

RoHS

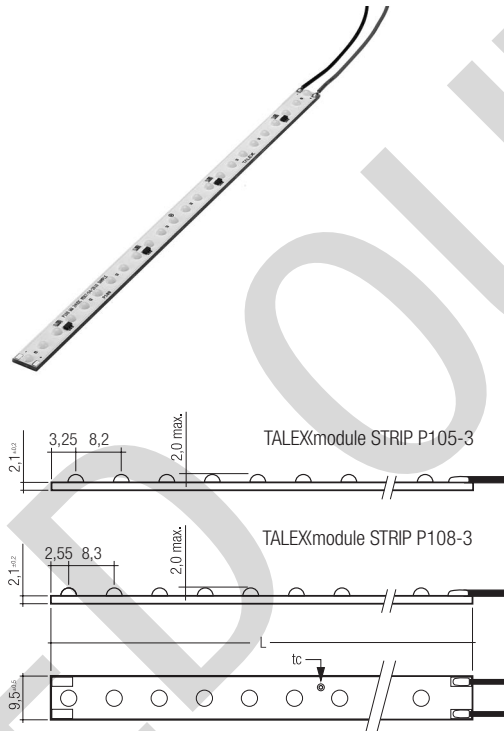
## TALEXmodule STRIP P105-3 / P108-3 TALEXmodule STRIP

### Product description

- LED strip module for highlighting lines and edges and for side injection
- For safety lighting, general lighting, effect lighting and shelf lighting
- Suitable for TALEXaccessory PROFILE Z200-2 / 201-2 / Z22W-2
- Edge injection of transparent or diffuse materials
- With maximum possible beam angle for uniform illumination
- Low-profile
- Dimmable by pulse width modulation (PWM)
- Integrated current source to stabilise luminous flux
- Attached with premounted thermally conductive double-sided adhesive tape
- Connection: Cable 200 mm

### Technical data

Beam characteristic	140°
Ambient temperature $t_a$	-25 ... +50 °C
Max. tc point <sup>①</sup>	75 °C
Risk group (EN 62471:2008)	0



Colour temperatures and tolerances, page 4

### Ordering data

Colour <sup>④</sup>	Colour temperature <sup>⑤</sup>	Type	Article number
<b>6 light points per module</b>			
Daylight white	6,500 K	P105-3 DL	89601049
Neutral white	4,200 K	P105-3 NW	89601048
Warm white	3,000 K	P105-3 WW	89601047
<b>24 light points per module</b>			
Daylight white	6,500 K	P108-3 DL	89601052
Neutral white	4,200 K	P108-3 NW	89601051
Warm white	3,000 K	P108-3 WW	89601050

Packaging TALEXmodule STRIP P105-3: 20 pieces/carton

Packaging TALEXmodule STRIP P108-3: 10 pieces/carton

### Specific technical data

Type	Typ. luminous flux <sup>②</sup>	Supply voltage DC <sup>③</sup>	Power <sup>②</sup>	Colour rendering index CRI <sup>⑥</sup>	Total length
<b>6 light points per module</b>					
P105-3 DL	51 lm	24 V	0.90 W	75	47.5 +/- 0.4 mm
P105-3 NW	41 lm	24 V	0.90 W	80	47.5 +/- 0.4 mm
P105-3 WW	35 lm	24 V	0.90 W	80	47.5 +/- 0.4 mm
<b>24 light points per module</b>					
P108-3 DL	204 lm	24 V	3.65 W	75	196.0 +/- 0.4 mm
P108-3 NW	163 lm	24 V	3.65 W	80	196.0 +/- 0.4 mm
P108-3 WW	140 lm	24 V	3.65 W	80	196.0 +/- 0.4 mm

<sup>①</sup> If the max. temperature limits are exceeded, the life of the module will be reduced or the module may be damaged. The temperature of the TALEXmodule STRIP at the tc-point is to be measured in the thermally stable state. For tc-point see the above diagram.

<sup>②</sup> Tolerance range for optical and electrical data: ±15 %.

<sup>③</sup> Exceeding the max. operating voltage leads to an overload on the TALEXmodule STRIP. This may in turn result in a significant reduction in lifetime or even in destruction. Tolerance range for the supply voltage: 24 V: +2 V / -0 V

<sup>④</sup> Colour coordinates and tolerances according to CIE 1964. For details please refer to page 3.

<sup>⑤</sup> Colour temperature and CRI according to CIE 1931.

All values at  $t_a = 25$  °C.

Converters matrix – TALEX(module STRIP P105-3 / P108-3

IN-BUILT LCU				
Type	0010 K301 24V	LCU 060/24 D010	LCU 100/24 D010	LCU 150/24 D010
Article number	86456215	22185184	22185185	22185186

Type	Assignable converters								Max. chaining
	Number of modules								
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
TALEX(module STRIP P105-3	2	11	6	66	12	111	23	166	40
TALEX(module STRIP P108-3	1	2	2	16	3	27	6	41	10

Converters matrix – TALEX(module STRIP P105-3 / P108-3

REMOTE LCU							
Type	0025 K201 24V	0025 K210 24V one4all	0025 K211 24V	LCU 035/24 E020	LCU 060/24 E020	LCU 100/24 E020	LCU 150/24 E020
Article number	86453418	86455937	86455066	24166320	24166324	24166328	24166333

Type	Assignable converters														Max. chaining
	Number of modules														
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
TALEX(module STRIP P105-3	2	27	2	27	2	27	4	38	6	66	12	111	23	166	40
TALEX(module STRIP P108-3	1	6	1	6	1	6	1	9	2	16	3	27	6	41	10

Lighting controls matrix – TALEX(module STRIP P105-3 / P108-3

Typ	REMOTE						IN-BUILT	
	C001		C002		C004		C003 DALI RGB	
	Artikelnummer	86454974		86454968		24138760		86457912

Typ	Assignable lighting controls						Assignable lighting controls		Max. chaining
	Number of modules						Number of modules		
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
TALEX(module STRIP P105-3	2	53	2	53	2	53	2	16	40
TALEX(module STRIP P108-3	1	13	1	13	1	13	1	3	10

### Electrical supply/choice of converter

TALEXmodule STRIP from Tridonic is not protected against overvoltages, overcurrents, overloads or short-circuit currents. Safe and reliable operation can only be guaranteed in conjunction with a converter which complies with the relevant standards.

The use of TALEX converters from Tridonic in combination with TALEXmodule STRIP guarantees the necessary protection for safe and reliable operation.

The TALEXmodule STRIP is only for the operation with SELV < 60V.

The operation at converters with output voltage > 60V is with an additional preparations possible. Further information on request.

If a converter other than Tridonic TALEXconverter is used, it must provide the following protection:

- Short-circuit protection
- Overload protection



TALEXmodule STRIP P105-3/P108-3 must be supplied by a constant voltage converter.

Operation with a constant current converter will lead to an irreversible damage of the module. Reversed polarity can damage the TALEXmodule STRIP P105-3/P108-3.

### Mounting instruction



TALEXmodule EOS from Tridonic which have to be installed on a heat sink are equipped as standard with thermally conductive adhesive tape on the back of the pc board.

These TALEX products must be installed with this adhesive tape. To ensure permanent adhesion the fixing/cooling surface must be cleaned before installing the TALEX modules to remove all dirt, dust and grease.

The contact adhesion surface must have a surface energy of at least 38 mNm. The contact pressure must be at least 10 kg/cm<sup>2</sup> (ideally: 40 kg/cm<sup>2</sup>) for at least 3 seconds.

Processing must take place at an ambient temperature of 23 +/- 5°C. A dwell time of 24 hours is required after adhesion.

To avoid damaging the modules during processing you must not touch the components or the glob top. A suitable tool must be used.

For more information please call or email your Tridonic contact.



### EOS/ESD safety guidelines

The device / module contains components that are sensitive to electrostatic discharge and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken. No special measures need be taken for devices/modules with enclosed casings (contact with the pc board not possible), just normal installation practice. Please note the requirements set out in the document EOS / ESD guidelines (Guideline\_EOS\_ESD.pdf) at:

<http://www.tridonic.com/com/en/technical-docs.asp>

### Wiring

Cable: AWG24; length 200 mm

Colour	red	black
Function	+	-

### Heat sink characteristics

#### TALEXmodule STRIP P105-3

ta	tc	R <sub>th, hs-a</sub>
25°C	65°C	51.0 K/W
35°C	65°C	38.0 K/W
45°C	65°C	25.0 K/W
50°C	65°C	18.5 K/W

#### TALEXmodule STRIP P108-3

ta	tc	R <sub>th, hs-a</sub>
25°C	65°C	12.8 K/W
35°C	65°C	9.5 K/W
45°C	65°C	6.2 K/W
50°C	65°C	4.6 K/W

### Notes

Above values are guidelines based on natural convection, heat sink material: aluminium ≥ 1 mm thick,

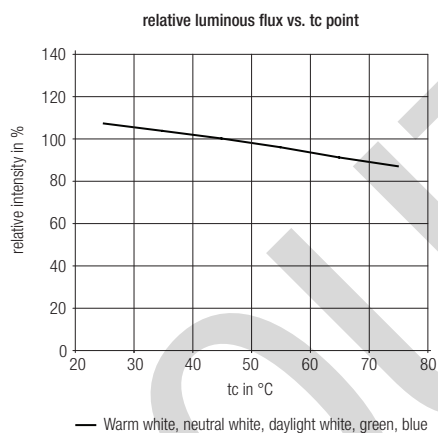
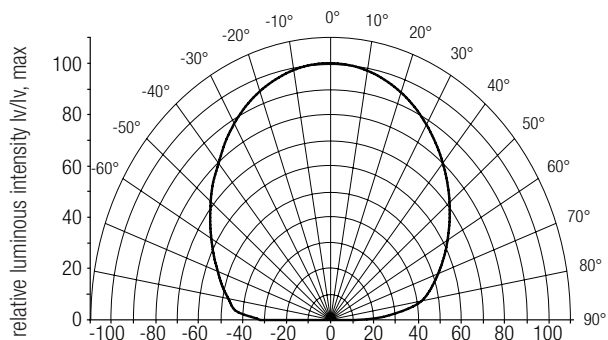
R<sub>th, hs-a</sub> = required thermal resistance of heat sink

The actual required heat sink surface need to be corrected according to the actually measured temperature at tc.

### Optical characteristics TALEX(module STRIP P105-3/P108-3

The optical design of the TALEX(module STRIP lens system ensures an optimum of homogeneity for the light distribution.

#### Light distribution



The diagrams based on statistic values.  
The real values can be different.

#### The evaluation to the eye safety is according to the EN 62471:2008 (Photobiological safety of lamps and lamp systems)

Type	Article number	Colour	Actinic UV	near UV	blue light	retinal thermal	IR radiation, eye
			$E_s$	$E_{UV-A}$	$L_B$	$L_R$	$E_{IR}$
			200 – 400 nm	315 – 400 nm	300 – 700 nm	380 – 1,400 nm	780 – 3,000 nm
P108-3 WW	89601052	Warm white	exempt	exempt	exempt	exempt	exempt
P108-3 NW	89601051	Neutral white	exempt	exempt	exempt	exempt	exempt
P108-3 DL	89601050	Daylight white	exempt	exempt	exempt	exempt	exempt
P105-3 WW	89601049	Warm white	exempt	exempt	exempt	exempt	exempt
P105-3 NW	89601048	Neutral white	exempt	exempt	exempt	exempt	exempt
P105-3 DL	89601047	Daylight white	exempt	exempt	exempt	exempt	exempt

#### Exempt:

The LED does not pose any photobiological hazard.

#### Low risk:

The LED does not pose a hazard due to normal behavioral limitations on exposure.

#### Moderate risk:

The LED does not pose a hazard due to the aversion response to very bright light sources or due to thermal discomfort.

#### High risk:

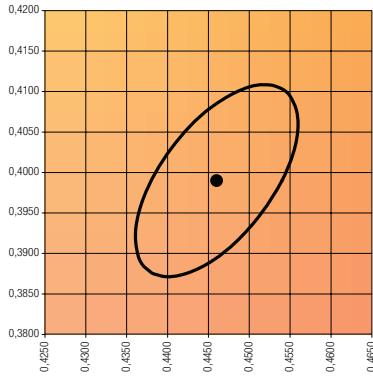
The LED may pose a hazard even for momentary or brief exposure.

Coordinates and tolerances according to CIE 1964

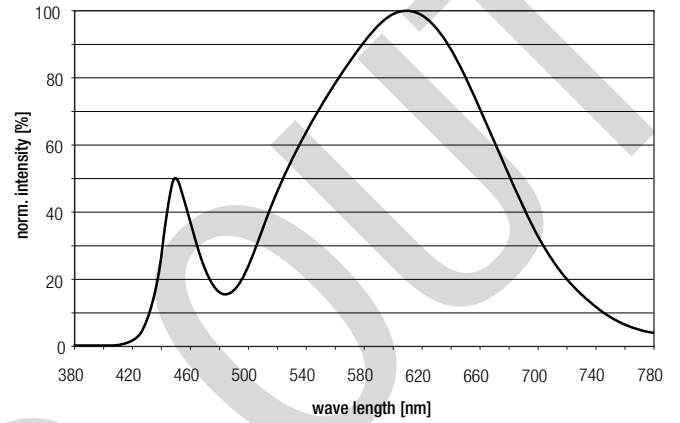
The specified colour coordinates are measured by a voltage impulse of 24V and a duration of 100 ms.  
The ambient temperature of the measurement is  $t_a = 25\text{ }^\circ\text{C}$ .

3,000 K

	x0	y0
Centre	0.4460	0.3990

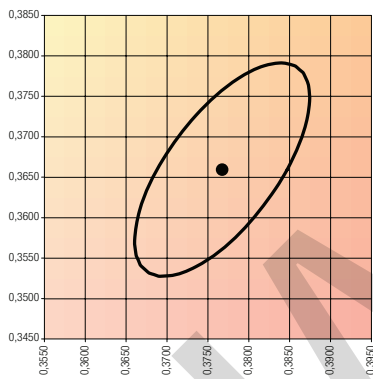


MacAdam ellipse: 5SDCM

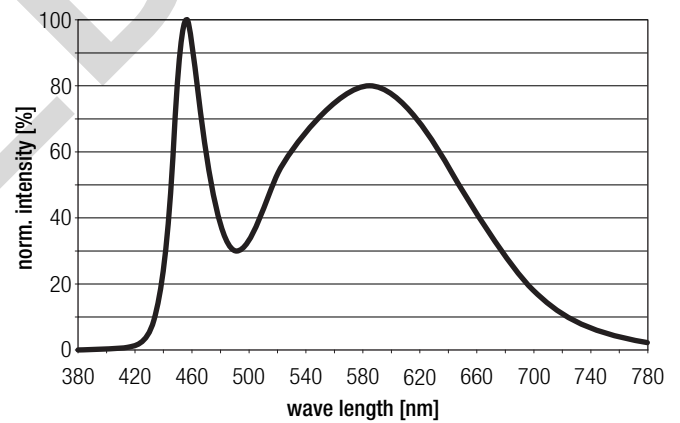


4,200 K

	x0	y0
Centre	0.3770	0.3660

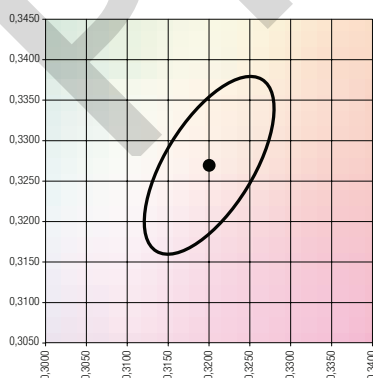


MacAdam ellipse: 5SDCM



6,500 K

	x0	y0
Centre	0.3200	0.3270



MacAdam ellipse: 5SDCM

