

The next generation of machine vision lighting, powered by LuxiBright®

MACHINE VISION LINE LIGHTS DATASHEET

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Product Application

Machine Vision Lighting with LuxiBright® Technology

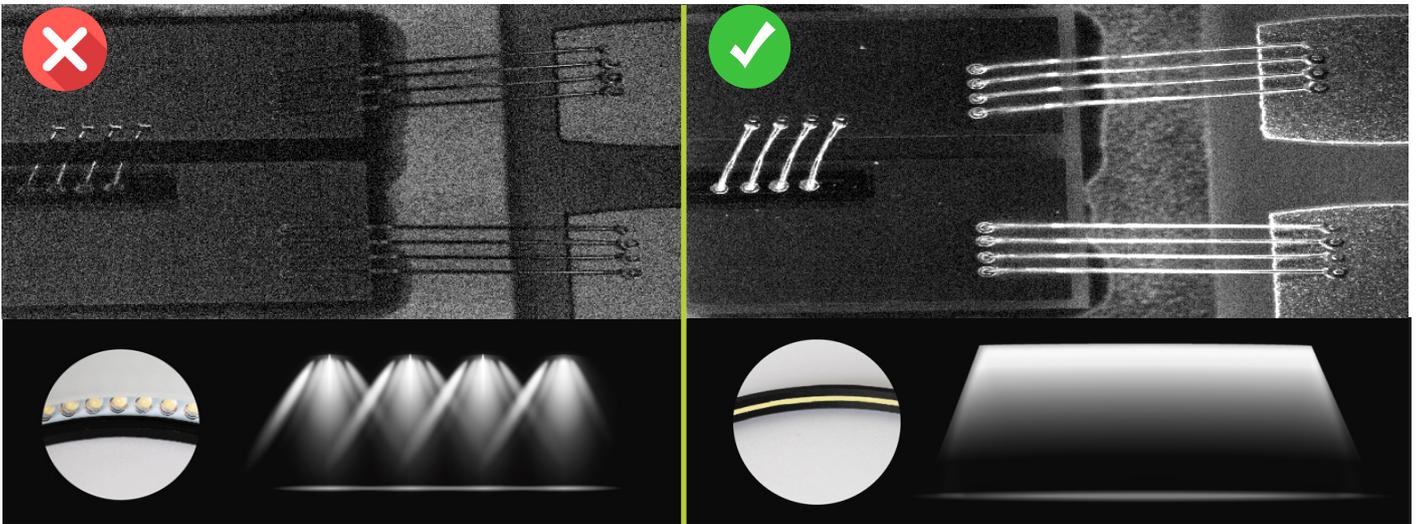
Leveraging our innovative LuxiBright® lighting technology, delivering uniform and directional illumination, we have developed LuxiLine, a high-performance linear lighting solution designed for demanding machine vision applications.

LuxiLine provides exceptional brightness, homogeneity, and optical precision across a wide range of lengths, ensuring consistent illumination over extended inspection areas. Thanks to LuxiBright® technology, LuxiLine achieves outstanding uniformity and directional control, even in compact or space-constrained integrations.

Our product portfolio has been engineered to offer maximum flexibility and to address diverse lighting requirements in industrial vision systems. LuxiLine is particularly optimized for semiconductor inspection, while remaining perfectly suited for electronics manufacturing, surface inspection, metrology, and advanced industrial applications.

When combined with cameras and precision optics, LuxiLine delivers sharper, higher-contrast, and more detailed images, significantly improving inspection reliability, defect detection capability, and measurement repeatability.

Key Features



LED

LuxiBright®

Bulky Design

Diffuser Required

4X Thinner

5X Lighter



LuxiLine 300mm

General Mechanical Specifications



MECHANICAL SPECIFICATIONS

Variant	Product Reference	Hole Position*	Interface	Frame Material	Weight
300	LL-300	2 x Ø3 Dowel Pins	2x M3 holes, depth 6mm	Anodized Aluminium	≤ 220g
Controller interface**	DIN Rail adaptor TS35				

*For more information, please refer to the drawing of this variant in our download section or in our product page.

**Machine vision controller specifications, please refer to the controller section below.

OPTICAL SPECIFICATIONS

Lighting technology	LuxiBright®
Color	White
Color temperature	5400°K ±250°K
Illumination modes	Continuous / Trigger / Strobe
Part reference	Illuminance at optimal working distance***
LL-300	>300'000 lx at 10 mm nominal >500'000 lx at 10 mm in trigger mode

***Measurements at specified vertical distance from the line.

ELECTRICAL SPECIFICATIONS

Electrical interface**	24 VDC / GND / Trig In
Max. Power Consumption**	19W (Overdrive), 12W (Nominal)
Overdrive ratio**	x 2.5
Strobe reactivity**	<10µs

**Machine vision controller specifications.

ENVIRONMENTAL SPECIFICATIONS

Working temperature	0-40°C
IP rating	IP 30

LuxiLine 600mm

General Mechanical Specifications



MECHANICAL SPECIFICATIONS

Variant	Product Reference	Hole Position*	Interface	Frame Material	Weight
600	LL-600	2 x Ø3 Dovel Pins	2 x M3 Holes, depth 6 mm	Anodized Aluminium	≤ 320g
Controller interface**	DIN Rail adaptor TS35				

*For more information, please refer to the drawing of this variant in our download section or in our product page.

**Machine vision controller specifications, please refer to the controller section below.

OPTICAL SPECIFICATIONS

Lighting technology	LuxiBright®
Color	White
Color temperature	5400°K ±250°K
Illumination modes	Continuous / Trigger / Strobe
Part reference	Illuminance at optimal working distance***
LL-600	>150'000 lx at 10 mm nominal >250'000 lx at 10 mm in trigger mode

***Measurements at specified vertical distance from the line.

ELECTRICAL SPECIFICATIONS

Electrical interface**	24 VDC / GND / Trig In
Max. Power Consumption**	19W (Overdrive), 12W (Nominal)
Overdrive ratio**	x 2.5
Strobe reactivity**	<10µs

**Machine vision controller specifications.

ENVIRONMENTAL SPECIFICATIONS

Working temperature	0-40°C
IP rating	IP 30

LuxiLine 900mm

General Mechanical Specifications



MECHANICAL SPECIFICATIONS

Variant	Product Reference	Hole Position*	Interface	Frame Material	Weight
900	LL-900	2 x Ø3 Dowel Pins	2 x M3 holes, depth 6 mm	Anodized Aluminium	≤ 420g
Controller interface**	DIN Rail adaptor TS35				

*For more information, please refer to the drawing of this variant in our download section or in our product page.

**Machine vision controller specifications, please refer to the controller section below.

OPTICAL SPECIFICATIONS

Lighting technology	LuxiBright®
Color	White
Color temperature	5400°K ±250°K
Illumination modes	Continuous / Trigger / Strobe
Part reference	Illuminance at optimal working distance***
LL-900	>100'000 lx at 10 mm nominal >150'000 lx at 10 mm in trigger mode

***Measurements at specified vertical distance from the center of the rings.

ELECTRICAL SPECIFICATIONS

Electrical interface**	24 VDC / GND / Trig In
Max. Power Consumption**	19W (Overdrive), 12W (Nominal)
Overdrive ratio**	x 2.5
Strobe reactivity**	<10µs

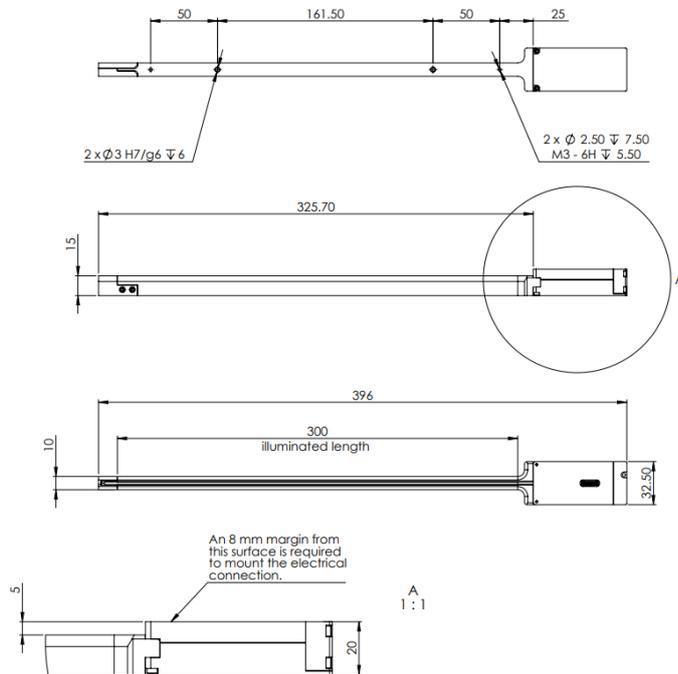
**Machine vision controller specifications.

ENVIRONNEMENTAL SPECIFICATIONS

Working temperature	0-40°C
IP rating	IP 30

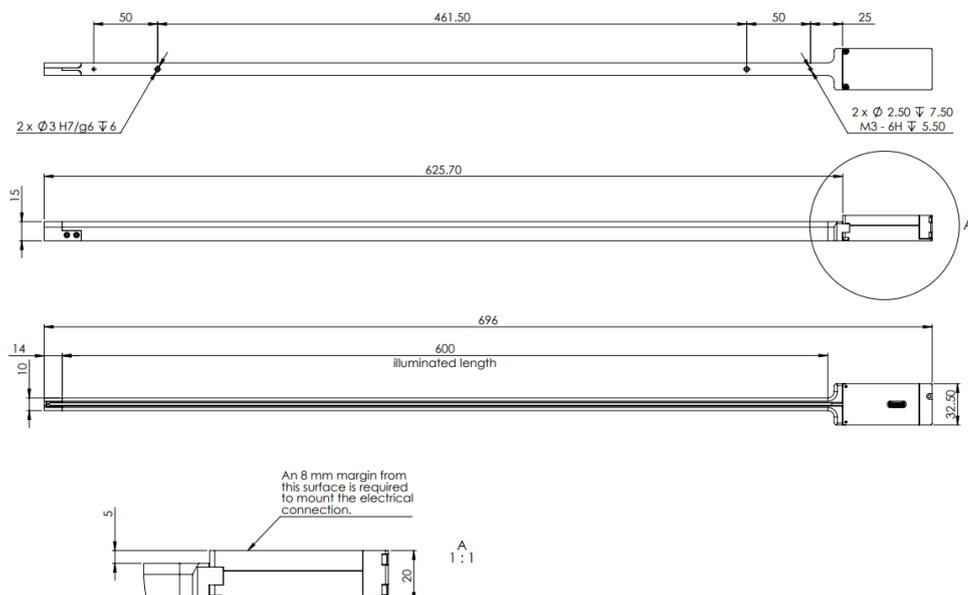
1. LuxiLine 300mm

2D Drawing



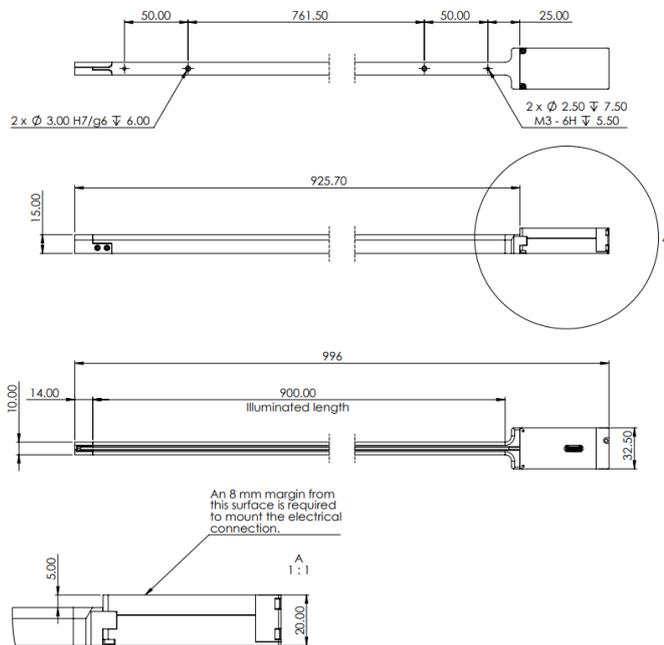
2. LuxiLine 600mm

2D Drawing



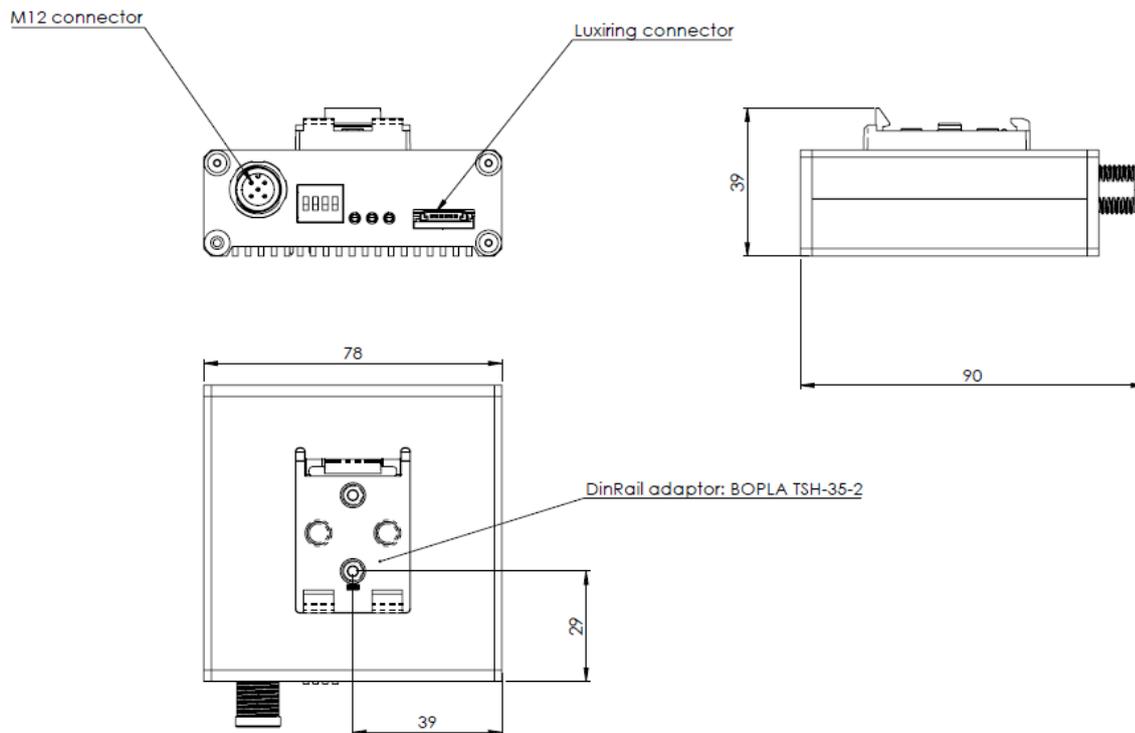
3. LuxiLine 900mm

2D Drawing



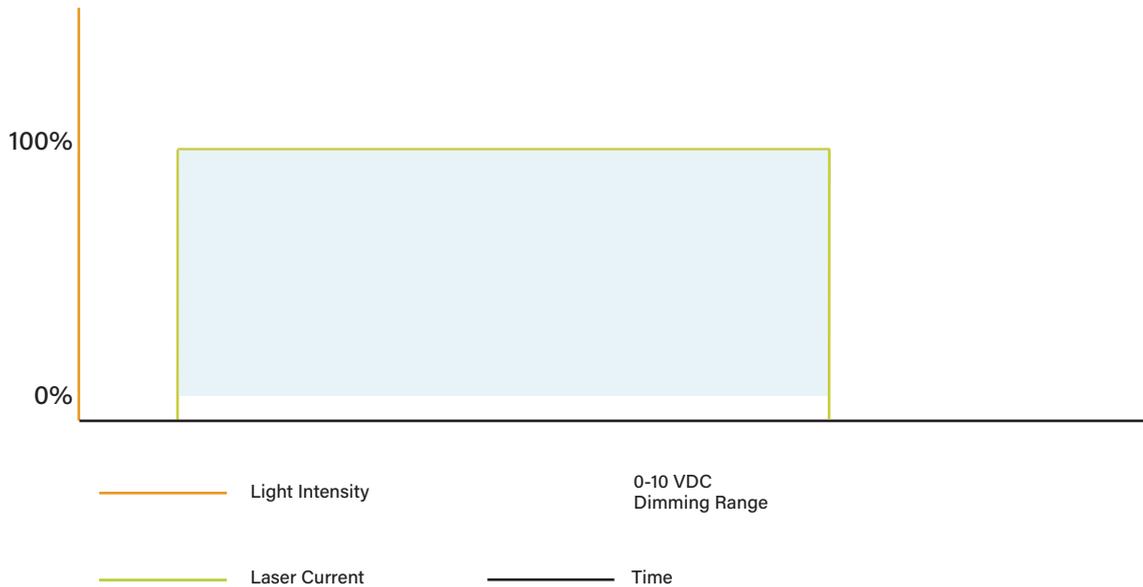
Controller (10030-1000-01-A)

2D Drawing

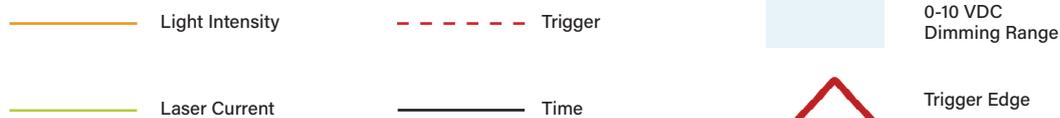
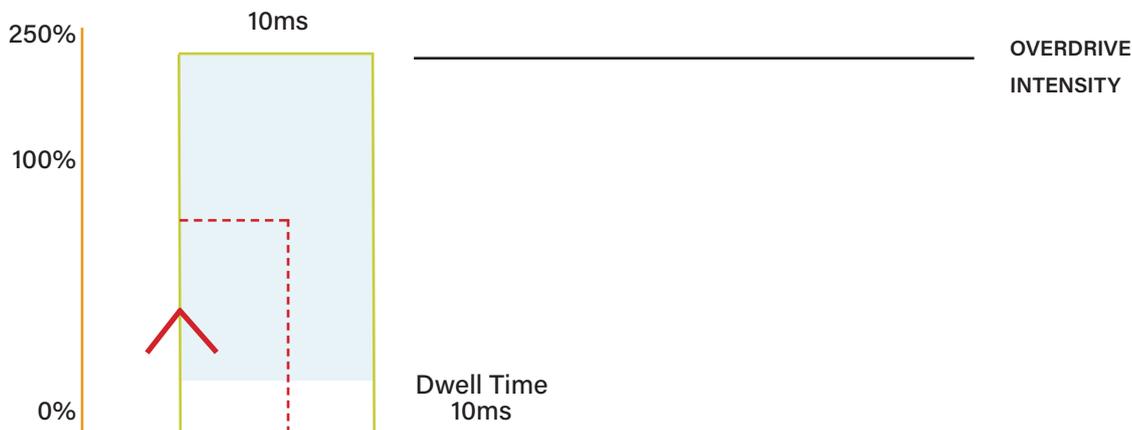


Operating Modes

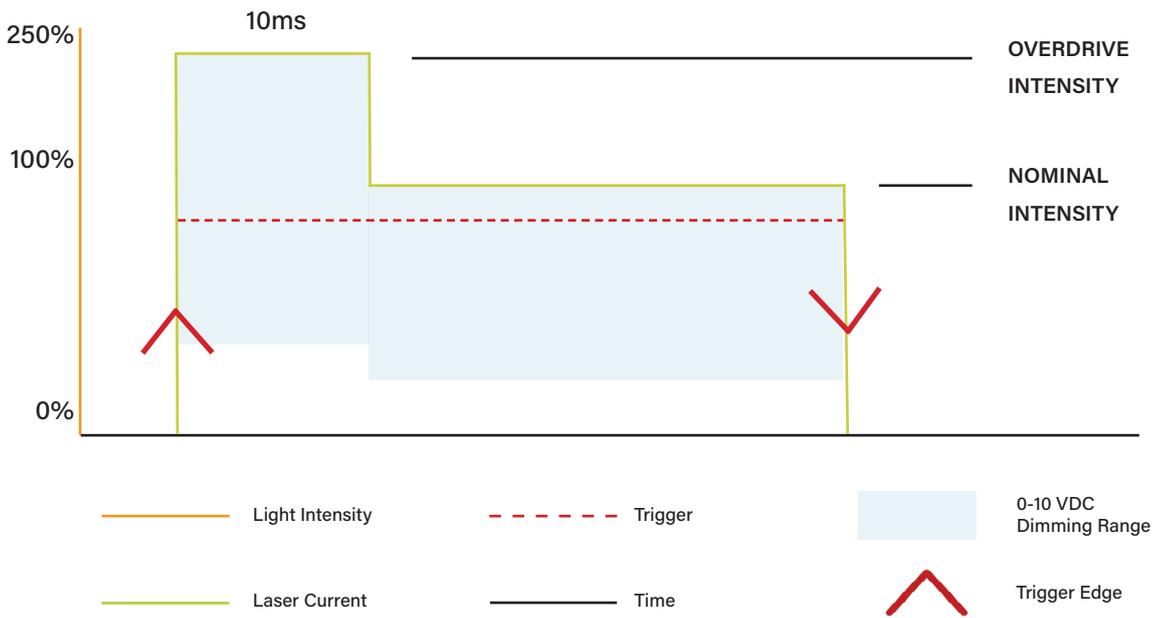
1. Continuous at nominal current



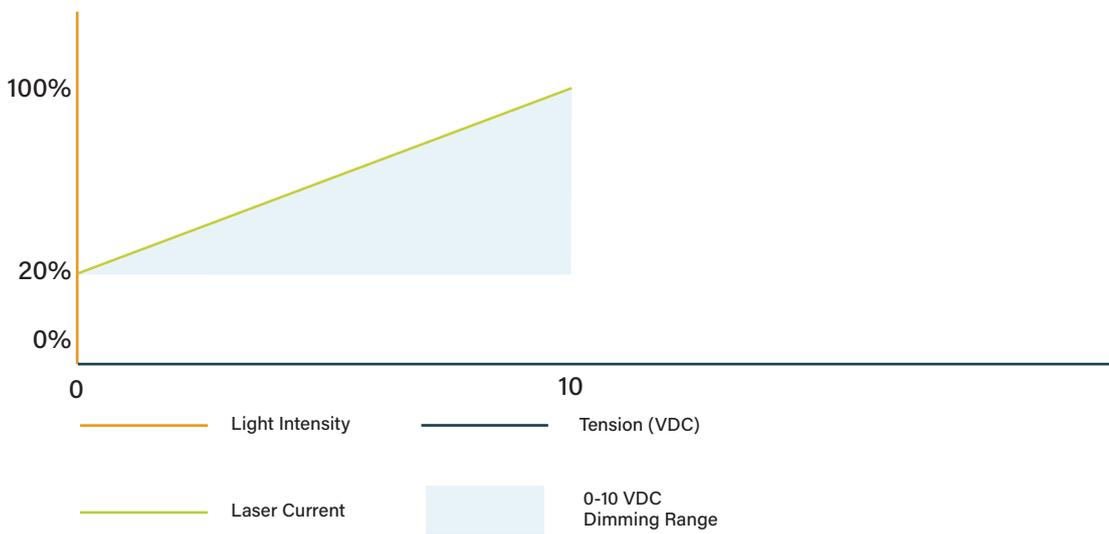
2. Rising Edge + Overdrive *



3. Following pulse + Overdrive *



4. Voltage with Dipswitch 4 ON



Cabling

Controller's input: 5 wires terminal-to M12 5-pin-power supply and external trigger



Ref : AC-M12-1.5

1	BN	
2	WH	
3	BU	
4	BK	
5	GY	

24 VDC
 Analog Dimming 0-10 VDC*
 GND
 Trigger in 12-26 VDC
 n.u.

Light source connector: I/O connector:
 TE Connectivity / ERNI iBridge Ultra.

**Analog dimming range: 0-10 VDC.*

At 0 VDC, light intensity is 20%; at 10 VDC, light output is 100%.

Ordering Informations

Products reference.

LuxiLine	Size	M12 Cable	Supply Cable	Controller
LL	XXX	AC-M12-1.5	AC-CBL-1M AC-CBL-2M	CTRL-LR-V2



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