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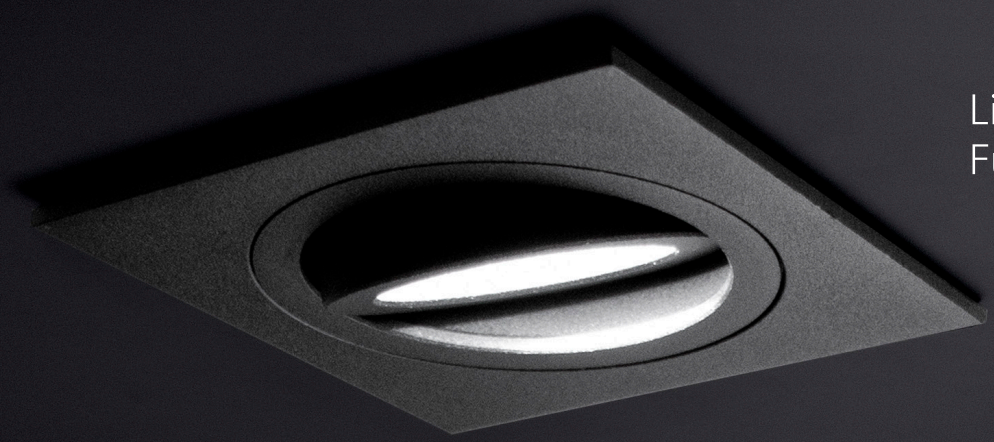
Licht.
Für Generationen.



M1 module system.

In three steps to an individual luminaire.

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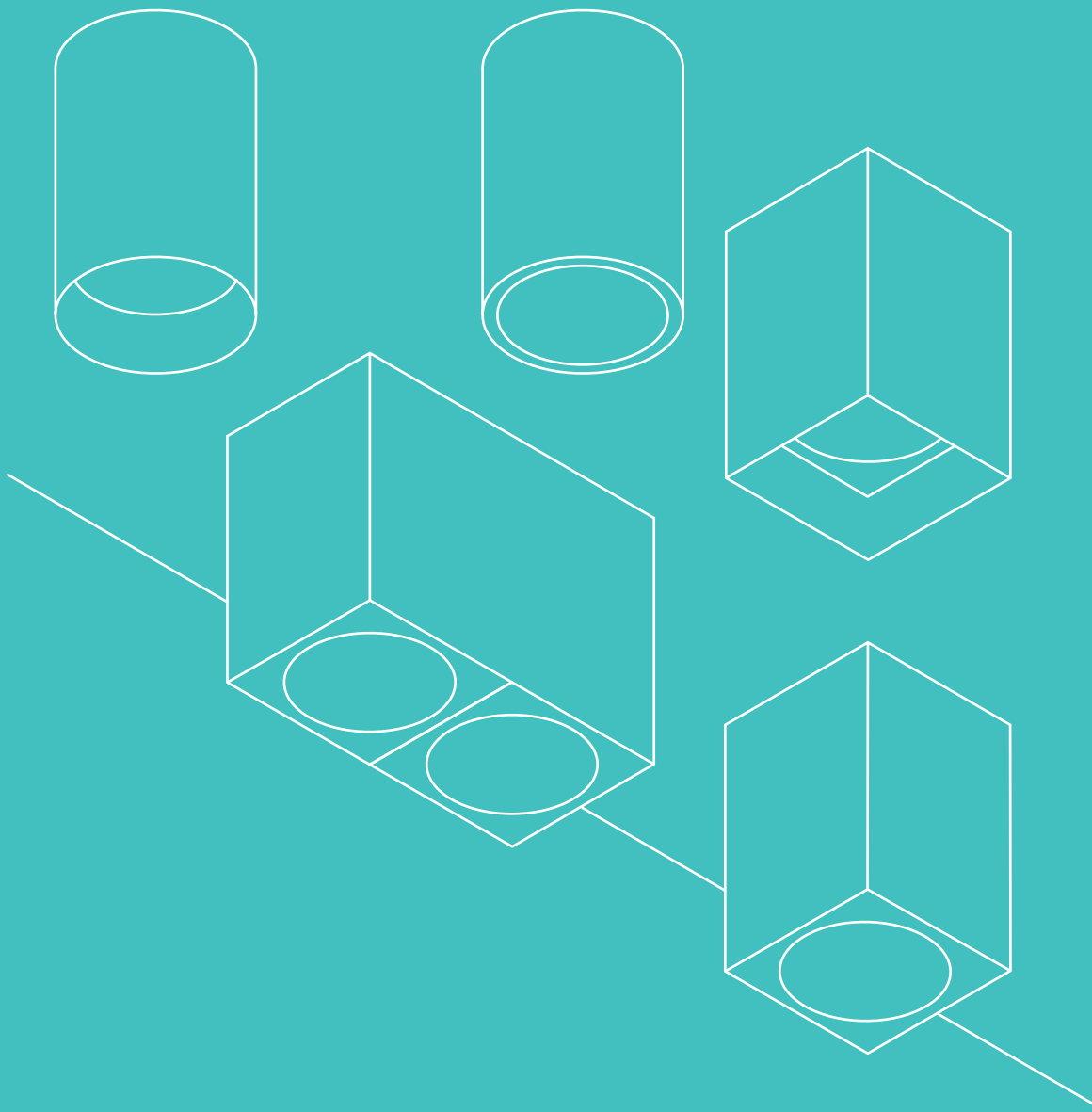
1

Housing shape, module bracket, housing color

Select the housing shape with the module bracket and the color.

This results in the first of the three item numbers.



2

LED modules

Select an LED module between 3 and 8 Watt from over 30 LED modules.

This results in the second of the three item numbers.

3

Converter

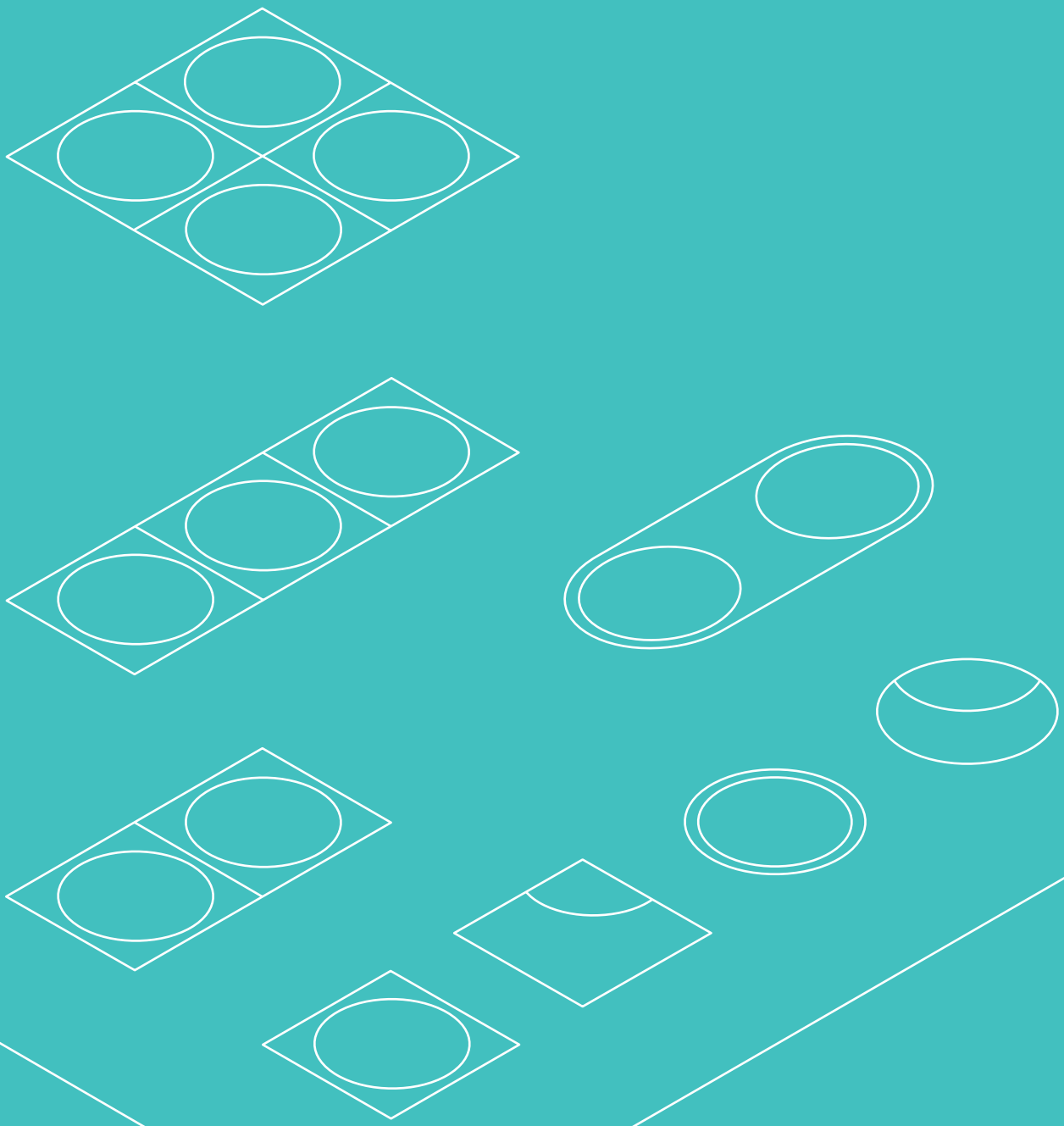
Select the desired converter and, if necessary, the control unit. For the surface-mounted versions, please note that the maximum LED module assembly power is 8 Watt, and it is up to 12 Watt for the housing. On/off, phase or DALI. In case of 12 V DC and 24 V DC surface-mounted luminaires, the power supplies and controllers must be placed outside the housing.

This results in the third item number and the system is complete.

M1 module system.

Consistent. Reduced. Simple.
The lighting system for “Easy handling”.

- Consistent planning ability - as recessed and surface-mounted luminaire for all ceiling solutions
- Reduced design language - simple and integrative
- Lighting options – for all shapes of basic and accent lighting
- Light colors for all applications – warm white, neutral white, cool white, TunableWhite, D2W
- Simple switching - from on/off via phase section to DALI
- Installation – pluggable, easy mounting up to through-wiring



The M1 module system comprises:

- 8 ceiling-mounted recessed housings, round and angular, one to four lamps, rigid and swiveling
- 5 ceiling surface-mounted housings, round and angular, one to two lamps, rigid and swiveling
- Structural white and structural black color variants and these are possible as color combinations
- Can be combined with all MR16 LED modules 3 W, 6 W, 8 W and for housings up to 12 W

Configuration example.

Desired solution in three simple steps.

Example:

Select the suitable housing shape, module bracket and housing color

Housing shape:

Angular surface-mounted luminaire, single lamp in structural white.

Module bracket

Swiveling, flush-mounted module bracket in structural white.

+

+

Item no. **45103170**

First item number

Select the light.

DISC LED insert, MR16, 6 W, with lens optics,

350 mA, CRI > 80

Color temperature: 3,000 K
Luminous flux: 690 lm
Beam angle: 24°

Item no. **12920243**

Second item number

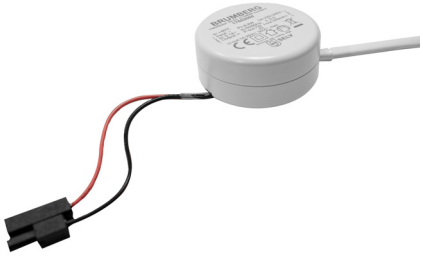
Select the suitable converter.

LED round converter 350 mA, dimmable phase section

Dimensions: D 51 x H 24 mm,

Power: 4.9 – 7 W

Select the suitable converter and, if necessary, the desired control unit. Ensure that the power consumption corresponds to the number of selected LED modules.



Item no. **17652000**

Third item number

1 + 2 + 3 = pre-configured luminaire, comprising three item numbers.

1

Housing shape, module bracket, housing color

Select the type, the housing shape with the module bracket and the color.

This results in the first of the three item numbers.

2

LED modules

Select an LED module between 3 and 8 Watt from over 30 LED modules.

This results in the second of the three item numbers.

3

Converter

Select the desired converter and, if necessary, the control unit.

For the surface-mounted versions, please note that the maximum LED module assembly power is 8 Watt, and it is up to 12 Watt for the housing. On/off, phase or DALI.

This results in the third item number and the system is complete.

Recessed housing.

Item no. 450 __ ___

Housing shape.

Angular ...

Flush-mounted housing

Number of LEDs: 1
Ceiling cut-out: 80 mm
Length x width: 93 x 93 mm

Installation depths*:
with A 8 mm: 450**09**___
with B 10 mm: 450**10**___
with C 16 mm: 450**11**___

Flush-mounted housing

Number of LEDs: 2
Ceiling cut-out: 160 x 81 mm
Length x width: 175 x 92 mm

Installation depths*:
with A 8 mm: 450**23**___
with B 10 mm: 450**24**___
with C 16 mm: 450**25**___

Flush-mounted housing

Number of LEDs: 3
Ceiling cut-out: 250 x 81 mm
Length x width: 260 x 92 mm

Installation depths*:
with A 8 mm: 450**26**___
with B 10 mm: 450**27**___
with C 16 mm: 450**28** ___

Flush-mounted housing

Number of LEDs: 4
Ceiling cut-out: 82 mm
Diameter: 92 mm

Installation depths*:
with A 8 mm: 450**29**___
with B 10 mm: 450**30**___
with C 16 mm: 450**31**___

Recessed housing

Number of LEDs: 1
Ceiling cut-out: 92 x 92 mm
Length x width: 105 x 105 mm

Installation depths*:
with A 33 mm: 450**03**___
with B 35 mm: 450**04**___
with C 41 mm: 450**05**___

* Installation depth: for the recessed variant, the specified installation depth is excluding the selected LED module.

... or round.

Flush-mounted housing

Number of LEDs: 1
Ceiling cut-out: 82 mm
Diameter: 92 mm

Installation depths*:
with A 8 mm: 450**06**___
with B 10 mm: 450**07**___
with C 16 mm: 450**08**___

Flush-mounted housing

Number of LEDs: 2
Ceiling cut-out: 2 x 82 mm
Length x width: 175 x 92 mm

Installation depths*:
with A 8 mm: 450**20**___
with B 10 mm: 450**21**___
with C 16 mm: 450**22**___

Recessed housing

Number of LEDs: 1
Ceiling cut-out: 91 mm
Diameter: 105 mm

Installation depths*:
with A 33 mm: 450**00**___
with B 35 mm: 450**01**___
with C 41 mm: 450**02**___

Example.

Housing in structural black, flush-mounted, swiveling module bracket, structural white.

Module bracket.

Three all-rounders for all housings.

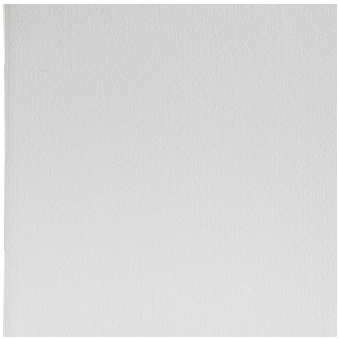
A **flush, swiveling (20°)**

B **flush, rigid**

C **recessed, swiveling (20°)**

Housing color.

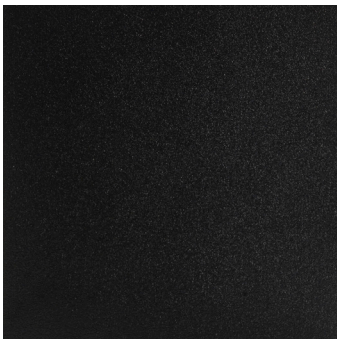
White, black or both?



Structural white. Modern and timeless.

Complete structural white: _____**170**

Frame in structural white, module bracket in structural black: _____**550**



Structural black. For maximum flexibility.

Complete structural black: _____**180**

Frame in structural black, module bracket in structural white: _____**560**

Configuration example.

Type + shape/module + color

① General information about housing	② Round, flush-mounting housing with one LED and rigid module bracket, structural white B	③ Housing and module bracket in structural white
450_____	___07___	_____170

Item no. **45007170**

You have selected the housing and with it the first item number.
Select the LED module in the next step.

1

Housing shape, module bracket, housing color

Select the type, the housing shape with the module bracket and the color.

This results in the first of the three item numbers.

Surface-mounted housing.

Item no. 451 __ ___

Housing shape.

Angular ...

... or round.

2

LED modules

Select an LED module between 3 and 8 Watt from over 30 LED modules.

This results in the second of the three item numbers.

Flush surface-mounted housing

Number of LEDs: 1
Length x width: 90 x 90 mm
Height: 115 mm

with A: 451**10**___
with B: 451**11**___
with C: 451**12** ___

Flush surface-mounted housing

Number of LEDs: 2
Length x width: 173 x 90 mm
Height: 95 mm

with A: 451**23**___
with B: 451**24**___
with C: 451**25** ___

Flush surface-mounted housing

Number of LEDs: 1
Diameter: 90 mm
Height: 95 mm

with A: 451**06**___
with B: 451**07**___
with C: 451**08** ___

3

Converter

Select the desired converter and, if necessary, the control unit.

For the surface-mounted versions, please note that the maximum LED module assembly power is 8 Watt, and it is up to 12 Watt for the housing. On/off, phase or DALI.

This results in the third item number and the system is complete.

Recessed surface-mounted housing

Number of LEDs: 1
Length x width: 90 x 90 mm
Height: 115 mm

with A: 451**03**___
with B: 451**04**___
with C: 451**05** ___

Recessed surface-mounted housing

Number of LEDs: 1
Diameter: 90 mm
Height: 115 mm

with A: 451**00**___
with B: 451**01**___
with C: 451**02** ___

Example.

Surface-mounted housing in structural white, flush-mounted, swiveling module bracket, structural white.

Module bracket.

Three all-rounders for all housings.

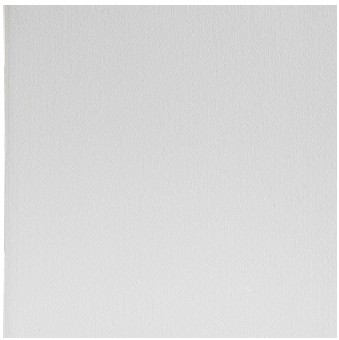
A flush, swiveling (20°)

B flush, rigid

C recessed, swiveling (20°)

Housing color.

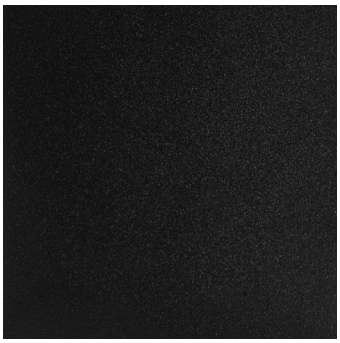
White, black or both?



Structural white. Modern and timeless.

Complete structural white: _____**170**

Frame in structural white, module bracket in structural black: _____**550**



Structural black. For maximum flexibility.

Complete structural black: _____**180**

Frame in structural black, module bracket in structural white: _____**560**

Configuration example.

Type + shape/module + color

①	②	③
General information about surface-mounted housing	Angular, recessed surface-mounted housing with one LED and rigid module bracket, structural white B	Housing in structural black, module bracket in structural white
451_____	___04___	_____560

Item no. **45104560**

You have selected the housing and with it the first item number.
Select the LED module in the next step.

1

Housing shape, module bracket, housing color

Select the type, the housing shape with the module bracket and the color.

This results in the first of the three item numbers.

LED modules.

2

LED modules

Select an LED module between 3 and 8 Watt from over 30 LED modules.

This results in the second of the three item numbers.

3

Converter

Select the desired converter and, if necessary, the control unit.

For the surface-mounted versions, please note that the maximum LED module assembly power is 8 Watt, and it is up to 12 Watt for the housing. On/off, phase or DALI.

This results in the third item number and the system is complete.

LED modules for housing.

LED reflector insert 12 W reflector, 350 mA, CRI > 80

Color temperature	Luminous flux	Beam angle	Item number
2,700 K	1,120 lm	38°	**12953003**
3,000 K	1,210 lm	38°	**12954003**
3,500 K	1,240 lm	38°	**12954004**
4,000 K	1,250 lm	38°	**12953004**

LED reflector insert 12 W reflector, 38°, 350 mA, dim2warm

Color temperature	Luminous flux	Beam angle	Item number
3,000 (1,800 K)	930 lm	38°	**12965003**

LED reflector insert MR16, 350 mA, 12.5 W, SunLike, CRI > 97,

Color temperature	Luminous flux	Beam angle	Item number
3,000 K	920 lm	38°	**12983003**

LED modules for installation and surface-mount

LED reflector insert MR16, 3 W, 350 mA, CRI > 80

Color temperature	Luminous flux	Beam angle	Item number
2,700 K	290 lm	38°	**12925003**
3,000 K	310 lm	38°	**12926003**
4,000 K	340 lm	38°	**12925004**

LED reflector insert MR16, 6 W, 350 mA, CRI > 80

Color temperature	Luminous flux	Beam angle	Item number
2,700 K	600 lm	38°	**12923383**
2,700 K	570 lm	60°	**12923603**
3,000 K	680 lm	38°	**12924383**
3,000 K	660 lm	60°	**12924603**
3,500 K	680 lm	38°	**12924384**
3,500 K	660 lm	60°	**12924604**
4,000 K	720 lm	38°	**12923384**
4,000 K	700 lm	60°	**12923604**

LED reflector insert MR16, 6 W, 350 mA, dim2warm

Color temperature	Luminous flux	Beam angle	Item number
3,000 (1,800 K)	460 lm	38°	**12963383**
3,000 (1,800 K)	460 lm	60°	**12963603**

ted housings.

DISC LED insert MR16, 6 W, with lens optics, 350 mA, CRI > 80

Color temperature	Luminous flux	Beam angle	Item number
3,000 K	640 lm	18°	**12920183**
3,000 K	690 lm	24°	**12920243**
3,000 K	670 lm	38°	**12920003**
3,000 K	620 lm	60°	**12920603**
4,000 K	685 lm	18°	**12920184**
4,000 K	740 lm	24°	**12920244**
4,000 K	720 lm	38°	**12920004**
4,000 K	660 lm	60°	**12920604**

MR16 LED reflector insert, 8 W, 24 V DC, CRI > 90

Color temperature	Luminous flux	Beam angle	Item number
2,850 K	900 lm	60°	**12823003**

LED reflector insert MR16, 8 W, 24 V DC, CRI > 90, TunableWhite

Color temperature	Luminous flux	Beam angle	Item number
2,000 (6,500 K)	318 – 415 lm**	60°	**12843004**

** Luminous flux: 318 lm at 2000 K, 374 lm at 4000 K, 415 lm at 6500 K

MR16 LED reflector insert, 8 W, 24 V DC, CRI > 90, dim4colour (RGB+WW)

Color temperature	Beam angle	Item number
RGB + WW	60°	**18438002**

LED insert MR16 with lens optics, RGB, 12 V DC

Color temperature	Energy efficiency class	Beam angle	Item number
RGB	Special product *	45°	**18101001**

* Special product.

Caution! The product with the RGB light color is a special product. This product with these light colors is used for colorful illumination. The spectral distribution of the light is used to change the appearance of illuminated scenes or illuminated objects in addition to making them visible. The product is not intended for use in other applications. The special product is not suitable for room lighting in households.

In case of 12 V DC and 24 V DC applications, for the **surface-mounted variant**, the power supplies and controllers must be placed **outside the housing**.

You have selected the LED module and the second item number. Now, you only need the converter.

1

Housing shape, module bracket, housing color

Select the type, the housing shape with the module bracket and the color.

This results in the first of the three item numbers.

2

LED modules

Select an LED module between 3 and 8 Watt from over 30 LED modules.

This results in the second of the three item numbers.

3

Converter

Select the desired converter and, if necessary, the control unit.

For the surface-mounted versions, please note that the maximum LED module assembly power is 8 Watt, and it is up to 12 Watt for the housing. On/off, phase or DALI.

This results in the third item number and the system is complete.

In case of 12 V DC and 24 V DC applications, for the **surface-mounted variant**, the power supplies and controllers must be placed **outside the housing**.

Converter.

For housing

1 x 3 W	2 x 3 W	3 x 3 W	4 x 3 W	1 x 6 W	2 x 6 W	3 x 6 W	1 x 12 W
●	–	–	–	–	–	–	–
●	●	–	–	●	–	–	–
●	●	●	●	●	●	–	●
●	●	●	●	●	●	●	●
●	●	–	–	●	–	–	–
–	●	–	–	●	–	–	–
–	●	●	–	●	–	–	–
–	–	–	●	–	●	–	●
–	–	●	●	–	●	●	●
●	●	●	●	●	●	–	●
–	●	●	●	●	●	●	●
–	●	●	●	●	●	–	●
●	●	–	–	●	–	–	–
●	●	●	–	●	–	–	–
–	●	●	●	●	●	●	●
–	●	●	●	●	●	●	●

For surface-mounted housing

1 x 3 W	2 x 3 W	3 x 3 W	4 x 3 W	1 x 6 W	2 x 6 W	3 x 6 W	1 x 12 W
●	–	–	–	–	–	–	–
●	●	–	–	●	–	–	–
–	●	–	–	–	●	–	–
–	–	–	–	–	●	–	–
–	●	–	–	–	–	–	–
–	●	–	–	●	–	–	–
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–	–	–	–	–	●	–	–
–	●	–	–	–	●	–	–
–	●	–	–	–	●	–	–
●	–	–	–	●	–	–	–

Switchable	Phase section	1-10 V	DALI	ZigBee	Casambi	d2w 6 W	d2w 12 W	Converter dimensions	Converter power	Item number
✓	–	–	–	–	–	–	–	L 52 x W 30 x H 23 mm	1-5 W	**17666000**
✓	–	–	–	–	–	–	–	L 68 x W 35 x H 21 mm	1–7.2 W	**17662000**
✓	–	–	–	–	–	–	–	L 115 x W 34 x H 19 mm	1-15 W	**17613000**
✓	–	–	–	–	–	–	–	L 128 x W 50 x H 13 mm	1-21 W	**17621000**
–	✓	–	–	–	–	✓	–	L 110 x W 50 x H 19 mm	2.8-7 W	**17663000**
–	✓	–	–	–	–	✓	–	D 51 x H 24 mm	4.9-7 W	**17652000**
–	✓	–	–	–	–	✓	–	L 102 x W 38 x H 21 mm	4.2-10 W	**17640000**
–	✓	–	–	–	–	–	✓	L 125 x W 51 x H 20 mm	10.15-14 W	**17664000**
–	✓	–	–	–	–	–	✓	L 110.5 x W 52 x H 22 mm	8.75-18 W	**17643000**
–	✓	–	–	–	–	–	–	L 166 x W 46 x H 34 mm	0.7-17 W	**17648000**
–	–	✓	–	–	–	✓	✓	L 110.5 x W 52 x H 22 mm	5.25-18 W	**17657000**
–	–	–	✓	–	–	✓	✓	L 110.5 x W 52 x H 22 mm	3.5-17 W	**17683000**
–	–	–	✓	–	–	✓	–	L 130 x W 42 x H 22 mm	2.8-7 W	**17684000**
–	–	–	✓	–	–	✓	–	D 56 x H 25 mm	2.1-9 W	**17658000**
–	–	–	–	✓	–	✓	✓	L 146.5 x W 44 x H 30 mm	3.5-18.5 W	**17671000**
–	–	–	–	–	✓	✓	✓	L 146.5 x W 44 x H 30 mm	3.5-18.5 W	**17672000**

Switchable	Phase section	1-10 V	DALI	ZigBee	Casambi	d2w 6 W	Converter dimensions	Converter power	Item number
✓	–	–	–	–	–	–	L 52 x W 30 x H 23 mm	1-5 W	**17666000**
✓	–	–	–	–	–	–	L 68 x W 35 x H 21 mm	1–7.2 W	**17662000**
✓	–	–	–	–	–	–	L 115 x W 34 x H 19 mm	1-15 W	**17613000**
✓	–	–	–	–	–	–	L 128 x W 50 x H 13 mm	1-21 W	**17621000**
–	✓	–	–	–	–	–	L 110 x W 50 x H 19 mm	2.8-7 W	**17663000**
–	✓	–	–	–	–	✓	D 51 x H 24 mm	4.9-7 W	**17652000**
–	✓	–	–	–	–	✓	L 125 x W 51 x H 20 mm	10.15-14 W	**17664000**
–	✓	–	–	–	–	✓	L 110.5 x W 52 x H 22 mm	8.75-18 W	**17643000**
–	–	✓	–	–	–	✓	L 110.5 x W 52 x H 22 mm	5.25-18 W	**17657000**
–	–	–	✓	–	–	✓	L 110.5 x W 52 x H 22 mm	3.5-17 W	**17683000**
–	–	–	✓	–	–	✓	D 56 x H 25 mm	2.1-9 W	**17658000**

Finished. You now have the order for all three required item numbers.

Independence thanks to the system.

The M1 module system offers variable lighting characteristics and modern design across all applications. From hotels or offices to commercial or private rooms. From the application to the technology to the design in detail: the good thing is that the modules can be easily configured in three steps – depending on the room conditions.

No two projects are ever the same. But many projects require a unified lighting and design concept. The M1 module system is a perfectly coordinated lighting system that harmonizes function, design and technology. For planners and doers.

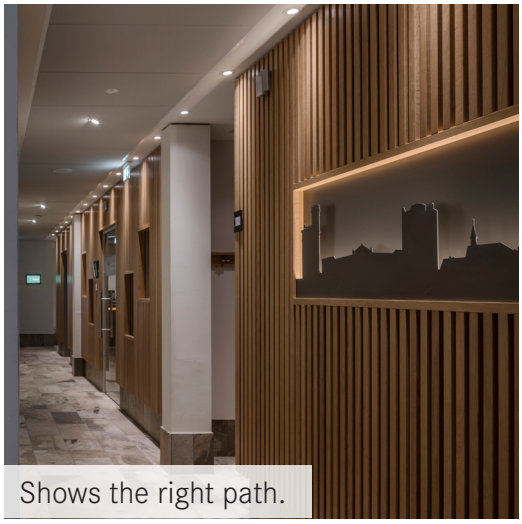
Gives the finishing touch to the atmosphere.

Maintains attention during long meetings.

Sets the stage for waiting areas.

Creates atmosphere for relaxed stays.

Provides a bright and glare-free light.



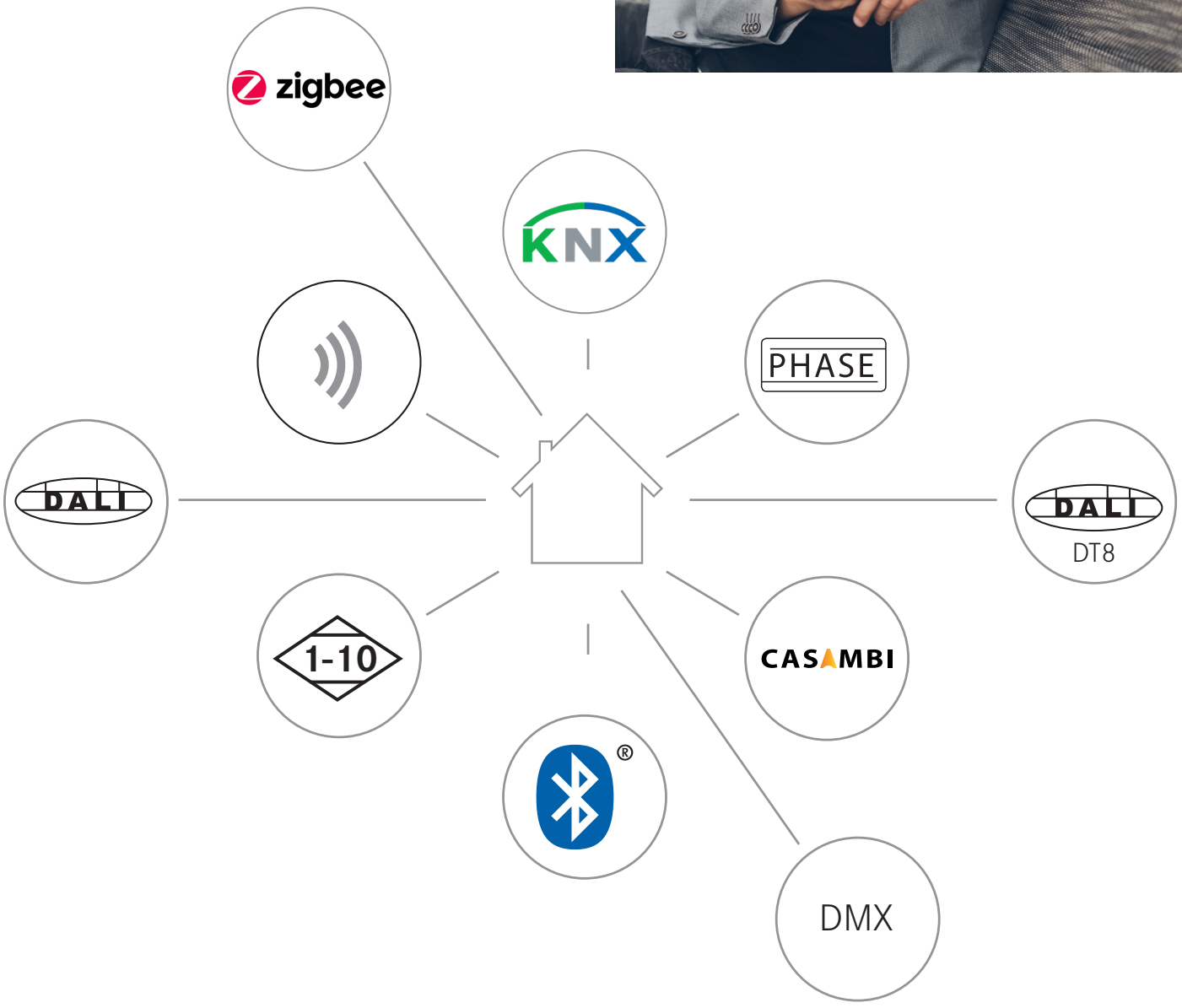
Shows the right path.

Configure M1 online. Simple and fast.

The M1 module system offers variable lighting characteristics and modern design across all applications. From hotels or offices to commercial or private rooms. From the application to the technology to the design in detail: the good thing is that the modules can be easily configured in three steps - depending on the room conditions.

Scan the QR code and start:

Controller. Digital or analog?



BRUMBERG

PREMIUM MARKEN Partner

ELEKTRO MARKEN STARKE PARTNER

ÖKOPROFIT Soest-Sauerland

Resource efficient economies Always with you.

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