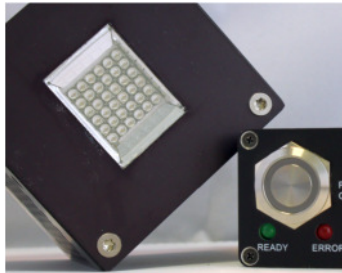


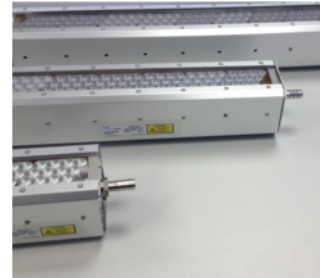
LED-Module



Small air-cooled
LED-System



Round water-
cooled LED-
System



Scalable water-
cooled LED-
System



Custom-designed
LED-System



Air-cooled Light Emitting System OLM018/ OLM034

The OLM-018/OLM-034 is an air-cooled high efficient LED radiation source including a controller unit and a power supply. The OLM-018 version contains 60 LED Chips on board with a wavelength in the range 365-1050nm whereas the OLM-034 contains up to 36 UVB/UVC SMD-LEDs. Since The prices for UVB/UVC LEDs is still very high we offer the possibility to reduce the amount of these LEDs down to 9 to match the costs. The OLM-018/OLM-034 system can be controlled directly from the control-unit or via a PC-program therefore making it a power tool for fast implementation in industrial and laboratory environment.



Features:

- Light emitting area of 25 x 25 mm
- Innovative air-cooled heatsink that enables operation at power losses up to 150W
- Anti-reflection coating on the front window with a transmission value of about 97%
- Controller Unit that enables on/off operation, power level adjustment, and automatic shutdown in case of overheating
- PC program for external control of the system with a power level slider bar, temperature display, and last setting saving option

Type	Number of LEDs	Typical peak wavelength ¹⁾ (nm)	Optical power density ²⁾ (W/cm ²)	Max current per LED-Chip (A)	Max current LED-system (A)	Forward Voltage (V)	Data sheet Download
OLM-018E1050 Air	60	1050	1.5	1	6	12	
OLM-018E740 Air	60	740	2	0.75	4.5	22	
OLM-018E510 Air	60	510	2	0.75	4.5	29	
OLM-018E430 Air	60	430	4	0.35	2.1	34	
OLM-018E390 Air	60	390	8	0.5	2.1	34	
OLM-018E390H Air	60	390	16	1	6	34	
OLM-018E365 Air	60	365	2	0.35	2.1	38	
Type	Number of LEDs	Typical peak wavelength ¹⁾ (nm)	Optical power density ²⁾ (W/cm ²)	Max current per LED-Chip (A)	Max current LED system (A)	Forward Voltage (V)	Data sheet Download
OLM-034E310 Air	36	310	0.2	0.5	3	32	
OLM-034E280 Air	36	280	0.2	0.5	3	34	
OLM-034E265 Air	36	265	0.15	0.35	2.1	35	

¹⁾ Other wavelength in the range 265-1050 nm can be supplied upon request

²⁾ Measured on the emitting window


Water-cooled Light Emitting System OLM046

The OLM-046 is a water-cooled hexagonal-shaped LED radiant source including a built-in controller unit and a power supply. This system contains 144 LED chips on board with a wavelength in the range 265-1050nm arranged under an array of parabolic reflectors that deliver the light at a narrow angle. For UVB/UVC LED Chips we offer the possibility to reduce the amount of chips down to 72 to match the costs. This system can be controlled directly from the radiant-unit or via a PC-program.



Features:

- Light emitting circle with a diameter of 100 mm
- A unique aluminum parabolic array of reflectors emitting the light at an angle of about 20°
- New anti-reflection coating on the front window with a transmission value of about 97%
- Innovative Heat sink with water channels that allowing operation at power losses up to 400W
- Integrated electronic control that enables on/off switching directly from the radiator unit and automatic shutdown in case of overheating
- PC program for external control of the system with a power level slider bar, temperature display, and last setting saving option

Type	Number of LEDs	Typical peak wavelength (nm)	Optical power density (mW/cm ²)	Max current per LED-Chip (A)	Max current LED-system (A)	Forward Voltage (V)	Data sheet Download
OLM-046A-c-310	144	310	70	0.5	9	44	
OLM-046A-c-280	144	280	60	0.5	9	46	
OLM-046A-c-265	144	265	45	0.35	6.3	48	


Scalable Water-cooled LED System OLM042/OLM044


Our scalable water-cooled LED systems can be produced in different lengths between 15 and 115 cm according to the size that fits best your application. The OLM-042 contain an array of parabolic reflectors that deliver the light at a narrow angle for long working distances whereas the OLM-044 doesn't have parabolic reflectors and is designed for short-distance applications. The OLM-042/OLM-044 System is controlled directly by a PC-program for short modules by a 19" controller unit with a built-in power supply for long modules



Features:

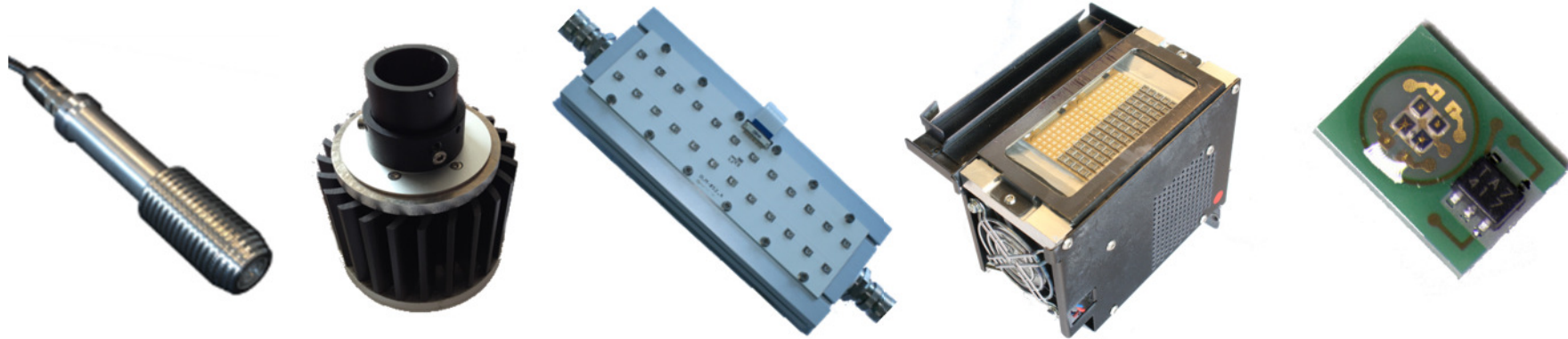
- Light emitting line width of 38 mm (OLM-042) / 9 mm (OLM-044)
- Heat sink with water channels that allow operation at power losses up to 40W per cm length
- New anti-reflection coating on the front window with a transmission value of about 97%
- Integrated electronic control unit that enables PC-control without an external control unit for short modules
- Controller Unit combined with a power supply for longer modules that enables on/off operation, automatic shutdown in case of overheating, external PC-control
- PC program for external control of the system with a power level slider bar for each 6 cm submodule, temperature display, and last setting saving option

Type	LED line width (mm)	Emission Angle (°)	Typical peak wavelength ¹⁾ (nm)	Optical power density ²⁾ (W/cm ²)	Max current per LED-Chip (A)	Max current LED-system ³⁾ (A)	Forward Voltage (V)	Data sheet Download
OLM-042-C2-1050	38	20	1050	0.2	0.5	6	10	
OLM-042-C2-740	38	20	740	0.5	0.5	6	18	
OLM-042-C2-510	38	20	510	0.8	0.5	6	23	
OLM-042-C2-430	38	20	430	1	0.35	4.2	27	
OLM-042-C2-390	38	20	390	1.5	0.5	6	34	
OLM-042-C2-365	38	20	365	0.8	0.35	4.2	34	

Type	LED line width (mm)	Emission Angle (°)	Typical peak wavelength ¹⁾ (nm)	Optical power density ²⁾ (W/cm ²)	Max current per LED-Chip (A)	Max current LED-system ³⁾ (A)	Forward Voltage (V)	Data sheet Download
OLM-044-A2-1050	9	120	1050	1.5	1	16	15	
OLM-044-A2-740	9	120	740	1	0.5	8	27	
OLM-044-A2-510	9	120	510	2	0.5	8	34	
OLM-044-A2-430	9	120	430	4	0.35	5.6	38	
OLM-044-A2-390	9	120	390	8	0.5	8	38	
OLM-044-A2-390H	9	120	390	16	1	16	38	
OLM-044-A2-365	9	120	365	2	0.35	5.6	40	

Custom-designed LED Module System

Over the last years OSA Opto Light has built many custom-designed LED modules of various sizes and shapes with single or multiple number of wavelengths. If you didn't find yet the LED module suitable for your application please don't hesitate to contact us



Examples for custom-designed LED module systems

Type	Wavelength (nm)	Cooling	Application
OLM-032	310, 450, 650	passive	Plant growth support
OLM-041	300, 390	water	Curing of ink for fast printing
OLM-047	280, 310, 365, 410, 480, white	passive	Florescence spectroscopy
OLM-053	265	water	Surface disinfection
OLM-111	600-1100	passive	Metabolism analysis