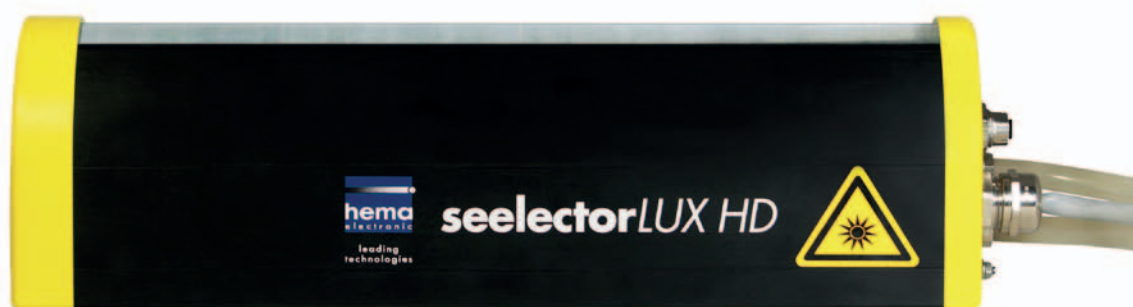# seelectorLUX HD

see - capture - analyze - monitor

The extremely bright megalux

LED-linelight-system

Optimal homogeneous LED light
for surface inspection!

hema electronic

leading technologies

seelector*LUX HD*
extremely bright and linear light

Integrated Design

seelectorLUX HD offers a completely new combination of light intensity, long-term stability and controller functionality. seelectorLUX HD integrates an intelligent controller, liquid cooling, power control and a communication interface in a very slim form.
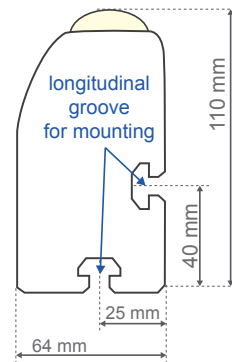
3 innovative technologies in seelector*LUX HD* linear light:

- **ACT (Array Cooling Technology):**
  liquid cooled LED arrays for stable long-term performance

- **HSE (Homogeneity Shaping Engine)**
  low-loss, extremely homogenised, optical guidance of light

- **MIC 2.0 (Multiple Interface Controller)**
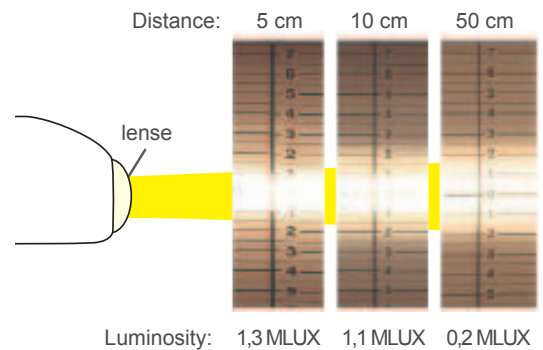 very simple integration

Intelligent Controller

The powerful integrated controller offers self-diagnosis of the whole system including surveillance of the degradation of LEDs, extended flash functions, sequenzer control and command line interpreter. The graphical user interface is based on an integrated webserver. It can be accessed by any browser-based system and supports remote access via the Internet.

Slim housing

Modelling of light

The newly developed Homogeneity Shaping Engine creates a band of light that is about 2 cm wide and unaffected by working distance.

Distance:	5 cm	10 cm	50 cm
Luminosity:	1,3 MLUX	1,1 MLUX	0,2 MLUX

Configuration surface
via web browser

Configuring and monitoring of **seelector*LUX HD*** linear lights can either be web-server-based or integrated into an existing machine controls system. Remote management is enabled through integration with an internet-connected network.

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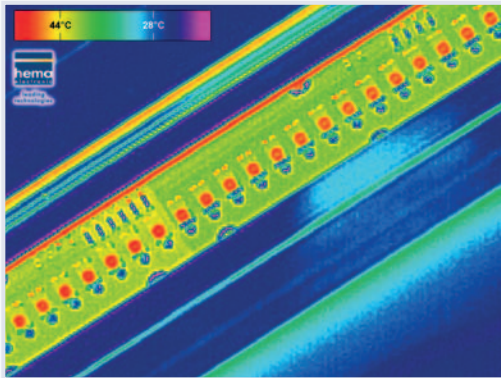| specifications	**seelector*LUX HD***	**seelector*LUX SD***
light intensity **dimming** **fix focus** **width of light line** **homogeneity**	> 1.000.000 lux (in 50 mm working distance) 1 - 100 % 50 mm - 500 mm 20 mm > 98 %	> 150.000 lux (in 50 mm working distance) 1 - 100 % 50 mm - 500 mm 20 mm > 96 %
interfaces	Ethernet, Analog (0 -10 V) TTL trigger input TTL alarm output options: CAN, RS232 / RS485, USB, Profibus	
colours (wave lenghts) **white (temperature of colour)** **UV and IR** **mixed placement** **eye protection class**	470 nm (blue), 530 nm (green), 627 nm (red), more colours per request ANSI 4000K , more colours per request 365 nm - 405 nm, 760 nm - 1080 nm per request per request CE/IEC 62471:2006: without diffusor = moderate risk, with diffusor = low risk.	
mechanics		
sizes **cooling** **interface cooling** **housing** **weight**	250 mm up to 4000 mm in steps of 250 mm special lengths per request external, per request 3/8" aluminum, anodised, IP54 (IP67 and food save housing per request) approx. 5 kg (250mm)	**housing design:** ■ simple and flexible mounting with double longitudinal slot system ■ slim housing design for narrow installation conditions ■ industrial cables and connectors ■ self-sealing hose coupling (optional)

User interface

intensity control via web browser
controlled illumination profile
(units of 6,25 cm are controlled to avoid
inhomogenities created by camera or optics)

- **saving / loading of longitudinal profiles**
- **network configuration**
- **status information includes
  alarm and temperature**

Einstellung der Leuchtsegmente

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optimized heat management

versions:

seelector*LUX HD*
- ■ > 1 Megalux
- ■ active liquid cooling

seelector*LUX SD*
- ■ > 150.000 lux
- ■ passive cooling

MEGALUX
LED-linelight
seelector*LUX HD*

With its liquid-cooled, extremely bright LED-array-line, the new intelligent seelectorLUX series offers essential advantages compared to existing systems and sets a new standard for LED-based line lights!

Optimal light for quality insurance and surface inspection of continously produced goods, wafers, glas und metal. Inspection of documents, prints and printed circuit boards.
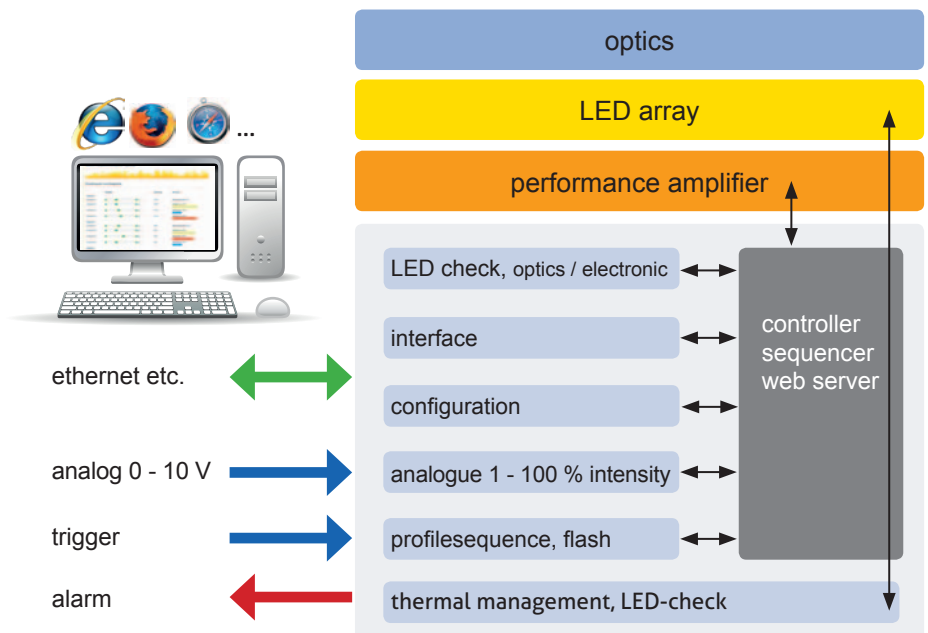
The adjustment of the light profile in combination with highest light intensity allows for much higher camera speed and better image quality.

The thermal management provides a life time of more than **50.000 hours.**

Controller

- ■ control: DIG I/O or webserver
- ■ 4 light profiles on board
- ■ error memory
- ■ thermal management
- ■ emergency shutdown at extreme temperatures
- ■ monitoring of degradation
- ■ flash modus (optional)
- ■ trigger up to 10 kHz
- ■ profile sequencer (optional)
- ■ log for service

Let us talk about
your application!
sales@hema.de

optics

LED array

performance amplifier

LED check, optics / electronic

interface

configuration

analogue 1 - 100 % intensity

profilesequence, flash

thermal management, LED-check

controller
sequencer
web server

ethernet etc.

analog 0 - 10 V

trigger

alarm