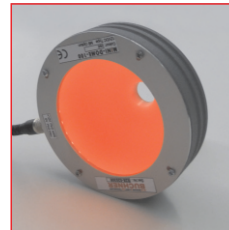


# Professional lighting systems for industrial imaging

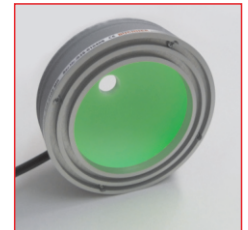
## MINI-DOME-100 & MINI-DOME-100-RGB

### Dome light

- >> extremely homogeneous, diffuse illumination
- >> also available as RGB version
- >> optional 4 segment control (not for RGB version)
- >> well-priced design
- >> small, light, compact
- >> for continuous, switched and pulsed operation (depending on type)



MINI-DOME-100 red



MINI-DOME-100-RGB switched in mixed colour

### Technical specifications



Housing	high-quality plastic, Aluminium
Total weight	approx. 230g
Operating / ambient temperature	max. 50°C recommended
IP protection class	depending on the version
Connector	M8 plug (4-pin)* / RGB version / 4-Channel-Operation: M8 plug (6-pin)*
Supply voltage**	24VDC type or 12VDC type: 24VDC resp. 12VDC (RGB version not available as 12VDC type) SC type: For use in conjunction with a controller
Number of LEDs	32 (monochrome versions) / 30 (RGB version)
Lebensdauer der LEDs	Die Lebensdauer der LEDs ist bei unseren Leuchten sehr hoch, hängt aber von vielen verschiedenen Faktoren wie z.B. Umgebungstemperatur, Strombelastung usw. ab. Nähere Informationen erhalten Sie in der <b>Technischen Information Lebensdauer LEDs</b> .

\* Cable not included in the scope of supply  
\*\* more information see section Operating modes

### Characteristics

Colour *	LED characteristics		typical characteristics per light		
	Wavelength (approx.)	Viewing angle	Current demand (24V type) ** / constant current max. (SC type) [mA]	Pulse current max. (SC type) *** [mA]	Intensity **** [W/m <sup>2</sup> ]
red	617nm	120°	70	400	12
white	6500K	120°	100	400	30
IR	850nm	120°		1600	
blue	470nm	120°	100	1000	20
RGB	red 630nm	120°	70 per colour max. 150 total	500 per colour	18
	green 530nm				17
	blue 470nm				39

\* other colours and types from UV to infrared on request

\*\* stated current values of the 24V types should be considered approximate values

\*\*\* depending on the strobe conditions, recommended maximum values for a flash time of 1ms

\*\*\*\* approximately data measured in DC mode; Measuring distance 5mm below housing



#### Safety note!

LED light systems can produce very intense radiation, which may possibly damage the eyes on improper use. Do not look directly into the light beam with unprotected eyes! Use eye protection!

### Operating modes

#### 24VDC type / 12VDC type

The lights are designed depending on the version for continuous operation at 24VDC or 12VDC.

The following operating modes are possible:

- DC operation at an appropriate power supply with 24VDC or 12VDC
- Switched operation with a matching power supply e.g. via PLC, opto-relay or controller (GS or SC series)
- Brightness-controlled operation via controller (GS or SC series) in conjunction with suitable power supply
- Pulsed mode via controller (GS or SC series) in conjunction with suitable power supply. The LED current can be increased in pulse mode up to a factor of 2 to 3.

#### SC type

For pulsed, switched or brightness-controlled operation, the lights are also available as optimized SC versions. They can be used in combination with our controllers of the GS and SC series and provide optimized and maximum current flow, especially in pulsed operation. We will assist you in selecting the right components.

technical changes reserved

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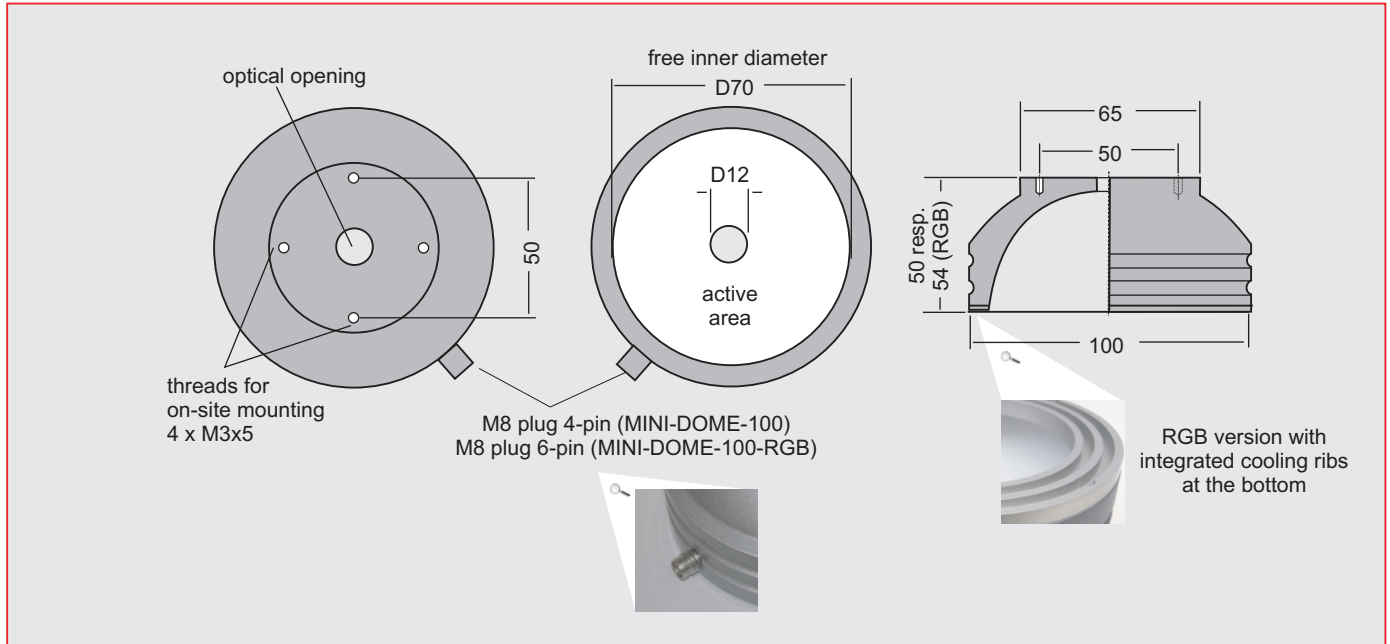
www.imaging-light-technology.com



# MINI-DOME-100 & MINI-DOME-100-RGB

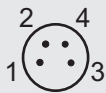
## Dome light

### Dimensions



### PIN assignment connector

M8 plug 4-pin  
(Front view on housing)



24VDC type

PIN	Colour	Function
1	brown	+ 24V
3	blue	-

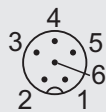
12VDC type

PIN	Colour	Function
2	white	+ 12V
3	blue	-

SC type

PIN	Colour	Function
4	black	+
3	blue	-

M8 plug 6-pin  
(Front view on housing)



RGB version

24VDC type

PIN	Colour	Function
1	brown	+ 24V
6	rose	- Ch. R
5	grey	- Ch. G
3	blue	- Ch. B

SC type

PIN	Colour	Function
4	black	+ common
6	rose	- Ch. R
5	grey	- Ch. G
3	blue	- Ch. B

Special version 4-Channel-Operation

24VDC type

PIN	Colour	Function
1	brown	+ 24V
3	blue	- Sector 1
4	black	- Sector 2
5	grey	- Sector 3
6	rose	- Sector 4

12VDC type

PIN	Colour	Function
2	white	+ 12V
3	blue	- Sector 1
4	black	- Sector 2
5	grey	- Sector 3
6	rose	- Sector 4

SC type

PIN	Colour	Function
4	black	+ common
3	blue	- Sector 1
2	white	- Sector 2
5	grey	- Sector 3
6	rose	- Sector 4

## MINI-DOME-100 & MINI-DOME-100-RGB

Dome light

### Technical notes (RGB version)

#### Operation of the RGB version directly at 24V

By switching on and off the ground lines of the 3 single colors (RGB), the individual colors can be activated and mixed.

#### Continuous/pulsed operation of the RGB version with SC4, SC6 or GS 420

When using 3-channel operation with the listed controllers, any colour mixture can be realised by setting a particular current to the 3 channels (RGB), both in continuous and pulsed operation.

### Options / special versions

#### 4-Channel-Operation

The monochrome versions of the MINI-DOME-100 can optionally be configured, so the LED ring is separated in 4 independently controllable sectors. For this 4-Channel-Operation a 6-pin M8 plug is used as connector by default. For the corresponding pin assignments, you can refer to the section PIN assignment connector.

### Application notes

The optical opening for the camera is located symmetrically on the top of the dome and has a diameter of 12mm. Other diameters on request!

The DOME is typically positioned close to the object.

