



TOLEDO FLAT PRO

SURFACE MOUNTED AND RECESSED DOWNLIGHTS
FOR HIGH REQUIREMENTS

TOLEDO FLAT PRO



Recessed and surface mounted downlights,
for high requirements

SOPHISTICATED EXTENSION

In addition to the almost incomprehensible range of recessed, surface-mounted, pendant, fabric shade and recessed versions, the Toledo Flat Pro large-area luminaire is now also available for higher requirements. This version is especially suitable for requirements of DIN EN 12464 for treatment rooms in the healthcare sector with $UGR \leq 19$ and $CRI > 90$. It is also excellently suited for office areas and computer workstations. A highly smooth diffuser made of polycarbonate allows for low sensitivity to dirt and at the same time is easy to clean, so that even higher hygienic requirements can be met. Best conditions for the use in health care, cosmetic studios and wellness areas.

Both add-on housings and insert frames for 625 and 600 modular grid ceilings are available as optional accessories. A closed-cell silicone foam gasket is available as an accessory to prevent the spread of germs and viruses.

ADVANTAGES

- ⊕ Ultra thin LED downlight (Recessed- and surface mounting).
- ⊕ Especially suitable for requirements in treatment rooms in the healthcare sector according to DIN EN 12464 ($UGR \leq 19$, $CRI > 90$).
- ⊕ Ideal for office areas ($UGR \leq 19$) and environments with computer screens in accordance with EN 12464-1.
- ⊕ Version with light color 940 qualified for medical applications according to Cyanosis Observation Index ($COI < 3.3$).
- ⊕ Diffuser made of resistant polycarbonate (PC) with smooth surface on room side for low dirt sensitivity to prevent the settling of germs and bacteria.
- ⊕ Easy cleaning with resistance to detergents/disinfectants.
- ⊕ Room side IP54.
- ⊕ No direct glare due to satin microprismatic diffuser.
- ⊕ LED rated life 80,000 h (L_{CLO}) (DALI version), CLO control for constant light output over the entire service life.
- ⊕ Versions with Casambi smart+free Bluetooth® control for wireless network and operation using Android / iOS devices, free app available for download.
- ⊕ Suitable for through wiring as standard.
- ⊕ Accessories:
 - Specially adapted closed-cell silicone foam gasket to prevent the distribution of germs and viruses;
 - Surface mounted housing and insert frame module 600 and 625
- ⊕ Areas of application: Treatment rooms in the health care sector, rooms with high hygienic requirements, medical practices, hospital bed rooms, therapy rooms, etc.; offices, stores, cosmetic and hairdressing studios, HCL wellness areas, etc.





TOLEDO FLAT PRO

Technology



Diffuser made of resistant polycarbonate (PC) with smooth surface on room side for low dirt sensitivity to prevent the settling of germs and bacteria.

Easy cleaning with resistance to detergents/disinfectants

Suitable for ceiling thicknesses of 1-20 mm

Tunable white versions, dynamically adjustable from 2700 K to 6500 K at CRI >90



Ideal for use as part of a Human Centric Lighting concept

IP54

High type of protection (room side)

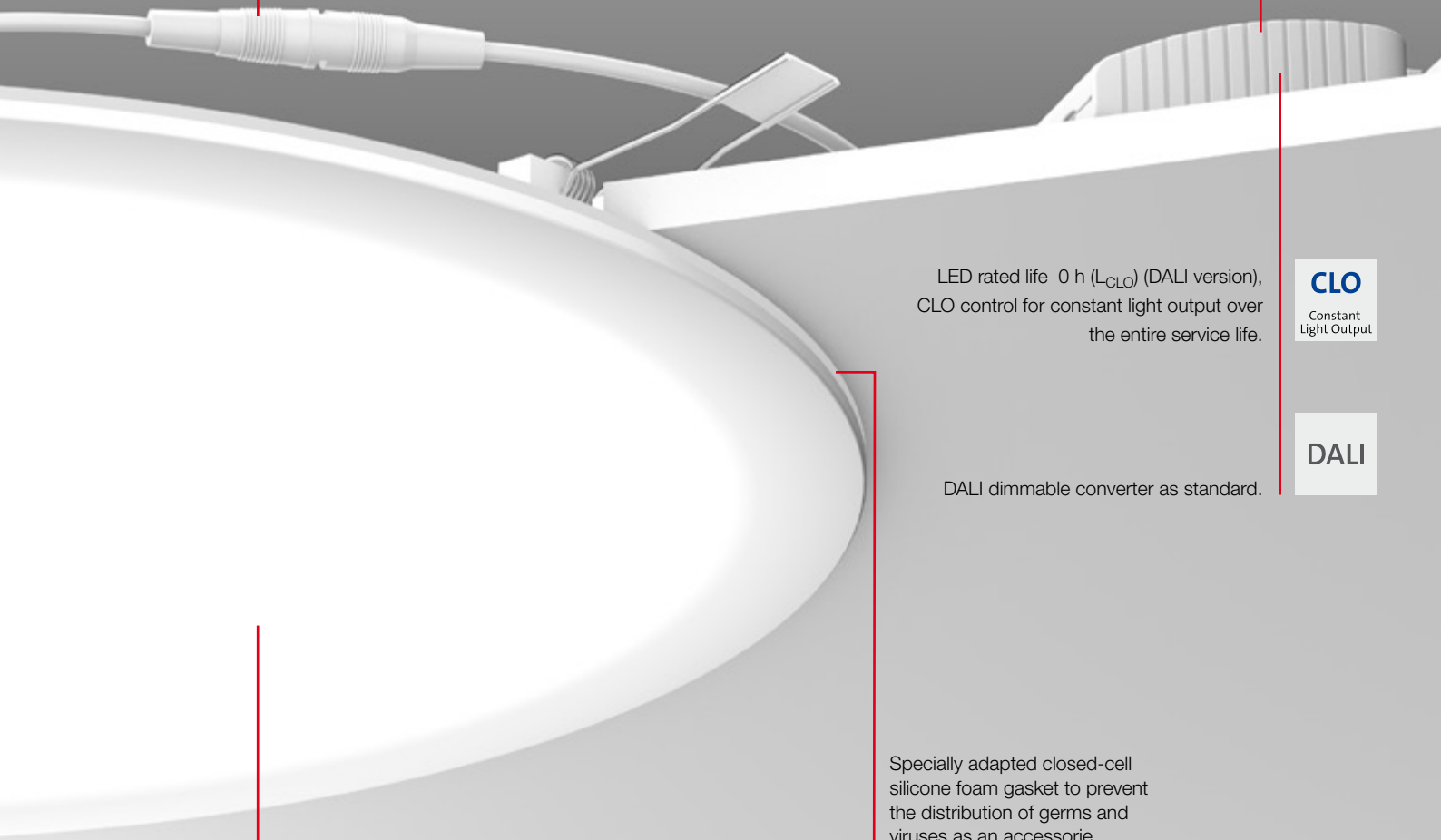
The Cyanosis Observation Index (COI) describes the quality of the light spectrum of a luminaire for suitability for medical applications. Luminaires with a standardised COI of less than 3.3 are particularly suitable for reliable detection of cyanosis. Cyanosis is a bluish discolouration of the skin or the mucosa caused by a decrease in arterial oxygen saturation. This can be a symptom of dangerous disorders of the human organism. For an initial early visual diagnosis, the quality of light is crucial.

The Toledo Flat Pro with light colour 940 has a COI of 2.94 and is therefore ideal for such applications.



Very easy plug-in installation (Quick connector)

Emergency luminaire in preparation



LED rated life 0 h (L_{CLO}) (DALI version),
CLO control for constant light output over
the entire service life.



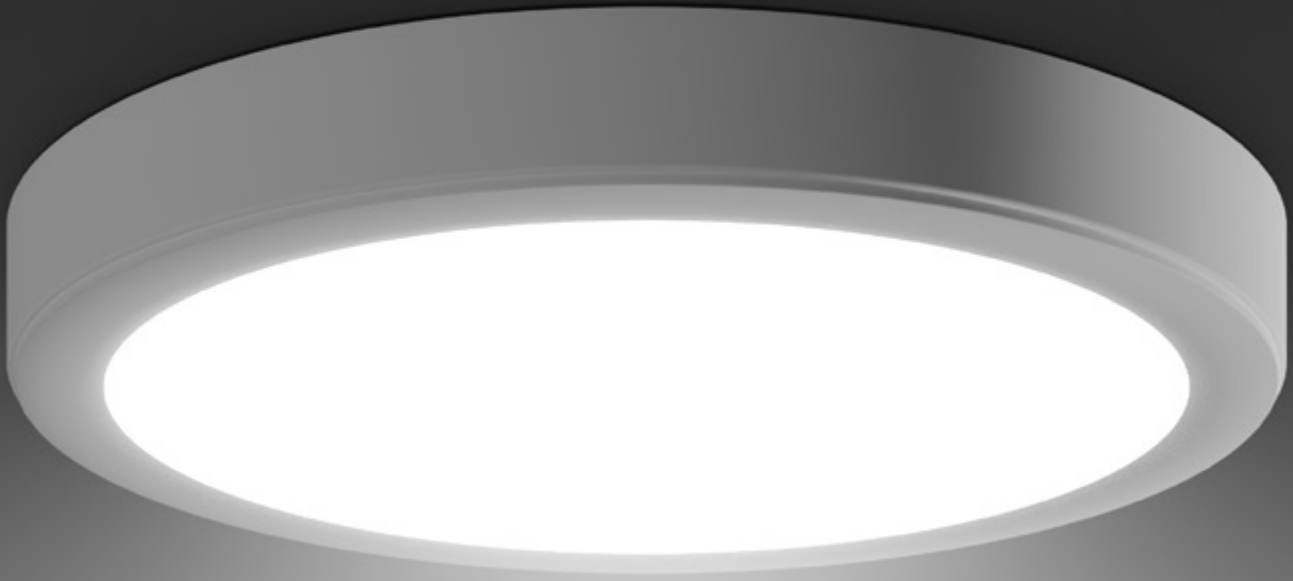
DALI dimmable converter as standard.



Specially adapted closed-cell
silicone foam gasket to prevent
the distribution of germs and
viruses as an accessorie



Versions with Casambi smart+free Bluetooth®
control for wireless network and operation
using Android / iOS devices, free app available
for download



PHOTOMETRICS

- ⊕ Colour rendering index CRI > 90
- ⊕ UGR ≤ 19
- ⊕ Colour temperature 3,000 K and 4,000 K
- ⊕ Luminous flux up to 2.800 lm
- ⊕ Luminous efficiency up to 108 lm/W
- ⊕ Colour consistency within 3-steps MacAdam (3 SDCM)
- ⊕ LED rated life 80,000 h (L_{CLO}) (DALI version),
CLO control for constant light output over the entire service life.
- ⊕ Tunable White versions also with CRI > 90, adjustable from 927 to 965
- ⊕ Particularly homogeneous, soft and glare-free light
thanks to the Sidelite technology

Recessed downlights | Toledo Flat Pro

Type of Protection: IP 20, IP 54 on room side

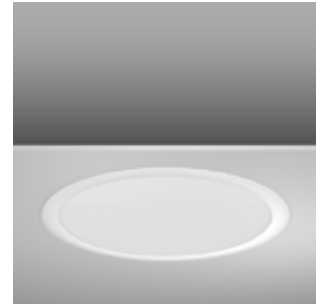
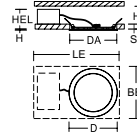
Protection Class: II

Ceiling thickness S: 1-20 mm

Impact Protection: IK03

Housing: die-cast aluminium. Diffuser made of resilient polycarbonate (PC) with smooth surface. Ceiling installation with spring system. Mounting depth depends on ceiling strength. Including separate LED converter with connecting cable 250 mm.

Available colour: 2 = white



Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [lm]	System power [W]	UGR	dim-able
Recessed downlights							
Diffuser polycarbonate smooth, satin, microprismatic							
Ceiling cut out DA 470 mm							
901719.002.76	D 495, H 6, HE 35-55	LED	930	2650	26	81 18,3	DALI
901719.002.1.76 *	D 495, H 6, HE 35-55	LED	940	2800	26	81 18,5	DALI
Tunable White - 2700 K to 6500 K							
901719.002.2.76	D 495, H 6, HE 40-59	LED	927-965	2500	30	81 18,2	DALI
901719.002.2.730	D 495, H 6, HE 55-75	LED	927-965	2500	30	81 18,2	smart+free

* Qualified for medical applications according to Cyanosis Observation Index (COI < 3.3).

Accessories | Surface mounting accessories

Ceiling frame and mounting plate galvanised metal. Cylinder housing sheet steel, powder coated. Downlight can be locked without tools.

Surface mounted housing

982181.002	D 500, H 57	for Toledo Flat Round D 495
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Recessed frame

Module 600

982182.002	L 595, B 595, H 36	for Toledo Flat Round D 495
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Module 625

982183.002	L 622, B 622, H 36	for Toledo Flat Round D 495
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Silicone foam gasket

982799.002	D 495, H 3	Closed-cell silicone foam seal to prevent the spread of germs and viruses
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Accessories | Chintz decorative element Toledo Flat Round

Standard colour covering surface: 66.8003.01 white

Further colours available at the same price. Please include the colour code in your order.

Can be retrofitted without tools to the recessed downlight.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Chintz lampshades

982323.002	D 500, H 60	Chintz decorative cylinder for Toledo Flat Round D 495
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Cannot be fitted with surface mount housing



Surface mounted downlights | Toledo Flat Pro

Type of Protection: IP 40

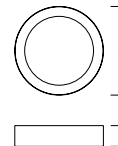
Protection Class: II

Impact Protection: IK06

Cylinder housing sheet steel, powder coated. Bezel ring: die-cast aluminium, powder coated.

Diffuser made from resilient polycarbonate (PC) with smooth surface. Integral driver.

Available colour: 2 = white



Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [lm]	System power [W]	UGR	dim-able
Surface mounted downlights							
Diffuser polycarbonate smooth, satin, microprismatic							
901720.002.76	D 500, H 63	LED	930	2650	26	81 18,3	DALI
901720.002.1.76 *	D 500, H 63	LED	940	2800	26	81 18,5	DALI
Tunable White - 2700 K to 6500 K							
901720.002.2.76	D 500, H 63	LED	927-965	2500	30	81 18,2	DALI
901720.002.2.730	D 500, H 63	LED	927-965	2500	30	81 18,2	smart+free

* Qualified for medical applications according to Cyanosis Observation Index (COI < 3.3).

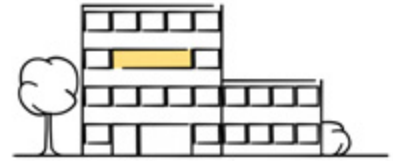
LIGHT MANAGEMENT SYSTEMS

Overview



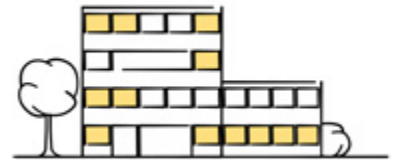
light control +3 Economy Multi DALI

The unbeatable price/performance winner for smaller installations. The system combines simple commissioning via smartphone, low wiring effort and flexible configuration and is therefore ideal for **group offices, conference rooms and classrooms**. Programmable buttons and sensors can also be integrated via DALI connections in order to achieve even greater energy savings. The system has an integrated timer and can therefore be used to set up HCL.



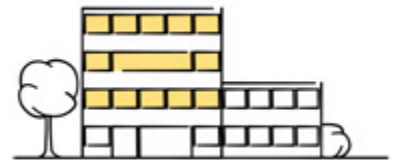
Casambi smart+free

The wireless light management system for maximum functions and configuration options. Casambi smart+free solutions are perfect for **residential buildings, shop and hotel**, as 3-wire cabling is enough - also suitable as a module for subsequent installation into existing luminaires. The module is already integrated into luminaires with the article number ending .730. You can configure the system to your individual needs due to the wide range of accessories from the Casambi ecosystem. The integration here is very intuitive and can be completed by users without prior knowledge in just a few minutes.



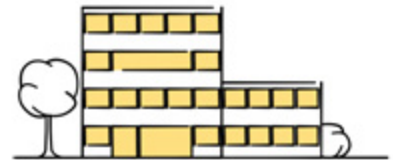
light control +3 Professional Control

The system is suitable for complex applications in **warehouses, room and floor control and production areas**; daylight dependant control, dynamic light control to circadian daylight simulation in Human Centric Lighting (HCL) and monitoring of energy data. In addition, the systems can be networked to make luminaire data available to other systems. light control+3 Professional is the perfect entry level lighting system for the IoT world.






light control +3 Professional Customised

Lighting management can integrate with your **building management system** in **office buildings, production halls and terminals**. In this way, you can combine trades such as heating, sanitation, ventilation, security and blinds with lighting in one control system and even add additional functions such as monitoring, predictive maintenance and energy reporting if desired. Other additional functions can be programmed and integrated as per your individual requirements. Our support team would be happy to help in this regard, from planning up to commissioning.



You still haven't found the right system for you?

Along with the systems shown here, we would also be happy to create a customised control system for your project. Please contact your designated on-site sales employee or contact our Planning department via e-mail at lms@rzb-leuchten.de or by phone at +49 951 / 79 09-396.

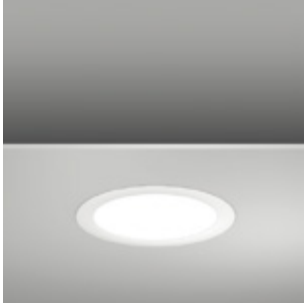
	light control + ³ Economy Multi DALI	Casambi smart+free	light control + ³ Professional Control	light control + ³ Professional Customised
				
Application	Group offices Conference rooms Classrooms	Residential buildings Shop Hotel	Warehouses Floor control Production areas	Office buildings Production halls Terminals
Integration of indoor/outdoor lighting	✓	✓	✓	✓
Can be combined with				
Communication	wired	wireless	wired	wired + wireless
Infrastructure requirements	L, N, PE, DA, DA (5 wires cable)	L, N, PE (3 wires cable)	L, N, PE, DA, DA (5 wires cable)	L, N, PE, DA, DA (5 wires cable)
Commissioning	by electrician	by electrician	RZB service technician	RZB service technician
Configuration	App, Plug & Play	App, Remote access	PC-Tool, Remote access	RZB service technician
Operation	Switches, Buttons, App	Switches, Buttons, App	Switches, Buttons, App, Web access	Switches, Buttons, PC, Web access
Number of luminaires (1 EB) <small>(Number of luminaires depends on the number of EB in the luminaire)</small>	32	1	256	any
Number of sensors <small>(presence, motion)</small>	4	1 per module	50	any
Dimmable	✓	✓	✓	✓
Motion/presence detection	✓	✓	✓	✓
Daylight-dependent control	✓	✓	✓	✓
Scenes/Groups	✓	✓	✓	✓
Timer/Calendar functions	✓	✓	✓	✓
HCL / Tunable White	✓	✓	✓	✓
RGB		✓	✓	✓
Network integration		✓	✓	✓
Remote access: programming, operation, maintenance		✓	✓	✓
IoT ready		✓	✓	✓
Predictive maintenance, monitoring, read out luminaire data			✓	✓
Beacon for indoor navigation, tracking, asset management		✓		✓
Integration of additional sensors <small>(CO₂, temperature, gas...)</small>				✓
Integration of other trades <small>(heating, air conditioning, security)</small>				✓
Order number with extension	.76 (DALI)	.76 (DALI) .730 (smart+free)	.76 (DALI)	.76 (DALI)



TOLEDO FLAT PRO

Discover the possibilities...

FURTHER LUMINAIRES, MATCHING THIS SERIES:



⊕ Toledo Flat recessed downlights



⊕ Toledo Flat surface mounted downlights



⊕ Toledo Flat pendant luminaires



⊕ Toledo Flatliner fabric lampshade luminaires



⊕ Parledo

HIGHEST PRODUCT AND CONSULTING QUALITY

⊕ RELIABILITY

We are your reliable partner. From the first idea to the implementation and far beyond, we accompany your project. Personal, passionate and individual. Thanks to our excellent expertise, top product quality and services such as light planning, economic efficiency analysis and commissioning, we meet the high demands of all parties involved in the planning process.

- ✓ availability of BIM files
- ✓ easy and quick installation
- ✓ quality and long warranty

⊕ WARRANTY

The creation of high quality lighting solutions is our passion. Our products are developed and manufactured with the utmost care.

In addition to SMART TECHNOLOGY and EXCELLENT DESIGN, we are dedicated to manufacture luminaires of highest quality throughout the entire value chain through to After Sales Service.

Because of this, we confidently grant you a 5 years warranty on LED luminaires and 2 years warranty on emergency luminaires with effect of the date of invoice without prior registration of your project.

Warranty terms to be found under

rzb.de/en/service/led-luminaire-warranty

RZB - FOR A TANGIBLE ADDED VALUE.



01.2022



RZB
Rudolf Zimmermann,
Bamberg GmbH

Rheinstr. 16
96052 Bamberg
Germany

Phone +49 951 79 09-374

www.rzb-lighting.com
export@rzb.eu



Member of **licht.de**