

NEW!  
Designed for line scan &  
web inspection applications!

# High Brightness LED Light Line

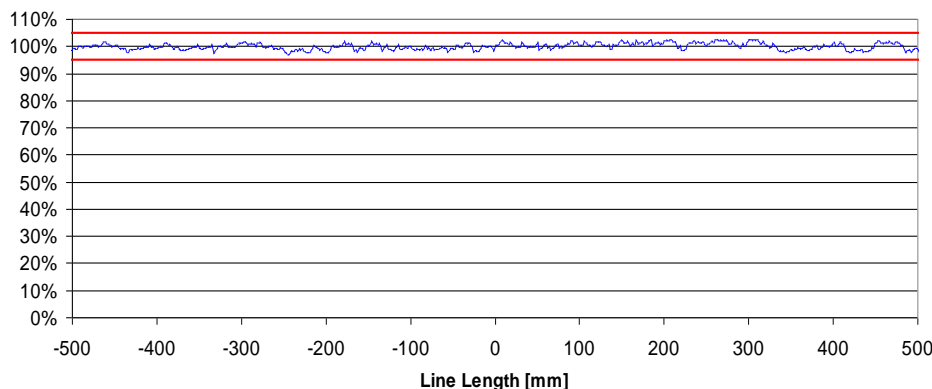
## Illumination for Web and Line Scan applications

Our series of HB LED Light Lines provide extremely high brightness illumination for challenging web and line scan applications with key features that include:

- Extreme high brightness, > 2 M Lux (\* White, water-cooled model at 50mm WD)
- High uniformity ( $\pm 5\%$  average level)
- Slim & light-weight design
- Adjustable condenser lens to vary working distance
- Strobe rates up to 100 kHz
- RoHS compliant, CE and ETL approved



The **mechanical design** is based on specially developed side profiles that integrate MayTec® grooves along the sides of the slim housing which allows for easy and flexible mounting for integration into existing manufacturing lines. In addition, the housing is mechanically stabilized for lengths up to 3 m. The design concept allows scalable lengths from 300 mm up to 3 m in increments of 150 mm. Each LED segment is driven by an **integrated controller** which offers a 0-5 V DC input for brightness control and a TTL input for switching, allowing PWM up to 100 kHz. As a result of strict tolerances for optical and mechanical design, a **homogeneity of  $\pm 5\%$**  can be achieved from the average level of the projected line of light.



### Standard Type (STD-Type) and Reflective Surface Type (RS-Type)

On non-reflective surfaces, our Standard Type light line reaches unparalleled light intensity value. Using a standard LED light line on reflective surfaces, however, may cause images of the individual LEDs to be projected into the imaging system resulting in a non-uniform lighting profile. In those cases, we recommend our Reflective Surface Type light lines to achieve smooth and homogeneous illumination for the camera sensor even when the light line is focused directly into the lens.

## Technical Data

### General technical data two basic modules (300 mm or 450 mm)

<b>Input Voltage</b>	24 V DC $\pm$ 2%		
<b>Power Consumption &amp; Current</b>	<b>Air cooled</b>	<b>Water cooled</b>	
	300 mm module: 450 mm module:	max. 72 W / 3.0 A max. 108 W / 4.5 A	max. 120 W / 5.0 A max. 180 W / 7.5 A
<b>Brightness</b>	White LEDs: 2,100 k Lux * At the center of the light lines (working distance 50 mm )	> @ 120 W per 300 mm module	
<b>LED Color</b>	White: Red:	Color temperature 5000 K to 5650 K 627 nm, FWHM 20 nm	
<b>Temperature Signal</b>	Can be read out via PIN 5		
<b>Operating Conditions</b>	Temperature: 5 °C to 35 °C	Humidity: < 70%	No dust or oil saturated ventilation
<b>Approvals</b>	CE and ETL according to Standard EN 61010, ROHS compliant		

Length (mm)	High Brightness Light Line for Diffused (D) or Reflective Surface (R)			
	White		Red	
	Air	Water	Air	Water
300	HB-LED-LL D/R300 WA	HB-LED-LL D/R300 WW	HB-LED-LL D/R300 RA	HB-LED-LL D/R300 RW
450	HB-LED-LL D/R450 WA	HB-LED-LL D/R450 WW	HB-LED-LL D/R450 RA	HB-LED-LL D/R450 RW
600	HB-LED-LL D/R600 WA	HB-LED-LL D/R600 WW	HB-LED-LL D/R600 RA	HB-LED-LL D/R600 RW
750	HB-LED-LL D/R750 WA	HB-LED-LL D/R750 WW	HB-LED-LL D/R750 RA	HB-LED-LL D/R750 RW
900	HB-LED-LL D/R900 WA	HB-LED-LL D/R900 WW	HB-LED-LL D/R900 RA	HB-LED-LL D/R900 RW
1050	HB-LED-LL D/R1050 WA	HB-LED-LL D/R1050 WW	HB-LED-LL D/R1050 RA	HB-LED-LL D/R1050 RW
1200	HB-LED-LL D/R1200 WA	HB-LED-LL D/R1200 WW	HB-LED-LL D/R1200 RA	HB-LED-LL D/R1200 RW
1350	HB-LED-LL D/R1350 WA	HB-LED-LL D/R1350 WW	HB-LED-LL D/R1350 RA	HB-LED-LL D/R1350 RW
1500	HB-LED-LL D/R1500 WA	HB-LED-LL D/R1500 WW	HB-LED-LL D/R1500 RA	HB-LED-LL D/R1500 RW
1650	HB-LED-LL D/R1650 WA	HB-LED-LL D/R1650 WW	HB-LED-LL D/R1650 RA	HB-LED-LL D/R1650 RW
1800	HB-LED-LL D/R1800 WA	HB-LED-LL D/R1800 WW	HB-LED-LL D/R1800 RA	HB-LED-LL D/R1800 RW
1950	HB-LED-LL D/R1950 WA	HB-LED-LL D/R1950 WW	HB-LED-LL D/R1950 RA	HB-LED-LL D/R1950 RW
2100	HB-LED-LL D/R2100 WA	HB-LED-LL D/R2100 WW	HB-LED-LL D/R2100 RA	HB-LED-LL D/R2100 RW
2250	HB-LED-LL D/R2250 WA	HB-LED-LL D/R2250 WW	HB-LED-LL D/R2250 RA	HB-LED-LL D/R2250 RW
2400	HB-LED-LL D/R2400 WA	HB-LED-LL D/R2400 WW	HB-LED-LL D/R2400 RA	HB-LED-LL D/R2400 RW
2550	HB-LED-LL D/R2550 WA	HB-LED-LL D/R2550 WW	HB-LED-LL D/R2550 RA	HB-LED-LL D/R2550 RW
2700	HB-LED-LL D/R2700 WA	HB-LED-LL D/R2700 WW	HB-LED-LL D/R2700 RA	HB-LED-LL D/R2700 RW
2850	HB-LED-LL D/R2850 WA	HB-LED-LL D/R2850 WW	HB-LED-LL D/R2850 RA	HB-LED-LL D/R2850 RW
3000	HB-LED-LL D/R3000 WA	HB-LED-LL D/R3000 WW	HB-LED-LL D/R3000 RA	HB-LED-LL D/R3000 RW

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