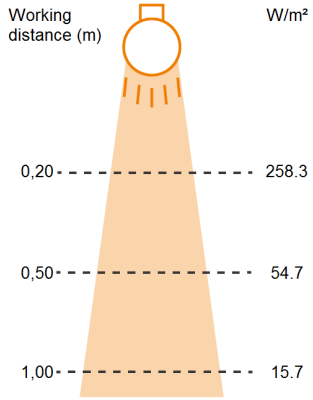
LED Bar Light LB250FL-R-220 / 102.0032.00.01.11

Pictures may differ from the original.

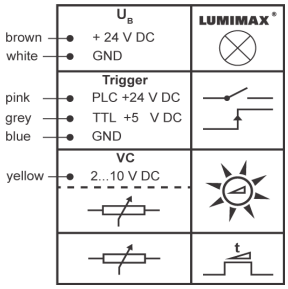
Technical Specifications

Light area dimensions	l x w in mm | 240 x 20
Illumination colour | Wavelength	Red | 625 nm
Light direction	Directed, 80° LED beam angle (without ancillary lenses)
Operating mode	Strobe mode
Controller	Integrated strobe controller
LED technology	20 High Power LEDs
Irradiance	258 W/m² @ 0,2 m
Average current (24 V DC)	0.9 A
Maximum electrical power at the light area	384 W
Risk group - DIN EN 62471	exempt Group
Operating voltage	19 to 30 V DC wide-range voltage input
Electrical connection	150 mm connection cable with M16 12-pin plug
TTL trigger	High level = 3 to 30 V DC
PLC trigger	High level = 15 to 30 V DC
Trigger slope	Rising slope
Switch-on delay	100 % brightness within a maximum of 4 µs
Flash time	From 20 to 220 µs
Flash frequency	35 Hz
Brightness control via potentiometer	0 % (left stop) to 100 % (right stop) brightness Note: automatic deactivation at VC > 1 V DC
Brightness control via VC analogue input	VC = 2 to 10 V DC (0 % to 100 % brightness) Note: Turn potentiometer to left stop
Maximum operating temperature at 21°C	50 °C
Allowed ambient temperature	5 to 45 °C, non-condensing
Protection class	IP64
Dimensions	l x w x h in mm | 250 x 42 x 52 (h = 92 mm with cable incl. bending radius)
Weight	850 g
Material Casing | Screen	Aluminium, anodised | PMMA
Tariff code	85395100
Country of Origin	Federal Republic of Germany

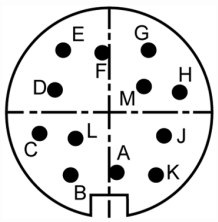
Irradiance



Pin Assignment



Pin	Colour	Assignment	Function	Image
A+K	white	GND	GND operating voltage	
B+L	brown	U_B	Operating voltage	
C	green	NC	NC	
D	yellow	VC	Brightness control 2...10 V DC	
E	grey	+ Trigger TTL	Flash input TTL > 3 V DC, rising slope	
F	pink	+ Trigger PLC	Flash input PLC > 15 V DC, rising slope	
G	blue	GND Trigger	GND trigger circuit	
H	Shield	Shield	Shield connection	
J	NC	NC	NC	
M	NC	NC	NC	



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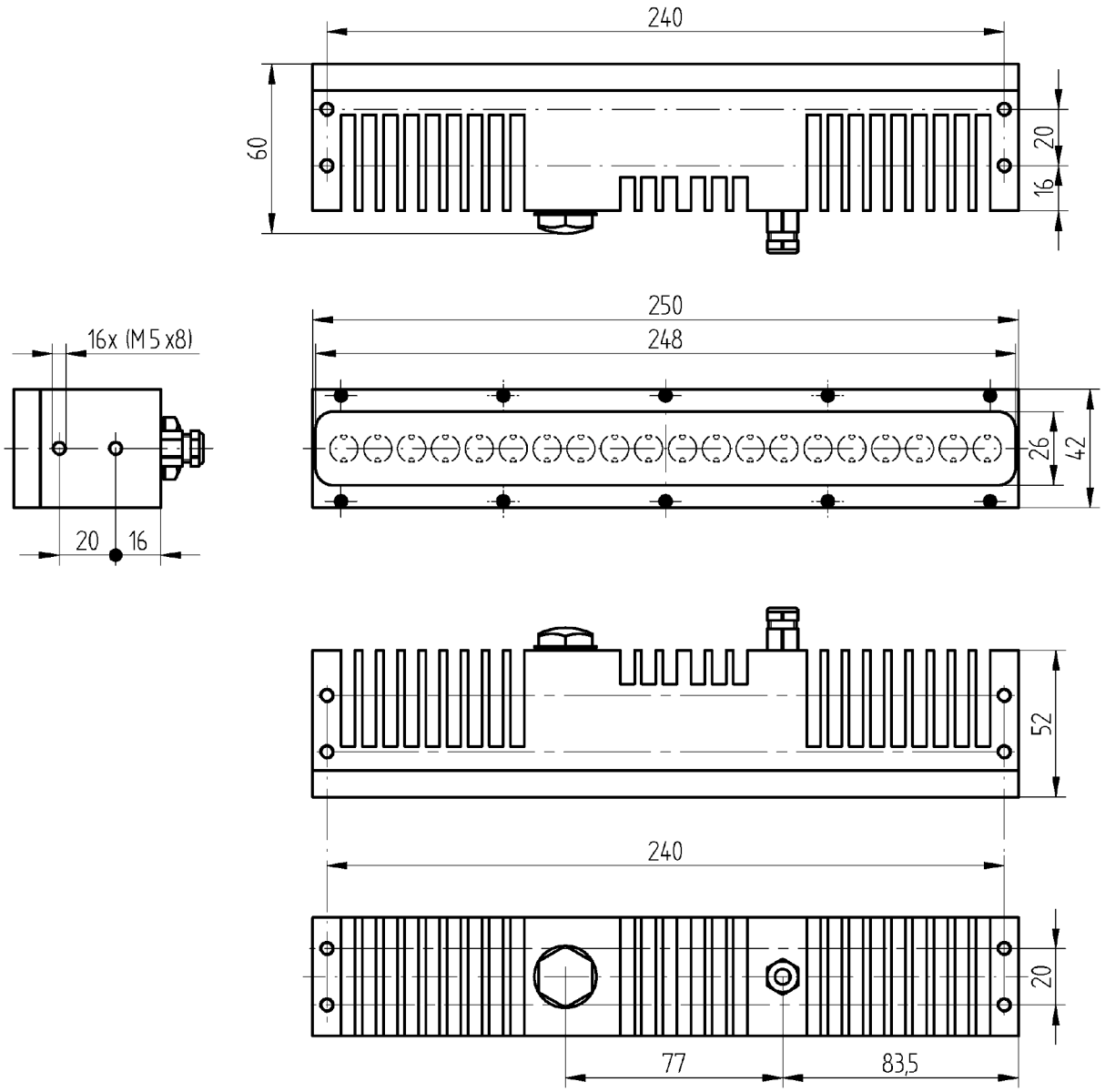
Technical Drawing



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Warnings

Photobiological safety - visible light

Caution! The lighting emits optical radiation light in a wavelength region between 400 nm and 750 nm. This is visible to the human eye. It can glare and/or cause irritation and damage to the eyes and skin. Observe the following risk group classifications and protective measures. The use of additional optical accessories (e. g. lenses, interchangeable screens/frames) can lead to a change of the risk group. For further help ask the LUMIMAX® Service&Support Team.

Hazard related risk group labelling

Illumination colour	RG 0 (exempt)	RG 1	RG 2	RG 3
Visible light	No requirements	No requirements	**CAUTION** Hazardous optical radiation may be emitted from this product	**WARNING** Hazardous optical radiation may be emitted from this product

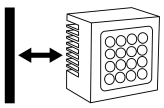
Instructions for protective measures

Illumination Colour	RG 0 (exempt)	RG 1	RG 2	RG 3
Visible light	No requirements	No requirements	Do not look at operating light for a long time. May be harmful to the eye.	Do not look at operating light. Eye injury may result.

Hot housing surfaces

Caution! High ambient temperatures and insufficient heat dissipation lead to hot housing surfaces. These can cause burns if touched. Do not touch the light during operation. Maintain a minimum distance of 20 mm between the light an thermally insulating surfaces or mount the light on a thermally conductive surface.

Cooling fins



Caution! Keep the cooling fins of the light free at all times during operation. Covered cooling fins lead to insufficient heat convection and thus to a significantly increased housing temperature. This can cause burns if touched as well a reduction of the lights' service life.

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FAQ LUMIMAX® LED Light

Intended Use

LUMIMAX® LED lights are exclusively intended as components for Machine Vision systems, that are used for quality control as well as process control and optimisation in industrial installations.

- Use the lights in enclosed rooms only.

Notes on operation

Initial operation

- Have the light only put into operation by trained specialists and in compliance with the specified protective measures. Adhere to the permissible environmental conditions.
- For optimal heat dissipation, mount the largest possible surface of the light on thermally conductive machine elements.
- Keep cooling fins free to ensure sufficient convection.

Status LEDs
Most lights have 2 status LEDs on the (rear) side. The light only illuminates when both status LEDs light or blink.

- The green status LED signals the connection to the correct operating voltage.
- The red status LED blinks when a switching or trigger signal is connected to the light.

Protection class
LUMIMAX® LED lights with protection class IP64 and higher are protected against dust, contact and splash water on all sides in accordance with the applicable standards. Permanent protection against liquids containing solvents, such as e. g. cleaning agents, machine emulsions or other lubricants cannot be guaranteed.

Ageing-related brightness decrease of the LEDs
The brightness of LEDs decreases over time due to natural ageing. LUMIMAX® LED lights are designed and manufactured in such a way that at full load operation under the permissible ambient conditions at least the following expected operating hours are achieved or exceeded without the light's intensity falling by more than 30% compared to the delivery condition:

- 80,000+ h for LUMIMAX® LED lights in the visible and infrared wavelength range
- 55,000+ h for LUMIMAX® High Power LED lights in the ultraviolet wavelength range
- 21,000+ h for LUMIMAX® High Power LED Spot lights in the ultraviolet wavelength range

The ageing is significantly influenced by the mounting conditions in the machine, the ambient temperature, and the operating mode of the lighting. Switching or strobing can significantly reduce the decrease in brightness of the LEDs and thus of the light. Further information concerning this topic you could find here.

Troubleshooting

The device does not light up.
The green status LED does not light up.

- Check if the light is connected as described on the data sheet and that the correct operating voltage is set. If you are using a power supply with current limiting, increase the allowable current.

The green status LED does light up.

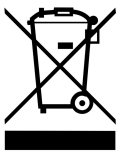
- Check whether the light has been dimmed. Carefully turn the brightness potentiometer clockwise. For variants with an active VC brightness regulation, check if the VC voltage input is correctly connected and a control voltage of at least 2 V DC is applied.
- For lights with switching input and for strobe lights check that the necessary switching or trigger signals are present. The status LED should blink red when a trigger is released.

Care and Maintenance

The LED lights from iiM AG usually do not need maintenance. Should it still be necessary to clean the external glass and plastic surfaces or device components, then observe the following:

- Do not use acetone, methylated spirits or other solvents.
- For cleaning the plastic surfaces use a soft, lint-free cloth moistened with soapy water or a normal glass cleaning cloth.

Disposal



LUMIMAX® LED lights and cables are registered at Stiftung Elektro-Altgeräte Register® under WEEE Reg. No. DE 48985193.

- Ensure the separate collection of electrical and electronic equipment. Beforehand, a non-destructive removal of the LEDs is not possible.
- On request, the iiM AG will handle the proper disposal of returned LED lights.
  Contact via info@iimAG.de

The aims of the Packaging Act (VerpackG) are the avoidance or reduction, reuse and recycling of packaging waste to protect the environment.

- Properly recycle packaging waste.

Compliance

EU and UK Documents of Conformity for all LUMIMAX® standard lights can be found online on the respective product detail page using our product configurator.
UK Representative: PKG Consultants LLP, 38 Northgate, Newark, Nottinghamshire NG24 1EZ, United Kingdom