The most rugged high-performance embedded parallel optics.

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**LightVISION VM** with **MPO** interface

**up to 150G**

**Key advantages**

- Flexible height with LGA interposer
- Rugged RoHS electrical interface
- Screw-in optical module
- Standard MTP/MPO cable connection
- Robust, board-mounted optical module with reduced footprint
- **Performance**: up to 150G from 0°C to 85°C
- **Low power consumption**: 100 mW per lane

**Configurations**

- 2, 4, 6, 8, 10, 12-lane transmitter
- 2, 4, 6, 8, 10, 12-lane receiver
- 4-lane transceiver

**Applications**

- Smart car, high-resolution cameras
- LIDAR connection to embedded computer
- Smart city, surveillance cameras
- Industry 4.0
- Machine vision

**LightVISION VM product summary**

The LightVISION™ VM is a screw-in, robust, industrial and RoHS optical module with MPO interface. This combination allows a standard MPO cable to be plugged into the optical module and also mounted on the face-plate of a box or line-card. This approach combines a standard MPO cable connection with a robust, board mounted optical engine providing small size(footprint) and convenient optical cabling at the same time. In addition, the MPO connector is covered with an outside cover boot addressing the issue of water and dust contamination.
LightVISION VM features

The LightVISION™ VM module is offered with bandwidth from 25G (2 TX or 2 RX lane) to 150G (12 TX or 12 RX lane). All modules operate at up to 12.5 Gbps per lane with a BER as low as $10^{-12}$ and a $-9$ dBm sensitivity.

- Multimode 850 nm wavelength laser
- Over 100 m reach on OM3 ribbon fiber
- Standard MPO parallel fiber connector
- Equalizer, pre-emphasis, adjustable output
- Monitoring: LOS, RSSI, temperature etc.
- Integrated microcontroller
- Available in commercial grade temperature range (0°C to 85°C)

**LightVISION VM with MPO interface ordering information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Product Description</th>
<th>Lanes</th>
<th>Bandwidth (Gbps/lane)</th>
<th>Sensitivity (dBm)</th>
<th>Mounting</th>
<th>Optical Interface</th>
<th>Operating Temperature (°C)</th>
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</thead>
<tbody>
<tr>
<td>VMX04P6185121AA</td>
<td>LightVISION VM 4TRX transmit/receive</td>
<td>4+4</td>
<td>12.5</td>
<td>$-9$</td>
<td>RoHS LGA interposer</td>
<td>MTP/MPO</td>
<td>0 to 85</td>
</tr>
<tr>
<td>VMX04B6185121AA</td>
<td>LightVISION VM 4TRX transmit/receive</td>
<td>4+4</td>
<td>12.5</td>
<td>$-9$</td>
<td>RoHS LGA interposer midboard mount</td>
<td>MTP/MPO</td>
<td>0 to 85</td>
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<tr>
<td>VMT12P6185130AA</td>
<td>LightVISION VM 12TX transmitter</td>
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<td>12.5</td>
<td>n.a.</td>
<td>RoHS LGA interposer</td>
<td>MTP/MPO</td>
<td>0 to 85</td>
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<tr>
<td>VMR12P6185101AA</td>
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<td>12</td>
<td>12.5</td>
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<td>RoHS LGA interposer</td>
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**ACCESSORIES**

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<tr>
<th>Part Number</th>
<th>Product Description</th>
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</thead>
<tbody>
<tr>
<td>500-00090</td>
<td>LightSNAP MPO cable</td>
</tr>
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</table>

THE Light on Board® Company

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Reflex Photonics is certified to ISO 9001

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