

Upgrade now. Benefit immediately.



# Refurbishment solutions.

Quick replacement. Maximum savings.



# Refurbishment solutions

### Solutions for indoor lighting

### Industry

- **12** Trunking systems
- 18 Highbay luminaires
- 20 Damp-proof luminaires

### Office

- **24** Recessed luminaires
- 28 Surface-mounted luminaires
- **30** Downlights
- **32** Light management systems

# Solutions for outdoor lighting

- 34 Road luminaires
- **38** Area lighting

## **Refurbish** your lighting.

And save up to 80% with

modern lighting technology.

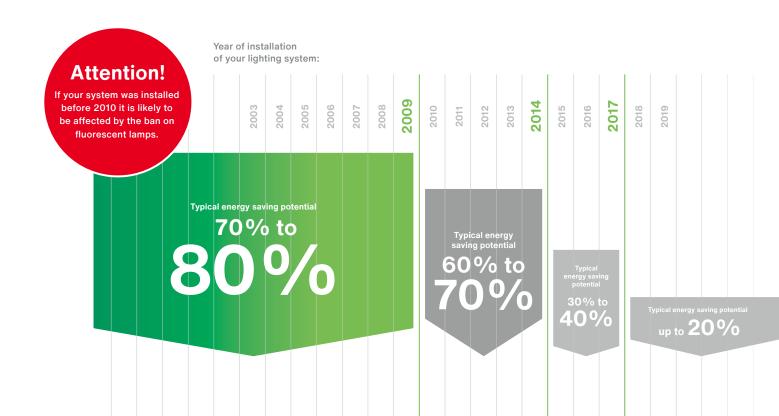
Register now for a no-obligation check of your lighting.

4

In typical cases, **80% in energy and maintenance costs** can be saved. And even if you are already using LED: if your system is older than four to five years you can **save up to 40%** thanks to state-of-the-art technology.

You set the path: install a completely new and digital system or reuse as much of the existing infrastructure as possible. In both cases, we check and calculate your savings potential without any obligation for you.

### When shall we start?



# Fluorescent lamps will be banned in 2023!

February 25, 2023



- Compact fluorescent lamps (without integrated ECG)
- T5 circular fluorescent lamps

August 25, 2023



T5 linear fluorescent lampsT8 linear fluorescent lamps

According to EU Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), Annex III, the placing on the market of these lamps is prohibited in the EU after this date.

### The government supports lighting refurbishments with attractive subsidies in many countries.

SITECO solutions ideally meet the eligibility requirements. Your local SITECO contact person will work with you to calculate subsidies and assist with the application.

# Government funding for efficient buildings (example) Minimum technical requirements for the funding program for efficient buildings SITECO lighting solutions System luminous efficacy with LED continuous row luminaires at least 140lm/W, otherwise 120lm/W ✓ up to 180lm/W Luminous flux maintenance of LED luminaires > L80/50,000h ✓ up to L90/up to 100,000h General conditions: • Optimization, refurbishment or new installation of lighting systems in existing buildings • Investment volume at least €2,000, maximum €15 mill. Eligible expenses: • Complete luminaire replacement: new lighting system including installation and dismantling costs of old system • Control and regulation technology, e.g. our intelligent SITECO Connect light management system • Required ancillary work and components, e.g. lighting design

# Light is **teamwork**.

# How much work can we take off your hands?

#### Would you rather focus on your core business?

No problem: SITECO supports owners, contractors and specifiers when it comes to lighting refurbishments. What can we do for you?

Would you like to learn more about our solution elements?

### Light audit

Our experts review your existing lighting installation and specify the individual requirements for your new system on site.

- Savings in operating costs and CO<sub>2</sub>
- Investment and payback

### A single appointment – many insights.

### Where is the greatest potential? Where is a specific need for action?

We review the status quo of your existing installation on site. On this basis, we then develop possible scenarios for your new lighting – custom-tailored to your specific needs and requirements.



### Full transparency.

### How much cost can be saved? And how much CO<sub>2</sub>?

Our experts inspect the lighting system and transparently show you how the system can be made state of the art.

You'll also learn how quick the payback is: refurbishment projects often pay for themselves in less than two years. This has been our experience from numerous cases.



# Reduction of operating costs by 755 0/0

### Because it pays off.

Calculation example for a new lighting system

	old installation	new installation	
Luminaire type	4 × 58W, ECG	Licross, 9,000lm	
Number of luminaires	153	162	
Energy consumption per year in kWh	138,753	37,066	
Reduction in energy consumption per year in kWh		-101,687	
<b>CO</b> <sub>2</sub> emission per year in t	59.2	15.8	
Reduction in CO <sub>2</sub> emission per year in t		-43.4	
Operating costs per year in €	42,624	10,771	-7
Savings per year in €		-31,853	-1
Costs for lighting and installation in $\in$	Payback:	60,129	
Investment minus 15% efficient buildings subsidy in $\in$	1.5 years	51,110	
Investment as monthly installment over 5 years in $\in$	from day 1	1,202	

Calculation based on energy price of 0.26 €/kWh.

### Planning

We develop a lighting concept or customized solution tailored precisely to your needs -

- enabling you to benefit from outstanding and sustainable lighting and control technology.
- Lighting design
- Lighting concept and electrical concept
- Customizing solution

### Lighting concept and electrical concept The solution in concrete terms.

Our experts show you what is already possible today. Not in theory, but directly at your location. We transform your ideas into technical solutions for you, along with the functional and design requirements. To achieve this we work hand in hand with architects, lighting designers, electrical planners and installation companies. To enable you to make the best decision, we bring the planning process to life by using state-of-the-art visualization.



### **Customization** Refurbishing existing systems requires custom solutions.

When all catalog options are exhausted, our customization process begins. Developing individual customer solutions is our daily bread and butter. Our refurbishment kits can be adapted to any situation, be it suspended drywall ceilings, metal panel ceilings or system ceilings.

Refurbishments can be carried out with minimal effort: In most cases, existing housings and cables can be used, eliminating the need for complex drywall and cabling work. Thus, the installation can be carried out during running operation.

### Everything is possible. Simply contact us.

### Modification of standard luminaires

- Customization of housing dimensions, colors and mounting accessories – for optimal integration into existing ceiling systems
- Changing the light color and color rendering

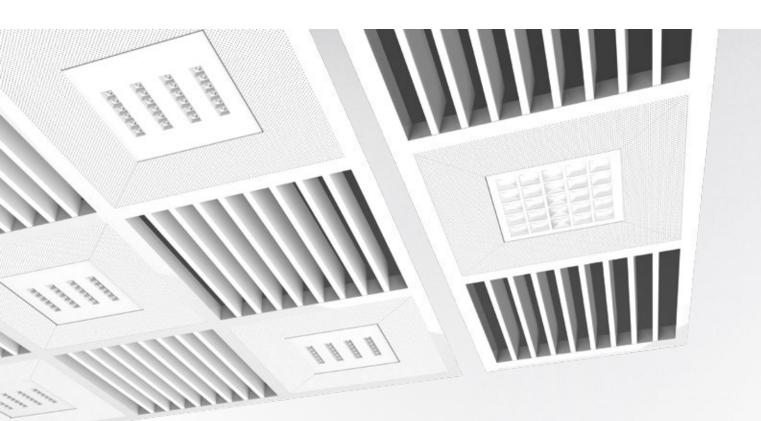
### 2 Modular kit systems

- Versatile, combinable systems for your project solution
- Modular SITECO optic platforms as the basis for your custom luminaire

### 3

**Development of special luminaires** 

- Concept development and project management
- Construction planning and special luminaire construction with an experienced development team



### Financing and funding

Our individual financing solutions let you save from day one. The terms are flexible and depend entirely on your needs. We also prepare the efficiency certificate verifying at least 50 % CO<sub>2</sub> savings for the funding application.

- Funding advice
- Financing

### We advise on funding money.

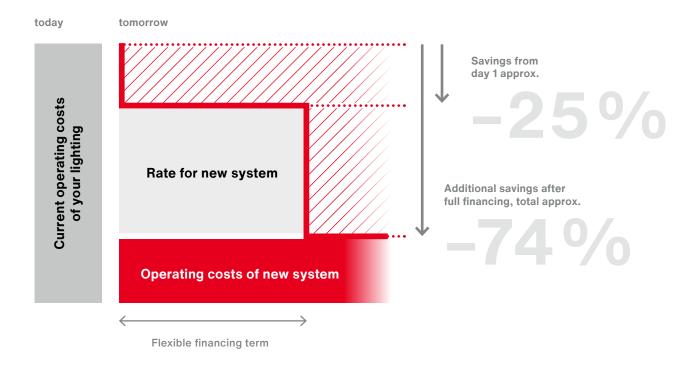
Investing in climate-friendly lighting, you can receive subsidies for efficient indoor and outdoor lighting. How does it work? SITECO knows. We help you select the optimal funding. We work with you to calculate subsidies and financing. And we also assist with the application. Please contact your local SITECO contact person for further details.

### We take care of it - you save.



### Thanks to financing, very little own resources are required.

We would like to show you how this works. Because it can be done – simply by spreading the investment for the new lighting over several years. It then often carries itself, because more operating costs are saved from day one than are incurred in monthly installments. We will gladly do the calculations for you and your project.



At SITECO, we match the financing exactly to your needs. This means that you save money from day one. Simply contact us for a quote that precisely fits your requirements!

- Which funding programs are eligible in which countries?
- Calculation of the financing effect
- Support with the application

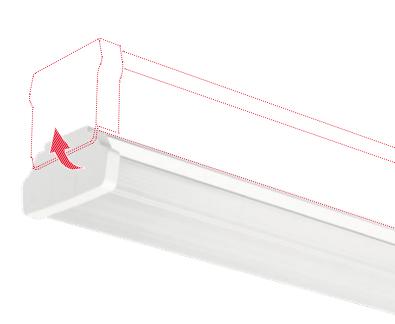


12

## **DUS 31**

### Updating the classic among trunking systems with state-of-the-art technology.

- · easy implementation of the latest energy efficiency standards in existing installations
- + highly efficient LED luminaire insert with up to 166 lm/W for refurbishing existing DUS trunking systems equipped with fluorescent lamps
- · proven, functional system with state-of-the-art technology
- prismatic frosted optic for low glare and high visual comfort
- quick and simple mounting







#### **Technical data**

Color temperature	4,000 K	Temperature range	–35 +30 °C
Luminous flux	8,950lm   12,380lm	Rated service life	50,000h (L85/B50) at 25°C
Color rendering index	CRI > 80	Mounting	luminaire insert for refurbishment of
Luminous efficacy	up to 160Im/W		existing DUS systems
Beam angle	wide distribution	Dimensions	luminaire insert: L = 1,535mm
Cover	PMMA, frosted	Connection voltage	220 240 V AC
Control	On/Off Multilumen	Housing	sheet steel, white

Replacement for DUS luminaire insert	к	Im 8-level adjustable	w	lm/W	Control	Weight	Order no.
1 × 58 W	4,000	5,040     8,950	60	150	On/Off Multilumen	1.8 kg	53BD812M1V4085
1 × 58 W or 2 × 58 W	4,000	5,050     12,380	77	160	On/Off Multilumen	1.9 kg	53BD812M1V4120

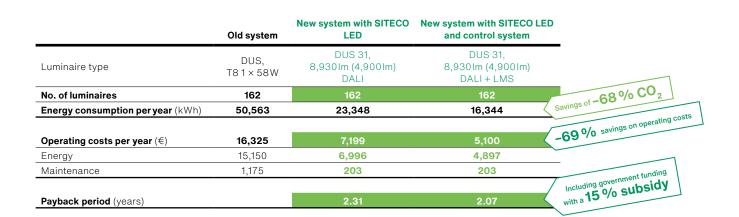
#### Accessories

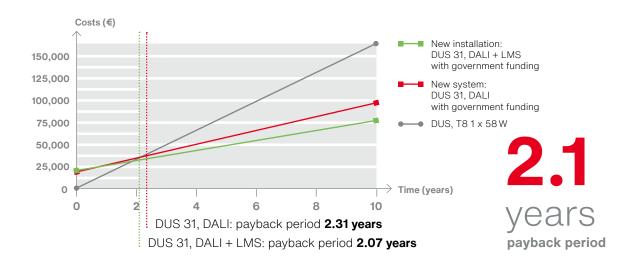
Accessories	Weight	Order no.
DUS, blind cover, plastic, IP20, length 1,535 mm	0.2kg	5LJ90830ED
DUS, blind insert, sheet steel, IP60, length 1,535mm	0.8kg	5LS90800ED

# It has never been more worthwhile.

Numbers say more than a thousand words. Our example calculation of a production hall shows you how much can be saved.

### Upgrade now. Benefit immediately.

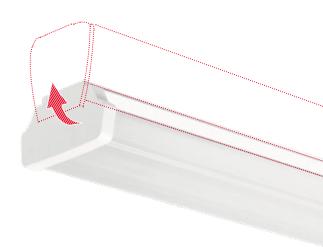


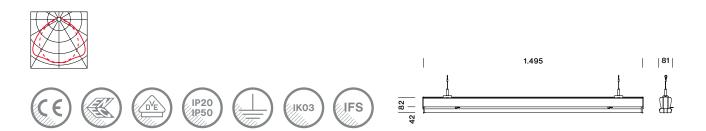




### The perfect trunking solution for performance and efficiency.

- easy implementation of the latest energy efficiency standards in existing installations
- highly efficient LED inserts with up to 166lm/W also suitable for refurbishing conventional luminaire inserts in existing Modario systems to use full energy-saving potential
- · proven, functional system with state-of-the-art technology
- · prismatic frosted optic for low glare and high visual comfort
- quick and simple mounting





Color temperature	4,000 K	Control	DALI 2   On/Off Multilumen
Luminous flux	8,930lm     12,380lm	Temperature range	-25 +30 °C   -35 +35 °C
Color rendering index	CRI > 80	Rated service life	50,000h (L85/B50) at 25°C
Luminous efficacy	up to 160 lm/W	Dimensions	luminaire insert: L = 1,495mm
Beam angle	wide distribution	Connection voltage	220 240 V AC
Cover	PMMA, frosted	Housing	sheet steel, white

Replacement for Modario luminaire insert	к	<b>Im</b> 8-level adjustable	w	lm/W	Control	Temp. range	Weight	Order no.
2 × 35 W, 2 × 49 W or 1 × 80 W	4,000	5,040     8,950	60	150	On/Off Multilumen	-35 +30 °C	1.9 kg	53BM812M1V4085
2 × 49 W	4,000	8,930	62	144	DALI 2	-25+30°C	1.9 kg	53BM812D2V4085
2 × 35 W, 2 × 49 W, 1 × 80 W or 2 × 80 W	4,000	5,050     12,380	77	160	On/Off Multilumen	-35 +35 °C	1.9 kg	53BM812M1V4120
2×80W	4,000	12,350	80	155	DALI 2	-25+30°C	2.0 kg	53BM812D2V4120

Accessories	Weight	Order no.
End cap, PC, white, 10-pole infeed, set of 2	0.1kg	5TR90161
Blind insert, steel, white, IP20, length 1,495mm	0.5 kg	5TR30000Q
Blind cover, PC/ABS, signal white (RAL 9003), IP20, length 1,495 mm	0.2 kg	5TR30200Q2



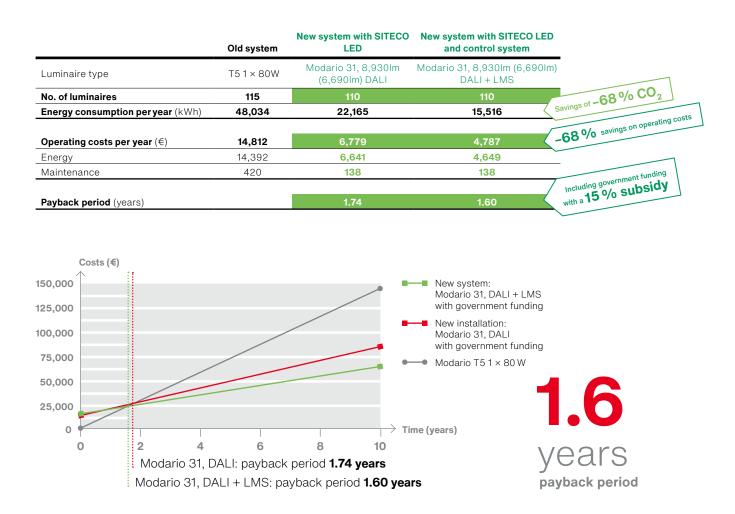
### Modario 31 sensor technology

Function	Product	Family	Order no.
	O	Modario	5TR305FCMA
Master function (DALI)	Sensor interfaces MD	external	59US1FCMA
		Sensor PR1-M, storerooms, corridors	59US1HXMPR1A
	Sensor heads M	Sensor PR2-M, shelf warehousing and highbay racking	59US1HXMPR2A
	Sensor neads M	Sensor PC1-M, dispatch areas 2 4 m	59US1HXMPC1A
		Sensor PC5-M, dispatch areas 4 14 m	59US1HXMPC5A
	Sensor interfaces S	Modario	5TR305FCSA
	Sensor Interfaces S	external	59US1FCSA
01 (DALI)		Sensor PR1-S, storeroom, corridor	59US1HXSPR1A
Slave function (DALI)	Osma sin hara da O	Sensor PR2-S, shelf warehousing and highbay racking	59US1HXSPR2A
	Sensor heads S	Sensor PC1-S, dispatch areas 2 4 m	59US1HXSPC1A
		Sensor-Head PC5-S, dispatch areas 5 14 m	59US1HXSPC5A
Start-up		Smart Remote	59UC3RCA

### It has never been more worthwhile.

Numbers say more than a thousand words. Our example calculation of a production hall shows you how much can be saved.

### Upgrade now. Benefit immediately.

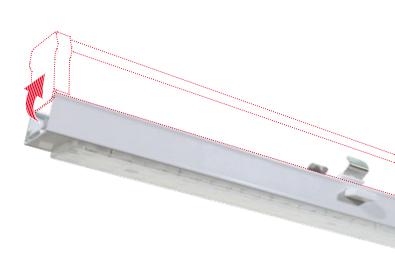




### Refurbishment Iuminaire insert 31

### The universal insert for trunking refurbishment.

- enables refurbishment of different trunking systems through individual plug connectors and end caps for length compensation of the luminaire inserts
- easy implementation of the latest energy efficiency standards in existing installations
- · simple replacement due to tool-free mounting
- highly efficient LED inserts with up to 160 lm/W
- long service life, maintenance-free





### 

#### **Technical data**

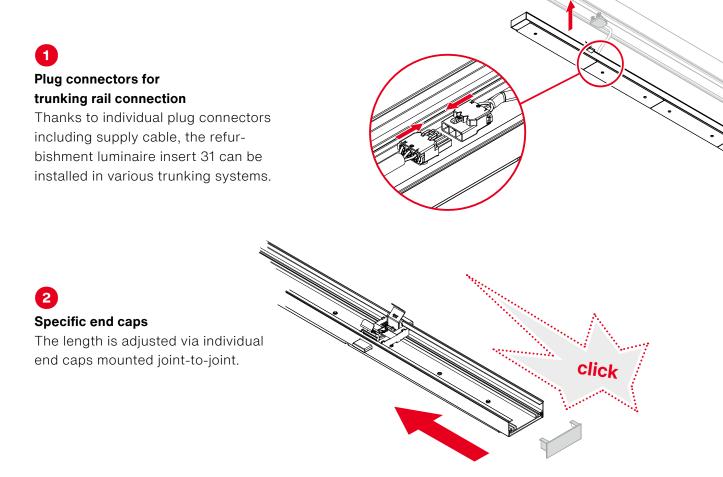
Color temperature	4,000 K	Control	On/Off Multilumen
Luminous flux	6,400lm 8,000lm	Temperature range	-20+40°C
Color rendering index	CRI > 80	Rated service life	50,000h (L85/B50) at 25°C
Luminous efficacy	160 lm/W	Dimensions	L = 1,172 mm   1,472 mm
Beam angle	wide distribution	Connection voltage	220 240 V AC
Cover	PMMA	Housing	extruded aluminum profile, traffic white (RAL 9016)

Replacement for Iuminaire insert	к	<b>Im</b> 4-level adjustable	w	lm/W	Control	Length	Weight	Order no.
1 × 36 W or 2 × 36 W	4,000	3,300     6,400	40	160	On/Off Multilumen	1,172 mm	1.2 kg	51RE12MA46B
1 × 58 W or 2 × 58 W	4,000	4,130     8,000	50	160	On/Off Multilumen	1,472 mm	1.4 kg	51RE12MB48B

Accessories for refurbishment of DUS trunking systems'	Weight	Order no.
Plug connector, plastic, white, 3-pole	0.1 kg	59RP004
End caps (set of 2), plastic, white, length compensation total + 63mm, length of insert + end caps: 1,235/1,535mm	0.1 kg	59RC1K
DUS spring for fixing insert in the DUS rail, set of 2	0.1 kg	59RL0CD

\* Accessories for other trunking systems on request.

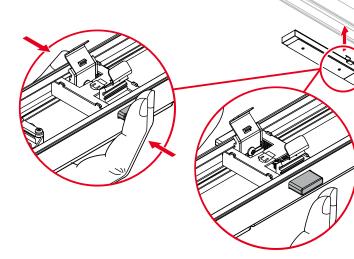
### The universal luminaire insert can be adapted to existing trunkings with corresponding accessories.





### Spring mechanism

The spring mechanism of the refurbishment luminaire insert 31 is compatible with a wide variety of trunking rails and enables simple and tool-free installation of the insert.



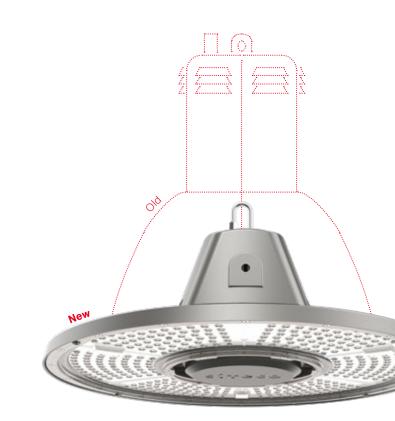


18

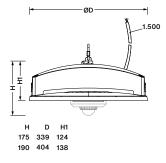
# Highbay 31

### The all-rounder: reliable, efficient and with smart control options.

- long service life and use at increased ambient temperatures up to 45 °C due to excellent thermal management of driver and LEDs
- · fast refurbishment thanks to simple one-point mounting
- energy-efficient lighting of 150 lm/W with up to 55 % energy and  $\rm CO_2$  savings
- · efficient light control and good visual comfort
- suitable for demanding ambient conditions and the food industry due to lens optics made of robust, UV-stabilized PC







Weight Order no.

#### Technical data

Color temperature	4,000 K	Control	On/Off		
Luminous flux	14,000 lm     28,000 lm	Temperature range	-30+45°C		
Color rendering index	CRI > 80	Rated service life	50,000h (L85/B50) at 25°C		
Luminous efficacy	150 lm/W	Connection voltage	220 240 V AC		
Beam angle	90°	Housing	die-cast aluminum, gray aluminum		
Cover	PC		(RAL 9007)		

250 W HIE / 400 W HME         4,000         14,000         94         150         On/Off         339 mm         141 mm         3.3 kg         51HC427A4FMA           400 W HIE / 250 W HSE         4,000         28,000         187         150         On/Off         406 mm         160 mm         4.1 kg         51HC427A4FMA	Replacement for highbay luminaire	к	Im	w	lm/W	Control	Total diam.	Total height	Weight	Order no.
400W HIE ( 250W HSE 4000 28 000 187 150 Op/Off 406mm 160mm 41kg 51HC427A4MM	250W HIE / 400W HME	4,000	14,000	94	150	On/Off	339mm	141 mm	3.3kg	51HC427A4FMA
4,000 20,000 187 130 Off/Off 400 min 100 min 4.1kg 3110427 A41007	400W HIE / 250W HSE	4,000	28,000	187	150	On/Off	406 mm	160 mm	4.1kg	51HC427A4MMA

#### Accessories\*

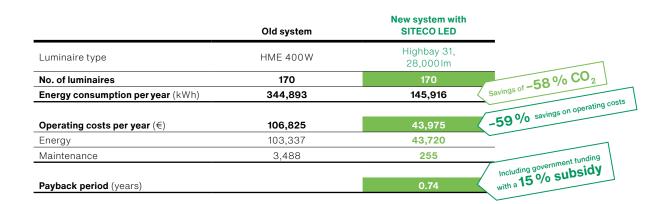
Link chain, steel, galvanized, inner link size 5.6 × 31mm, per running meter	0.1kg	5LY9001

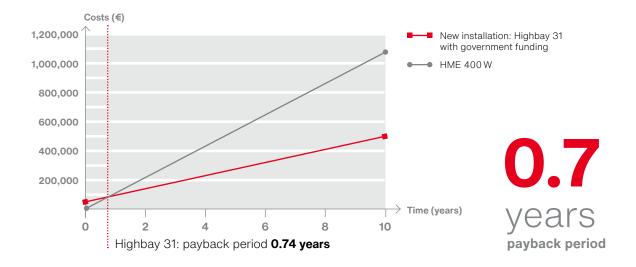
\* Further accessories on request.

# It has never been more worthwhile.

Numbers say more than a thousand words. Our example calculation of a production hall shows you how much can be saved.

#### Upgrade now. Benefit immediately.





### Refurbishment insert for FR 200 and FR 500

### The damp-proof specialist in a new light.

- enables refurbishment of conventional damp-proof luminaires by one-to-one replacement of the old gear tray with new LED insert and optimized luminous flux
- · high efficacy
- quick and simple mounting





#### **Technical data**

Color temperature	4,000 K	Control	On/Off Multilumen			
Luminous flux	8,000lm*	Rated service life	50,000h (L80/B50) at 25°C			
Color rendering index	CRI > 80	Connection voltage	220 240 V AC			
Luminous efficacy	1731m/W	Housing	sheet steel, galvanized			
Beam angle	wide distribution*	Mounting	luminaire insert for refurbishment of FR 200 / FR 500			

#### **Replacement for conventional**

FR 2007 FR 500 gear tray	ĸ	IM preset	vv	Im/w	Control	Length	weight	Order no.
1 × 58 W	4,000	3,500*	47	173*	On/Off Multilumen	1,500 mm	1.9 kg*	- an request
2 × 58 W	4,000	7,000*	47	173*	On/Off Multilumen	1,500 mm	1.9 kg*	— on request

... . . .

. ..

\* only without old luminaires



### Monsun 31 Tube

### Built for the toughest conditions.

- robust, gas-tight luminaire with IP69K protection rating
- + resistant to harmful gases such as sulfur and ammonia
- · designed to resist high pressure jet cleaning with hot water
- $\cdot\;$  suitable for e.g. tire stores, animal stalls and car washes







Color temperature	4,000 K	Temperature range	-20 +40°C			
Luminous flux	6,500lm     10,000lm	Rated service life	50,000h (L80/B50) at 25°C			
Color rendering index	CRI > 80	Connection voltage	220 240 V AC			
Luminous efficacy	162Im/W	Housing	PMMA, partially transparent			
Beam angle	wide distribution	Mounting	surface-mounting and suspended			
Control	On/Off		mounting, also available as insert for trunking rail (Licross/Modario)			

Replacement for damp-proof luminaire	к	Im	W	lm/W	Control	Length	Weight	Order no.
1×58W	4,000	6,500	40	162	On/Off	1,500mm	1.8 kg	51FT107N460A
2 × 58 W	4,000	8,000	49	162	On/Off	1,500mm	1.8 kg	51FT107N480A
2 × 58 W	4,000	10,000	62	162	On/Off	1,500mm	1.8 kg	51FT107N4A0A

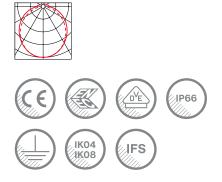


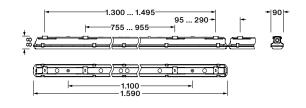
### Monsun 21

### The damp-proof luminaire with a bright future.

- $\boldsymbol{\cdot}$  reliable, robust and with upgradeable intelligence
- equipped for harsh environments and use in exposed outdoor areas thanks to IP66 protection rating
- · control is flexibly adaptable with upgradeable sensor technology
- · for use in industry and parking garages
- optimum glare control for industrial and manual work







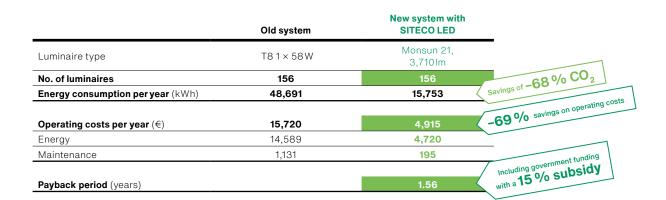
Color temperature	4,000 K	Rated service life	50,000h (L80/B50) at 35°C			
Luminous flux	3,3401m     6,0001m	Connection voltage	220 240 V AC			
Color rendering index	CRI > 80	Housing	polyester, glass fiber reinforced,			
Luminous efficacy	up to 167 lm/W		light gray			
Beam angle	diffuse distribution	Mounting	<ul> <li>ceiling surface-mounting (luminaire includes fixing accessories)</li> <li>with accessories: suspended mount- ing   surface-mounting   horizontal or vertical wall mounting   installation on Licross trunking rail</li> </ul>			
Cover	PMMA   PC					
Control	On/Off					
Temperature range	-25+35°C					

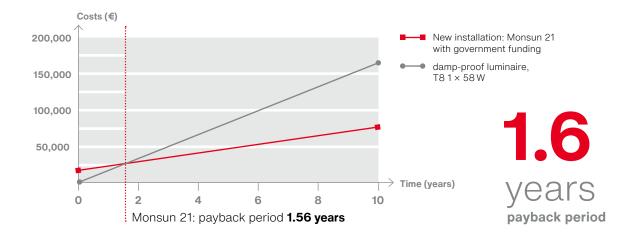
Replacement for damp-proof luminaire	к	Im	w	lm/W	Control	Impact resistance	Length	Weight	Order no.
1 × 58 W with PMMA diffuser	4,000	3,710	22	167	On/Off	IK04	1,590mm	2.5 kg	51FB107P430J
2 × 58 W with PMMA diffuser	4,000	6,000	38	158	On/Off	IK04	1,590mm	2.5 kg	51FB107P460B
1 × 58 W with PC diffuser	4,000	3,340	22	150	On/Off	IK08	1,590mm	2.5 kg	51FB207P430J
2 × 58 W with PC diffuser	4,000	5,400	38	142	On/Off	IK08	1,590mm	2.5 kg	51FB207P460B

# It has never been more worthwhile.

Numbers say more than a thousand words. Our example calculation of a technical room shows how much can be saved.

#### Upgrade now. Benefit immediately.





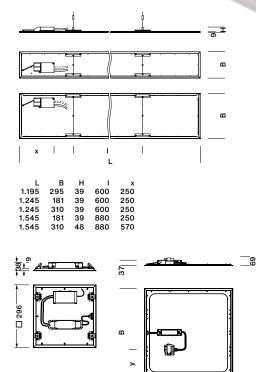


24

# Apollon 21

### Flexible, efficient and attractive in offices and public buildings.

- versatile luminaire family in different geometries and mounting variants for the complete office building
- excellent quality of light, high efficacy and various control options
- ideal lighting solution for offices, foyers, meeting rooms and general building areas



X | L B X M625 622 622 180

y 190





Luminous flux2,400 lm     7,200 lmColor rendering indexCRI > 80Luminous efficacyup to 127 lm/WBeam anglewide distribution
Luminous efficacy up to 127 lm/W
Ream angle wide distribution
Board angle what are an and a stability and a
Cover PC
<b>UGR</b> ≤ 19   ≤ 22
Control On/Off   On/Off Multilumen
Temperature range   -20 +40 °C

Rated service life	50,000h (L80/B50) at 25 °C
Connection voltage	220 240 V AC
Housing	coated aluminum, traffic white (RAL 9016)
Mounting	Lay-in mounting in system ceilings without further luminaire-specific accessories With accessories: • installation in ceiling cutouts • ceiling surface-mounting • suspended mounting

0	5
2	υ

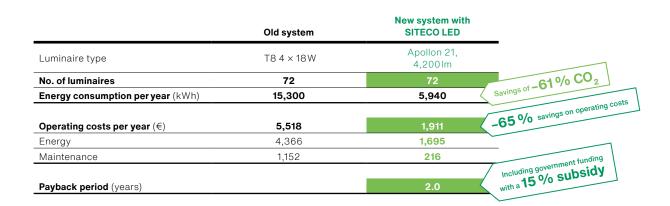
Replacement for square recessed luminaire Module 600	к	UGR	Im	w	lm/W	Control	Length	Width	Weight	Order no.
with T5 lamps: $3 \times 24$ W or $4 \times 14$ W	4,000	≤ 19	4,000	32	125	DALI 2	596	596	2.8kg	51MQ12WD2453
with T8 lamps: 3 × 18 W or 4 × 18 W	4,000	≤ 19	4,200	33	127	On/Off	596	596	2.4kg	51MQ12W72413
Replacement for linear luminaire										
with T5 lamps: $1 \times 28$ W with T8 lamps: $1 \times 36$ W	4,000	≤ 22	2,400	21	115	On/Off	1,245	179	2.2 kg	51MQ15W72412
with T5 lamps: 2 × 28 W with T8 lamps: 2 × 36 W	4,000	≤ 19	4,000	33	121	On/Off	1,245	307	2.9 kg	51MQ14W72412
with T5 lamps: $2 \times 28$ W / 54 W with T8 lamps: $2 \times 36$ W	4,000	≤ 19	4,000	33	121	On/Off	1,195	295	2.9 kg	51MQ18W72412
with T5 lamps: $1 \times 35$ W / $49$ W with T8 lamps: $1 \times 58$ W	4,000	≤ 22	4,000	33	121	On/Off	1,545	179	2.4 kg	51MQ16W72412
with T5 lamps: 2 × 35 W / 49 W with T8 lamps: 2 × 58 W	4,000	≤ 22	7,200	60	120	On/Off	1,545	307	3.6 kg	51MQ17W72412

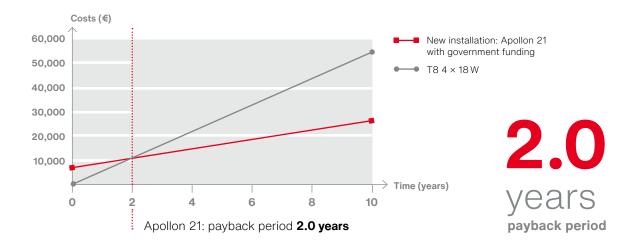
Accessories for recessed and surface-mounting		Description	Dimensions mm	Order no.	
Rapid-mount bracket for recessing not suitable for 600 × 600 already included for 300 × 300	AN A A	Rapid-mount bracket, sheet steel, galvanized, packing unit: set of 4		5MQ90040XC	
			600 × 600	59MQ12005021	
Ceiling recessing			1,195 × 295	59MQ18005021	
		Recessing frame, sheet steel, white,	1,245 × 181	59MQ15005021	
frame		for luminaire with dimensions:	1,245 × 310	59MQ14005021	
			1,545 × 181	59MQ16005021	
			1,545 × 310	59MQ17005021	
			600 × 600	59MQ22005021	
Surface-mount housing		Surface-mount housing, sheet steel, white, height 50 mm, for luminaire with dimensions:	1245 × 310	59MQ24005021	
nousing		height 50 mm, for fummalie with unnensions.	1545 × 310	59MQ27005021	
			600 × 600	59MQ22004021	
			1,195 × 295	59MQ18005021	
Surface-mount		Kit for surface-mount housing,	1,245 × 181	59MQ25004021	
housing (kit)		sheet steel, white, height 70 mm, for luminaire with dimensions:	1,245 × 310	59MQ24004021	
	$\checkmark$ $\checkmark$		1,545 × 181	59MQ26004021	
			1,545 × 310	59MQ27004021	

# It has never been more worthwhile.

Numbers say more than a thousand words. Our example calculation of a group office shows how much can be saved.

### Upgrade now. Benefit immediately.





# Silica 21 refurbishment insert

### Slim and integrative for any ceiling system

- combination of two optical systems ensures optimum visual conditions for different lighting requirements
- · dimensions can be adapted to existing situation
- ideal basis for a smart office due to optional integration of intelligent sensor technology
- · sustainability through easily replaceable components
- · individual project solutions thanks to modular design





#### **Technical data**

Color temperature	4,000 K	Temperature range	0+35°C			
Luminous flux	4,320lm     10,800lm	Rated service life	50,000h (L85/B50) at 25°C			
Color rendering index	CRI > 80	Mounting	<ul> <li>installation in ceiling cutouts</li> </ul>			
Luminous efficacy	up to 143 lm/W		<ul> <li>installation in modular ceilings</li> </ul>			
Beam angle	wide distribution	Connection voltage	220 240 V AC			
Cover	РММА	Housing	<ul> <li>steel, traffic white (RAL 9016) microstructure, matt</li> <li>metallic gray (RAL 9006)</li> </ul>			
UGR	≤ 19					
Control	DALI 2		microstructure • deep black (RAL 9005) microstructur			

Replacement for linear luminaire	к	UGR	lm*	W⁺	lm/W	Control	Length mm	Width mm	Order no.
with T5 lamps: $1 \times 54$ W with T8 lamps: $1 \times 36$ W	4,000	≤ 19	4,320	30	143	DALI 2	approx. 1,250	approx. 180	
with T5 lamps: $2 \times 54$ W with T8 lamps: $2 \times 36$ W	4,000	≤ 19	8,640	60	143	DALI 2	approx. 1,250	approx. 310	on
with T5 lamps: 1 × 35 W / 49 W with T8 lamps: 1 × 58 W	4,000	≤ 19	5,400	38	143	DALI 2	approx. 1,545	approx. 180	request
with T5 lamps: $2 \times 35$ W / $49$ W with T8 lamps: $2 \times 58$ W	4,000	≤ 19	10,800	76	143	DALI 2	approx. 1,545	approx. 310	_

\* Luminous flux and wattage adapted to the existing situation in each case.



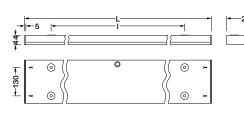
### Apollon 31 Surface

### The smart surface-mounted and pendant solution.

- · durable replacement for conventional louver luminaires
- excellent visual comfort and suitable for computer workstations thanks to UGR  $\leq$  19
- efficient operation with up to 139 lm/W
- · uniformly illuminated cover without dark spots
- easy installation and maintenance due to separation of gear tray from ECG and luminaire insert
- tool-free electrical contacting and through-wiring up to 2.5 mm<sup>2</sup>
- · easy installation of continuous rows possible









Color temperature	4,000 K	Temperature range	-20 +40°C		
Luminous flux	3,800lm     7,700lm	Rated service life	50,000h (L85/B50) at 25°C		
Color rendering index	CRI > 80	Mounting	Ceiling surface-mounting With accessories: • suspended mounting		
Luminous efficacy	up to 1391m/W				
Beam angle direct, wide distribution			continuous row mounting		
Cover	microprismatic, PMMA	Connection voltage	220 240 V AC		
UGR	≤ 19	Housing	coil-coated sheet steel,		
Control	On/Off Multilumen		traffic white (RAL 9016)		

Replacement for surface-mounted luminaires	к	UGR	Im	w	lm/W	Control	Length	Width	Weight	Colour	Order no.
with T5 lamps: $2 \times 28 W / 1 \times 54 W$ with T8 lamps: $1 \times 36 W / 2 \times 36 W$	4,000	≤ 19	3,800 (max. 5,000)	27	139	On/Off Multilumen	1,245	200	3.0kg	white (RAL 9016)	51MP25WM2441W
with T5 lamps: 1 × 35 W / 2 × 35 W 1 × 49 W / 2 × 49 W with T8 lamps: 1 × 58 W / 2 × 58 W	4,000	≤19	4,600 (max. 7,700)	33	139	On/Off Multilumen	1,545	200	5.5 kg	white (RAL 9016)	51MP26WM2441W

Accessories for recessed and surface-mounting	Description	Order no.
Y-wire suspension	For On/Off luminaire: Y-wire suspension, ceiling sleeve, with 4 terminals, 1-pole, max. 2.5 mm <sup>2</sup>	59MQ31000021
Continuous row connector	Sheet steel	59MP20007021



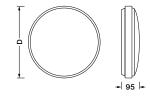
# Rondel 31

### Practical and robust.

- for replacement of surface-mounted luminaires
   equipped with compact fluorescent lamps
- efficient wall and ceiling luminaire for entrance areas, staircases, corridors, hallways and ancillary rooms
- · IP65 and IK10 especially resistant
- quick and simple mounting







D Ø 350 Ø 480

Color temperature	3,000 K   4,000 K	Control	On/Off Multilumen
Luminous flux	1,600 lm     4,250 lm	Temperature range	-20 +40°C
Color rendering index	CRI > 80	Rated service life	50,000h (L80/B50) at 25°C
Luminous efficacy	1201m/W 1251m/W	Mounting	ceiling or wall mounting
Beam angle	direct distribution	Connection voltage	220 240 V AC
Cover	PMMA	Housing	PC, traffic white (RAL 9016)

Replacement for wall and ceiling luminaires with compact fluorescent lamps	к	Im 4-level adjustable	w	lm/W	Diameter	Weight	Order no.
2 × TC-F 24W	3,000	1,600     2,300	19	120	350mm	1.7 kg	51WC10MA32A
2 × TC-F 24 W	4,000	1,700     2,400	19	125	350mm	1.7 kg	51WC10MA42A
2 × TC-F 36W / 1 × T5-R 40W	3,000	3,400     4,100	34	120	480 mm	2.9 kg	51WC10MB34A
2 × TC-F 36 W / 1 × T5-R 40 W	4,000	3,550     4,250	34	125	480 mm	2.9 kg	51WC10MB44A



# Lunis 21

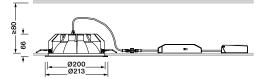
### Always in the right light.

- suitable for a wide range of applications thanks to modular design and various sizes
- integrates perfectly into the room design due to darklight optic and clear design
- simple ceiling integration due to flat design of less than 60mm
- quick and easy mounting





# 



Color temperature	4,000 K	Control	On/Off		
Luminous flux	1,700lm   2,289lm	Rated service life	50,000h (L85/B50) at 25°C		
Color rendering index	CRI > 80	Mounting	ceiling recessing without further luminaire-specific accessories		
Luminous efficacy	up to 1291m/W				
Beam angle	wide distribution	Connection voltage	220 240 V AC		
UGR	≤ 19	Housin	die-cast aluminum, traffic white (RAL 9016)		
Light control	lens, reflector				

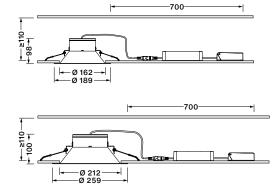
Replacement for downlight with compact fluorescent lamps	к	UGR	Im	w	lm/W	Control	Ceiling cutout Ø	Diameter	Weight	Order no.
2 × 18 W / 2 × 26 W with ceiling cutout 150 mm	4,000	≤ 19	1,700	14	123	On/Off	150 mm	162 mm	0.6kg	51DB15MD4C
2 × 26 W / 1 × 32 W with ceiling cutout 200 mm	4,000	≤ 19	2,289	18	129	On/Off	200 mm	213 mm	1.0 kg	51DB15MF4D

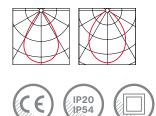


# Lunis 31

### The practical downlight for office and general lighting.

- very efficient and elegant downlight with powder-coated white reflector
- models with UGR ≤ 19 suitable for VDU workstations
- aluminum housing for optimal heat dissipation and long service life
- quick and easy mounting





#### Technical data

Color temperature	4,000 K
Luminous flux	1,040lm     2,150lm
Color rendering index	CRI > 80
Luminous efficacy	125 lm/W
Beam angle	wide distribution
UGR	≤ 19   ≤ 22 <sup>*</sup>
Light control	lens, reflector   lens, reflector and opal cover disc

Control	On/Off
Rated service life	50,000h (L85/B50) at 25°C
Mounting	ceiling recessing without further luminaire-specific accessories
Connection voltage	220 240 V AC
Housing	coated aluminum, traffic white (RAL 9016)

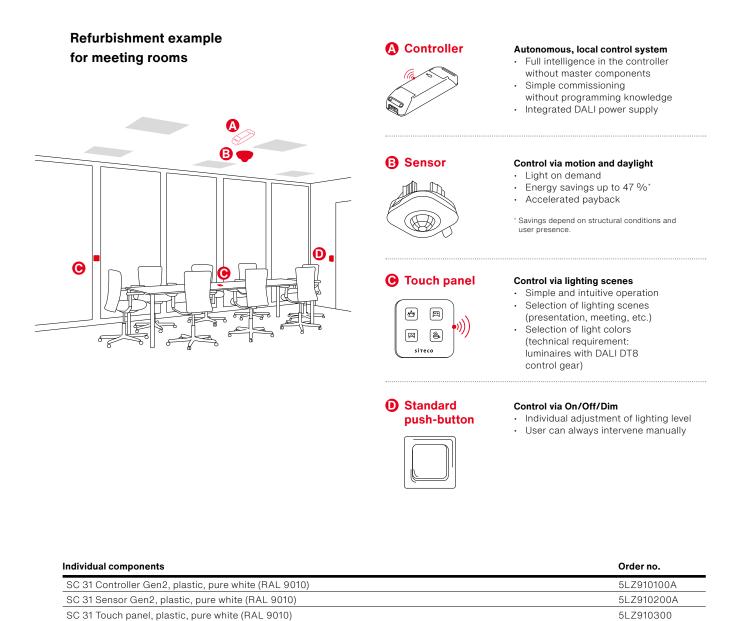
Replacement for downlight with compact fluorescent lamps	к	UGR	lm	w	lm/W	Control	Ceiling cutout Ø	Diameter	Weight	Order no.
1 × 18 W / 1 × 26 W with ceiling cutout 162 mm	4,000	≤ 19	1,040	8	125	On/Off	162 mm	189 mm	0.3 kg	51DN157E41
1 × 18 W / 1 × 26 W with ceiling cutout 162 mm	4,000	≤ 22*	1,040	8	125	On/Off	162 mm	189 mm	0.3 kg	51DN167E41
2 × 18W / 2 × 26W with ceiling cutout 212mm	4,000	≤ 19	2,150	17	125	On/Off	212 mm	259mm	0.5 kg	51DN157G42
2 × 18 W / 2 × 26 W with ceiling cutout 212 mm	4,000	≤ 22*	2,150	17	125	On/Off	212 mm	259mm	0.5 kg	51DN167G42

\* with opal cover disc

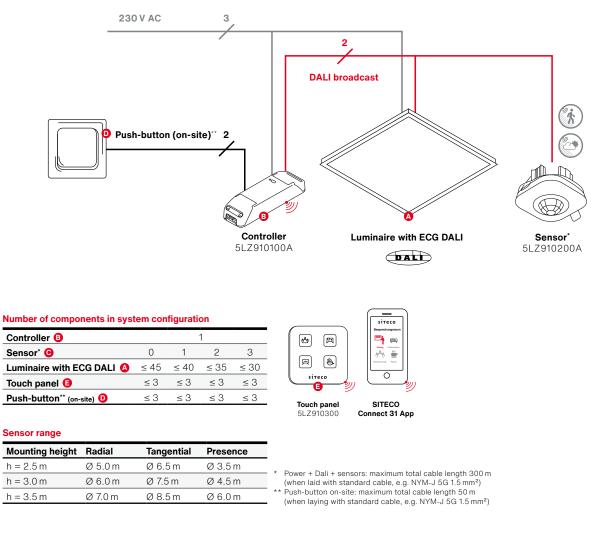
### SITECO Connect 31

#### Efficient light thanks to smart assistants.

- lighting control for single rooms with SITECO Connect 31 Gen2 for refurbishing office spaces and ancillary rooms
- effortless commissioning and control: easy switching, dimming and scene selection via the on-site push-button or the intuitive smartphone app or the touch panel
- everything customizable if required: allows the adaptation of preconfigured scenes and the storage of time schedules, authorizations and user profiles
- trouble-free selection, expansion and commissioning thanks to perfectly matched components in professional quality



### Easy mounting with standard installation material



The above illustration serves only as an example of a circuit diagram for a light management system. For specific applications, individual planning (in particular for cable and circuit dimensioning, types of cables, fire barriers, routing, etc.) by qualified personnel is essential. Siteco GmbH assumes no liability for the correctness of the above illustration.

	Old system	New system with SITECO LED	New system with SITECO LED and control system	
Luminaire type	T8 4 × 18W	Silica 21, 3,890 lm	Silica 21, 3,8901m + SITECO Connect	
No. of luminaires	72	72	72	Savings of -91% CO2
Energy consumption per year (kWh)	15,300	4,842	1,453	Savings of -91
				-89 % savings on operating
Operating costs per year $(\in)$	5,518	1,598	631	-89 % 34
Energy	4,366	1,382	415	
Maintenance	1,152	216	216	at funding
			/	Including government funding with a 15 % subsidy
Payback period (years)		3.18	2.90	with a 15 % 3 4 4





# Streetlight SL 31

### Simply practical light – robust, cost-efficient and future-proof.

- low operating costs thanks to very high energy efficiency with luminous efficacy of up to 153lm/W
- long service life of more than 100,000h thanks to
   sustainable product concept and durable components



S = 0,045m<sup>2</sup>



Color temperature	3,000 K	Rated service life	100.000h (L90)
Luminous flux	4,900lm   8,400lm	Mounting	post-top/side entry
Color rendering index	CRI > 70	Spigot size	76 / 60mm (42mm with reducer)
Luminous efficacy	140 lm/W	Connection voltage	220 240 V AC
Light control	lenses		terminal
Cover	toughened safety glass, clear	Housing	die-cast aluminum,
Control	PLUS		SITECO metallic gray (DB 702S)
Temperature range	-30+50°C	Accessories	reducer

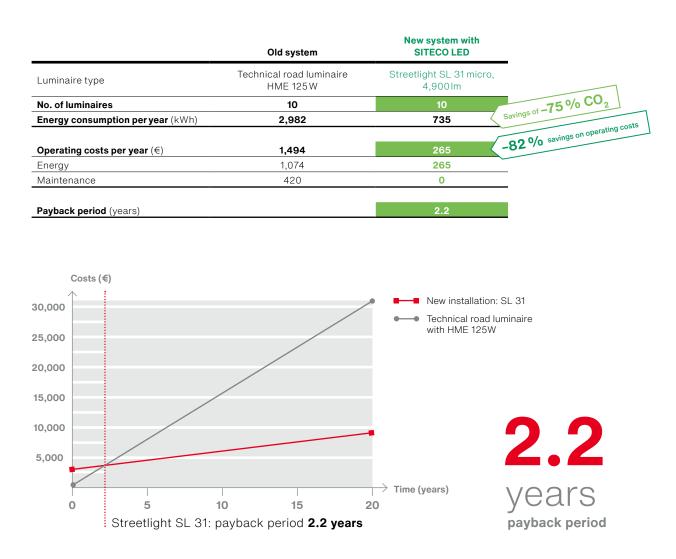
road luminaire	Beam angle	К	Im	w	lm/W	Size	Weight	Order no.
with HME lamps: 1 × 80W / 1 × 125W with HSE lamps: 1 × 50W / 1 × 120W	direct asymmetric wide distribution, ST1.0a	3,000	4,900	35	140	micro	3.6 kg	5XF1E32D08DA
<b>with HME lamps:</b> 1 × 250 W <b>with HSE lamps:</b> 1 × 100 W	direct asymmetric wide distribution, ST1.0a	3,000	8,400	60	140	mini	4.7 kg	5XF2E32D08HA

Accessories	Weight	Order no.
Reducer, spigot size: 76/42mm	0.1kg	5XC1008XR14

# It has never been more worthwhile.

Numbers say more than a thousand words. Our example calculation of an approach road shows you how much can be saved.

### Upgrade now. Benefit immediately.

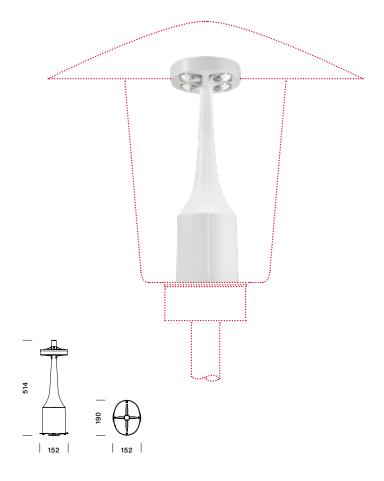




### Module 540

### Modular into the future of city lighting.

- allows refurbishment of heritage luminaires and historical luminaires as well as surface-mounted and suspended luminaires with a vertical design
- · low energy consumption with high luminous efficacy
- high visual comfort and innovative LED technology with unique visual guidance
- easy replacement due to simple mounting and electrical connection at the mast without special tools
- · available with iQ Street Remote





#### **Technical data**

Color temperature	<b>emperature</b> 3,000 K   4,000 K		Control overheating protection   power							
Luminous flux	1,6101m     3,8201	m								nmunication ndent luminous
Color rendering index	CRI > 70									parameterization
Luminous efficacy         up to 148 lm/W           Beam angle         wide distribution, symmetry/ asymmetry depending on model									imized constant	
			Rated service life				luminous flux control 100,000h (L95/B10)			
		Type of protection			protection rating is determined by the luminaire housing					
				•	220	240 \	240 V AC			
			Housing		traff	traffic white (RAL 9016)				
Replacement for		Beam angle	к	Im	W <sup>start</sup>	Wend	W <sup>red</sup>	lm/W	Weight	Order no.
Post-top luminaire with vertical design		wide distribution, asymmetric	3,000	1,610	14	14	7	119	2.7 kg	5XA5403EB04F
(HME, HSE, HIE, TC-L)		wide distribution, symmetric	3,000	3,140	26	27	12	123	2.7 kg	5XA5403JB04F
Heritage luminaire and hi	Heritage luminaire and historical luminaire		4,000	1,610	11	11	6	146	2.7 kg	5XA5403KB04F
(HME, HSE, HIE)		wide distribution, symmetric	4,000	3,820	26	27	13	148	2.7 kg	5XA5403RB04F

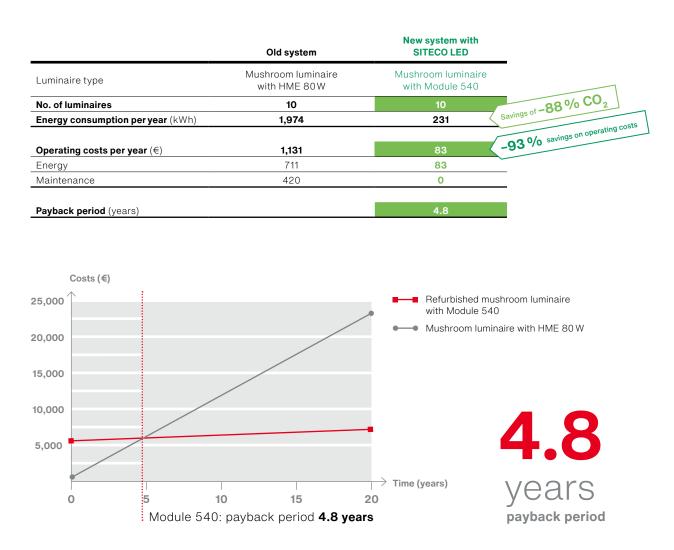
Pre-parameterized module order with pre-assembled cable possible on request.

Spreader element, packaging unit: set of 2	0.2 kg	5XA54000XS
Shielding on building side, H = 150mm	0.1 kg	5XA54000XBS
Shielding on building side, H = 430mm	0.5 kg	5XA54000XBXL

# It has never been more worthwhile.

Numbers say more than a thousand words. Our example calculation of a private access road shows you how much can be saved.

#### Upgrade now. Benefit immediately.

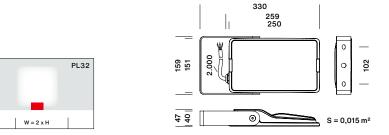


### micro/mini

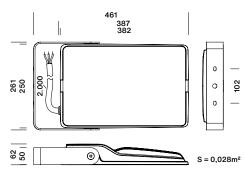
### Industrial design meets state-of-the-art technology.

- simple, quick installation thanks to mounting bracket and pre-assembled 2-meter connection cable
- efficient operation with up to 170 lm/W and asymmetric narrow beam distribution
- · high flexibility for all requirements
- robust housing and ESD-safe LED module, dustproof and high vibration stability tested with 250,000 strikes









#### Technical data

т

Color temperature	4,000 K	Rated service life	100,000h (L80/B50)	
Luminous flux	4,400lm   8,000lm	Mounting	on walls   on ceilings   on supporting	
Color rendering index	CRI > 70		structures   on cross-arms	
Luminous efficacy	up to 170 lm/W	Connection voltage	220 240 V AC	
Beam angle	asymmetric distribution		pre-assembled connection cable	
Light control	lenses	Housing	die-cast aluminum, metallic gray (RAL 9006)	
Cover	toughened safety glass, clear	<b>A</b>		
Control	On/Off	Accessories	plug/socket system connection, single/double cross-arms	
Temperature range	-40+45°C		5	

Replacement for floodlight with metal halide lamps	Beam angle	к	lm	w	lm/W	Control	Size	Weight	Order no.
<b>70 W</b> HIT-CE	asymmetric distri- bution, PL32	4,000	4,400	29	152	On/Off	micro	2.8kg	5XA7561A2K23
<b>150W</b> HIT-CE	asymmetric distri- bution, PL32	4,000	8,000	47	170	On/Off	mini	5.8kg	5XA7571B2K23

Accessories	Weight	Order no.
Connectivity: plug/socket, IP65, 3-pole, max. 2.5 mm <sup>2</sup>	0.1kg	5NX30003



### SiStellar maxi refurbishment insert

### Don't dispose. Refurbish.

- simple refurbishment of existing luminaires with maximum preservation of materials – 90 % of the old luminaire is retained
- long life of up to 100,000 h thanks to optimized thermal management
- also available in the particularly insect-friendly 3,000 Kelvin light color
- highly economical solution with rapid payback
- high visual comfort thanks to narrow beam and uniform illumination with 0 % light pollution





#### **Technical data**

3,000 K	Control	On/Off
70,630lm	Temperature range	-30+40°C outdoors
CRI > 80	Rated service life	up to 100,000 h
1131m/W	Connection voltage	220 240 V AC
PL43	Housing	die-cast aluminum
cover panel of toughened safety glass, clear		
	70,630 lm CRI > 80 113 lm/W PL43 cover panel of toughened	To,630 lm     Temperature range       CRI > 80     Rated service life       113 lm/W     Connection voltage       PL43     Housing

### Replacement for conventional gear trays for SiStellar maxi K Im W Im/W Control Order no. for refurbishing existing luminaires 3,000 70,630 624 113 On/Off 5XA768000ZS00185XX

Our complete portfolio: **siteco.com** 



### Siteco GmbH

Georg-Simon-Ohm-Str. 50 83301 Traunreut, Germany Tel. +49 8669 330 info@siteco.com

siteco.com