AESTHETICALLY FUNCTIONAL LUMINAIRES

The extensive luminaire portfolio from LEDVANCE covers virtually all professional and residential applications and delivers outstanding quality and functionality. What's more, its innovative SCALE design provides instant recognition, trust and flexibility – and was even a winner of the 2019 German Design Award.

EACH LAMP A LIGHTING SOLUTION

LEDVANCE's lamp portfolio includes a wide choice of outstanding efficiency and durability: different shapes, base sizes, light colors and wattages as well as types with additional functions (e.g. sensors). Alongside a broad range of innovative LED lamps, LEDVANCE will continue to offer conventional halogen, energy saver, fluorescent and gas discharge lamps. A win-win situation for you and every one of your customers.

FLEXIBLE LED STRIP SYSTEM

In addition to a large selection of flexible LED Strips and drivers, the LEDVANCE LED Strip System includes a

large number of matching profiles, covers, end caps and mounting brackets. In combination with a large range of luminous fluxes and light colors, the system allows bespoke lighting solutions to be created for virtually any indoor or outdoor ambient, cove or general lighting application. Easy to plan, easy to combine and easy to install – that's the principle here.

SMART FOR RESIDENTIAL

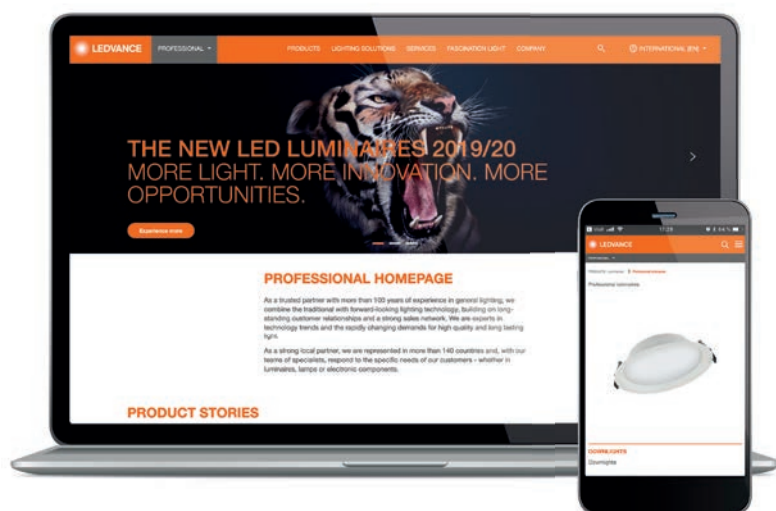
The new Smart for Residential portfolio from LEDVANCE offers the comprehensive combination of innovation, quality, reliability and userfriendliness. LEDVANCE provides a suitable solution for a wide range of different needs for smart lighting.

MORE INFORMATION AND CLEVER TOOLS

Go to www.ledvance.com for more information on LEDVANCE's extensive product portfolio, clever apps and tools that will help you in your day-to-day work.

WHENEVER AND WHEREVER: THE ONLINE PORTAL WITH ALL THE INFORMATION, ADVICE AND EXPERTISE

Are you looking for information about our products and services? LEDVANCE always keeps you up to date: at wholesalers, through our sales employees or via our Customer Service Center (email: kundenservice@ledvance.com). Here you'll find an overview of our competencies, databases and tools.



- ▶ **PERFECTLY FILTERED**
Use the online filters to find precisely what you're looking for in our luminaire portfolio – type of mounting, IP rating, light color, etc.: ledvance.com/luminaires
- ▶ **REFERENCES PROVIDE INSPIRATION**
A selection of some top lighting projects can be found at: ledvance.com/projects
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Our specialized sales department supports and advises our commercial end customers – including face-to-face. Find out all you need to know at ledvance.com/vam
- ▶ **DOWNLOAD CENTER**
Catalogs, compatibility overviews, brochures, and much more are available for you in our download center: ledvance.com/download
- ▶ **OUR TOOLS FOR YOU**
From the LED strip system configurator to the TCO calculator, you will find all the practical tools you need at ledvance.com/tools
- ▶ **SERVICE AT A GLANCE**
You will find a summary of all of our service offerings at ledvance.com/services

NEW: THE ONLINE TRAINING PLATFORM

A host of application-oriented eLearnings for professional users, practical advice on installation, integrated standards checks, planning tips, and much more.

Register and find out more at training.ledvance.com




FAST LIGHT CALCULATOR

Quick and easy calculation of your luminaire project with our Fast Light Calculation Tool* ledvance.com/flct
For details see page 194.

* The Fast Light Calculation Tool is no substitute for comprehensive professional planning with DIALux or any other professional light planning software.

SHEDDING LIGHT, SYMBOLS AND ABBREVIATIONS

	Type of protection		t [h]: L70/B50 @ 25 °C (T _a)
	Type of protection, back / front		t [h]: L80/B10 @ 25 °C (T _a)
	IK impact rating		Beam angle in °
	Color rendering index		Weight
	MacAdam color consistency		Unit of Packaging
	Dimmable or DALI		Recommended retail price
	Luminous flux in lm		Luminaire with cable and plug
	Power in W		Fig. no.
	Color temperature in K		Scale design
	Luminous efficacy		Protection class I
	Guarantee		Protection class II
	Sensor versions		ENEC certification
	Ceiling opening		TÜV Süd certification
	Replacement for traditional lamp technology		TÜV Rheinland certification

LIST OF ABBREVIATIONS

ASYM	Asymmetric
AT	Auto Test
BK	Black
CCT	Correlated Color Temperature
CLO	Constant Lumen Output
D	Direct
DA	Double asymmetric
D/I	Direct / Indirect
DEG	Degree (beam angle)
DK	Dark Light (cut-off)
DL	Downlight
DN	Diameter Nominal
DP	Damp Proof
EM	Emergency
ER	Energy Rail
FL	Flood (beam angle)
Flood	Floodlight
FP	Fire-Proof (fire rated up to ...)
GY	Gray
HB	High Bay
HO	High Output
IND	Indirect
INDV	IndiviLED®
LN	Linear
MT	Manual Test
MP	Microprismatic (= UGR < 19)
N	Narrow (beam angle)
NFL	Narrow Flood (beam angle)
O	Outdoor
OP	Opal
PFM	Performance
RD	Round
S	Sensor
SF	Surface
SI	Silver
SP	Spot
SQ	Square
Surface-C	Surface Circular
SYM	Symmetric
TH	Through-wiring
Track	Tracklight
UGR	Unified Glare Rating
UO	Ultra Output
VAL	Value
VN	Very narrow beam angle
VW	Very wide beam angle
W	Wide (90° beam)
WT	White
WW	Wallwasher = asymmetric

ABOUT LEDVANCE

With offices in more than 50 countries and business activities in more than 140 countries, LEDVANCE is one of the world's leading general lighting providers for professional users and end consumers. Having emerged from the general lighting business of OSRAM GmbH, LEDVANCE offers a wide-ranging assortment of LED luminaires for a broad spectrum of application areas, intelligent lighting products for Smart Homes and Buildings, one of the largest LED lamps portfolios in the industry as well as traditional light sources.



LEDVANCE

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Germany
LEDVANCE.COM

LEDVANCE is the expert partner for installers and lighting professionals. To match our extensive range of luminaires we also offer a large portfolio of innovative LED lamps in excellent brand quality. Further information about our range of lamps and services is available online at www.ledvance.com

Use our mobile apps and online tools to calculate the possible savings for your next LED project in no time, find the right lamp or luminaire and scroll through the latest catalogs:
www.ledvance.com/tools

Partner:



LEDVANCE.COM