LED Ring Lights provide direct illumination with high and even intensity on specular or opaque surfaces. Beam angle is factory adjusted according to customers’ demand on working distance (WD) and illuminated area size.

Specifications:
- white, UV, blue, green, red or NIR light
- power requirement: 12V DC or 24V DC (please specify when ordering)
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu or plastic housing
- designed to operate in harsh industrial environment
- please call for IP classified versions

LED Ring Lights

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
<th>Available IP protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-056-000</td>
<td>Ø80/Ø40x30</td>
<td>Ø80/Ø40</td>
<td>white</td>
<td>IP65</td>
</tr>
<tr>
<td>3-057-000</td>
<td>Ø100/Ø60x29</td>
<td>Ø100/Ø60</td>
<td>white</td>
<td>IP65</td>
</tr>
<tr>
<td>3-057-600</td>
<td>Ø100/Ø60x29</td>
<td>Ø100/Ø60</td>
<td>465</td>
<td>IP65</td>
</tr>
<tr>
<td>3-060-000</td>
<td>Ø100/Ø45x30</td>
<td>Ø100/Ø45</td>
<td>white</td>
<td>IP65</td>
</tr>
<tr>
<td>3-061-000</td>
<td>Ø100/Ø45x30</td>
<td>Ø100/Ø45</td>
<td>850</td>
<td>IP65</td>
</tr>
<tr>
<td>3-063-000</td>
<td>Ø80/Ø50x30</td>
<td>Ø80/Ø50</td>
<td>375</td>
<td>IP65</td>
</tr>
<tr>
<td>3-064-000</td>
<td>Ø80/Ø40x24</td>
<td>Ø80/Ø40</td>
<td>white</td>
<td>IP65</td>
</tr>
<tr>
<td>3-075-000</td>
<td>150x150x45/Ø90</td>
<td>Ø125/Ø100</td>
<td>640</td>
<td>IP65</td>
</tr>
<tr>
<td>3-076-000</td>
<td>150x150x30/Ø90</td>
<td>Ø125/Ø76</td>
<td>640</td>
<td>IP65</td>
</tr>
<tr>
<td>3-080-000</td>
<td>Ø70/Ø50x23</td>
<td>Ø70/Ø50</td>
<td>640</td>
<td>IP65</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED Darkfield (Low Angle) Lights are suitable for highlighting surface roughness, surface structure, edges with the help of light nearly parallel with the surface.

Specifications:

- white, UV, blue, green, red or NIR light
- power requirement: 12V DC or 24V DC (please specify when ordering)
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu or plastic housing
- designed to operate in harsh industrial environment
- please call for IP classified versions

**LED Darkfield (Low Angle) Lights**

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Illuminated area (mm)</th>
<th>Wavelength (nm)</th>
<th>Available IP protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-067-000</td>
<td>100x100x10/Ǿ60</td>
<td>Ø60</td>
<td>640</td>
<td>IP65</td>
</tr>
<tr>
<td>3-077-000</td>
<td>150x150x10/Ǿ100</td>
<td>Ø100</td>
<td>640</td>
<td>IP65</td>
</tr>
<tr>
<td>3-078-000</td>
<td>150x150x10/Ǿ100</td>
<td>Ø100</td>
<td>850</td>
<td>IP65</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED Dome Lights ensure even, shadowless illumination for inspecting specular, uneven or curved surfaces. Shadows and reflections generated by the surface can be avoided this way.

Specifications:
- white, UV, blue, green, red or NIR light
- power requirement: 12V DC or 24V (please specify when ordering)
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- designed to operate in harsh industrial environment

LED Dome Lights

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Illuminated surface (mm)</th>
<th>Wavelength (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-085-000</td>
<td>140x140x67</td>
<td>Ø80</td>
<td>640</td>
</tr>
<tr>
<td>3-087-000</td>
<td>Ø70/Ø30x40</td>
<td>Ø50</td>
<td>White</td>
</tr>
<tr>
<td>3-090-000</td>
<td>Ø122/Ø80x60</td>
<td>Ø80</td>
<td>White</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED Coaxial Lights ensure even, diffuse, axial illumination for inspecting glossy surfaces.

**Specifications:**
- white, UV, blue, green, red or NIR light
- power requirement: 12V DC or 24V DC (please specify when ordering)
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- designed to operate in harsh industrial environment

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
<th>Available IP protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-301-000</td>
<td>90x40x40</td>
<td>30x30</td>
<td>640</td>
<td>IP65</td>
</tr>
<tr>
<td>3-304-000</td>
<td>110x100x60</td>
<td>100x50</td>
<td>640</td>
<td>IP65</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
Standard LED Backlights ensure homogenous illumination to display contours of objects sized up to 100 mm with high contrast. Also applicable as diffuse lighting.

**Specifications:**
- white, blue, green, red or NIR light
- homogenous intensity distribution
- power requirement: 12V DC or 24V DC (please specify when ordering)
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- glass or plastic illumination surface
- designed to operate in harsh industrial environment
- please call for IP classified versions

**Slim Standard Backlights:**
- typical thickness: 8 to 10 mm
- illuminating area: \(<~50 \text{ mm} \times <~50 \text{ mm}\)

**Thin Standard Backlights**
- thickness: 12 mm
- illuminating area: \(<~50 \text{ mm} \times <~50 \text{ mm}\)

**Thick Standard Backlights**
- typical thickness: 20 mm
- illuminating area: \(<~100 \text{ mm} \times <~100 \text{ mm}\)

**Standard LED Backlights**

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
<th>Available IP protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-107-000</td>
<td>30x14x10</td>
<td>15x10</td>
<td>525</td>
<td>IP65</td>
</tr>
<tr>
<td>3-106-000</td>
<td>42x30x8</td>
<td>25x25</td>
<td>640</td>
<td>IP65</td>
</tr>
<tr>
<td>3-108-000</td>
<td>60x60x12</td>
<td>40x40</td>
<td>640</td>
<td>IP65</td>
</tr>
<tr>
<td>3-201-000</td>
<td>100x100x20</td>
<td>80x80</td>
<td>640</td>
<td>IP65</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36 1 392 2278.
Large LED Backlights ensure homogenous illumination to display contours of objects larger than 100 mm with high contrast. Also applicable as diffuse lighting.

**Specifications:**
- white, blue, green, red or NIR light
- homogenous intensity distribution
- power requirement: 12V DC or 24V DC (please specify when ordering)
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- plastic illumination surface
- designed to operate in harsh industrial environment
- please call for IP classified versions

**Standard Large LED Backlights:**
- typical thickness: 25 mm
- light emitting surface: >~100 mm x >~100 mm

**Slim Large LED Backlights (edge-lit):**
- typical thickness: 10 mm
- light emitting surface: >~100 mm x >~100 mm

<table>
<thead>
<tr>
<th>Large LED Backlights</th>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
<th>Available IP protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3-207-000</td>
<td>130x190x25</td>
<td>100x160</td>
<td>Red</td>
<td>IP65</td>
</tr>
<tr>
<td></td>
<td>3-212-000</td>
<td>200x200x30</td>
<td>200x150</td>
<td>White</td>
<td>IP65</td>
</tr>
<tr>
<td></td>
<td>3-240-000</td>
<td>235x240x10</td>
<td>200x200</td>
<td>Red</td>
<td>IP65</td>
</tr>
<tr>
<td></td>
<td>3-241-000</td>
<td>180x180x10</td>
<td>120x140</td>
<td>White</td>
<td>IP65</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED SPOT Backlights offer extra large intensity for exposures in the microsecond range. Simple installation, no maintenance. Recommended also for limited space applications.

Specifications:
- white, blue, green, red or NIR light
- power consumption: max. 3 W
- homogene intensity distribution
- light emitting area: Ø35 mm
- power requirement: constant current
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- dimensions: Ø40/Ø25x50 mm
- plastic or glass light emitting surface
- designed to operate in harsh industrial environment
- please call for IP classified versions

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED SPOT Lights including one power LED offer high intensity for a wide range of application with maintenance-free passive cooling.

Specifications:
- white, blue, green, red or NIR light
- power consumption: max. 3 W
- beam angle: 8°, 30°, 50° or 10°x50°
- power requirement: constant current
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- compact size: Ø25 x 50 mm
- fixing with M4 screw
- cable outlet on the side
- designed to operate in harsh industrial environment
- please call for IP classified versions

Typical field of use:
- products, workpieces
- laboratory tests
- machine vision measurements, calibrations
- microscopic inspections
- workpieces to be machined (eg. milling, lathing etc.)

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
<th>Available IP protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-402-000/1W/3W/5W</td>
<td>Ø25x45</td>
<td>Ø18,5</td>
<td>any color</td>
<td>IP65</td>
</tr>
<tr>
<td>3-410-000/1W/3W/5W (goose neck)</td>
<td>Ø25x45+120</td>
<td>Ø18,5</td>
<td>any color</td>
<td>IP65</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omioptika.hu, send a message to info@omioptika.hu or call +36-1-392-2278.
LED SPOT Modul Lights include multiple LED SPOT Lights offering extreme intensity with maintenance-free passive cooling and individually adjustable reflectors.

**Specifications:**
- power consumption: max. n x 3 W
- beam angle: from 10° up to 180°
- white, UV, blue, green, red, yellow or NIR light
- power requirement: constant current
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- circle, ring or line layout
- > 50.000 h lifetime
- robust, anodized alu housing with robust fixing
- designed to operate in harsh industrial environment
- please call for IP classified versions

**LED SPOT Modul Lights**

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
<th>Available IP protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-402-200/1W/3W/5W</td>
<td>Ø80x87</td>
<td>Ø18,5x4pcs</td>
<td>any color</td>
<td>IP65</td>
</tr>
<tr>
<td>3-456-000/1W/3W/5W</td>
<td>200x50x80</td>
<td>170x30</td>
<td>any color</td>
<td>IP65</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
RGB LED SPOT Lights offer three separately controllable LED chips integrated into one compact modul. A wide range of visible color gamut or white light can be achieved with integrated color mixing optics. RGB LED SPOT Lights are also available in moduls to achieve greater intensity.

Specifications:
- white or coloured light
- power consumption: max. 3 W
- beam angle: 30°
- power requirement: constant current
- separately adjustable intensity for each chip
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- compact size: ø25 x 50 mm
- fixing with M4 screw
- cable outlet on the side
- designed to operate in harsh industrial environment
- please call for IP classified versions

Typical field of use:
- enhancing contrast depending on the color of the workpiece in machine vision inspection
- illumination with variable color at laboratory tests
- museum display cases
- artworks
- illuminations for photography

3x1W RGB LED SPOT Lights

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
<th>Available IP protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-403-000</td>
<td>ø25x45</td>
<td>ø24</td>
<td>RGB</td>
<td>IP65</td>
</tr>
<tr>
<td>3-411-000</td>
<td>ø25x45+120 (goose neck)</td>
<td>ø24</td>
<td>RGB</td>
<td>IP65</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED SPOT Projector Lights illuminate workpieces of any size with a Structured Light. Usually optimised for a given distance, but also available with focusable optics.

We offer LED SPOT Projectors to project light spots with definite size or diameters, or with any pattern e.g. for 3D scanning.

Specifications:
- power consumption: max. 3 W
- projecting distance: max. ~3 m
- white, blue, green, red or NIR light
- available with custom size or pattern (Structured Light)
- even intensity distribution
- power requirement: constant current
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- compact size: Ø25 x 50 mm
- fixing with M4 screw
- cable outlet on the side
- designed to operate in harsh industrial environment
- please call for IP classified versions

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.oml-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED Line Lights illuminate objects, signs, labels, or workpieces passing in front of a sensor e.g. a line-camera. Direct line illumination is a special lighting used in industrial machine vision automated inspections.

Specifications:
- LED light source projecting a straight line with high intensity
- plastic cylindrical lens
- white, blue, green, red or NIR light
- compact, anodized alu housing
- fixing with M5 screws
- working distance: 50-200 mm, focusable or fix
- > 50.000 h lifetime
- length of illuminated area: 50-300 mm
- width of illuminated area: 3-20 mm
- power requirement: 24 VDC
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-015-000</td>
<td>250x60x20</td>
<td>250x10</td>
<td>White</td>
</tr>
</tbody>
</table>

Professional Laser Illuminations

Specifications:
- diffractive optics without moving parts, maintenance-free
- structured laser light
- focusable
- power requirement: 5V DC
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- professional semiconductor laser chips
- available with multiple wavelengths
- designed to operate in harsh industrial environment
- robust, anodized aluminium housing
- available with adjustable fixing

Typical patterns:
- dot, dot-series
- line, parallel lines
- cross, grid
- circle, concentric circles
- custom patterns are also available on demand

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36 1-392-2278.
LED Light Sources for Fiber Optics offer longlife illumination for fiber optics application. Tens of thousands of hours lifetime, dimmable, constant color temperature.

Flexible or semi-rigid fibers are available with custom length and with focusable optics.

Specifications:
- nominal max. luminous flux: 1500 lm
- dimming with front panel knob or via Trigger Input
- dimensions: 250 x 220 x 117 mm
- power source: 230 V AC, max. 50 W
- short-driven external trigger
- thermal protection with internal heatswitch
- weight: 2.6 kg
- > 50.000 h lifetime
- available with custom wavelength LEDs

<table>
<thead>
<tr>
<th>LED Light Source for Fiber Optics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product number</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>3-650-000</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED Matrix Lights illuminate objects, signs, labels or workpieces with light emitted by a large surface area. This kind of direct illumination offers high intensity for a wide range of application.

**Specifications:**
- white, UV, blue, green, red or NIR light
- power source: 12V DC or 24V DC
- available with power supply with optional trigger input
- continuous or strobe operation (depends on power supply)
- > 50,000 h lifetime
- robust, anodized alu housing
- compact size
- fixing with M4 screw
- designed to operate in harsh industrial environment

**LED Matrix Lights**

<table>
<thead>
<tr>
<th>Product number</th>
<th>Dimensions (mm)</th>
<th>Light emitting surface (mm)</th>
<th>Wavelength (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-005-000</td>
<td>40x20x22</td>
<td>32x16</td>
<td>640</td>
</tr>
<tr>
<td>3-001-000</td>
<td>70x30x45</td>
<td>64x26</td>
<td>630</td>
</tr>
<tr>
<td>3-002-000</td>
<td>70x30x45</td>
<td>64x26</td>
<td>880</td>
</tr>
<tr>
<td>3-003-000</td>
<td>70x30x45</td>
<td>64x26</td>
<td>white</td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
LED Power Supplies and Drivers are available in several versions depending on user requirements: dimmable, triggerable, with one or more outputs, typically with DIN rail mounting.

Because of the varied fields of applications, details must be specified when ordering.

**Specifications:**
- switched-mode circuits
- available dimmable with built in knob or analog signal
- available with external trigger input
- typical versions:
  - 12V DC or 24V DC input, constant current output
  - 230V AC input, constant current output
  - 230V AC input, 5V DC, 12V DC or 24V DC output available with multiple outputs
- DIN rail mounting
- flickerless technology

**LED Power Supplies**

<table>
<thead>
<tr>
<th>Product number</th>
<th>Input / Output</th>
<th>Dimming/Triggering</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-260-000</td>
<td>12VDC / 5VDC</td>
<td>built in knob</td>
</tr>
<tr>
<td>7-204-000</td>
<td>24VDC / 1A</td>
<td>trigger + knob</td>
</tr>
<tr>
<td>7-210-000</td>
<td>24VDC / 100mA</td>
<td></td>
</tr>
<tr>
<td>7-201-000</td>
<td>230VAC / 24VDC</td>
<td></td>
</tr>
</tbody>
</table>

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
Optical microstructures for calibration

We offer optical microstructures for calibration and measurement purpose. Micrometer-range precision, microlitographic technology. Please call for custom figures and substrates. Large printed versions are available as well.

Optical Mirrors

We manufacture and refurbish front or rear surface aluminium coated mirrors.

Extension tubes, spacer rings

We manufacture and offer extension tubes and spacers for C-mount lenses and for other kind of industrial optics. Custom length and versions with electronically isolated threads are available as well.

Optical subassemblies

We manufacture, assemble and calibrate optical components and subassemblies in a workshop with clean area.

More standard and custom versions are available.

For specific wavelength, shape, power, dimension, housing etc. visit www.omi-optika.hu, send a message to info@omi-optika.hu or call +36-1-392-2278.
Optical and optomechanical systems and devices

We design, develop, produce and install optical and optomechanical devices and equipments.

Please call for in-line machine vision equipments for non-contact quality inspection.

We design, develop and manufacture optomechanical devices for research and science.

Restoring and refurbishing optical devices

Restoring, repairing

We restore historical optical devices and instruments, achieving the original and functional condition: surveying instruments e.g. theodolites, old binoculars, astronomical telescopes etc. We repair, renew, restore and clean binoculars, riflescopes and other optical devices.

Refurbishing, modernization

We refurbish, functionally repair, renew and calibrate optical devices, instruments and tools by repairing or replacing the optical, mechanical and electrical components: industrial...
Machine Vision Lenses

Machine
- Production
- Control
- Logistics

Vision
- Up to 5MP
- Compact design
- Ultra-low distortion

Systems
- CMOSIS compatible
- 4K Board
- Infra-Red solutions

Telecentric lenses