OPTICS AND COMPONENTS FOR SCANNING LASER SYSTEMS
HOW TO ORDER

Contact your local II-VI sales representative to discuss your scanning laser optics needs. (See back cover for a representative in your location.)

The specific products listed in this catalog provide a small representative sampling of our scan lenses, galvo mirrors, beam expanders, protective windows, and band-selective optics. Additional optics and components are available in standard-stock and custom made-to-spec configurations. Our engineers will work with you to ensure that the optics and components you order fulfill all of your design requirements.
OVERVIEW: SCANNING LASER SYSTEM COMPONENTS

GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Galvo</td>
<td>A motor for positioning the X mirror.</td>
</tr>
<tr>
<td>Y Galvo</td>
<td>A motor for positioning the Y mirror.</td>
</tr>
<tr>
<td>X Mirror</td>
<td>The first mirror in the beam path.</td>
</tr>
<tr>
<td>Y Mirror</td>
<td>The second mirror in the beam path.</td>
</tr>
<tr>
<td>X-Y Galvo Mirror Separation</td>
<td>This distance between the centers of the two mirrors. It is usually set by the galvo manufacturer.</td>
</tr>
<tr>
<td>F-Theta Lens</td>
<td>A singlet, doublet, or triplet lens assembly that provides precision focusing of the laser beam onto the workpiece.</td>
</tr>
<tr>
<td>Y Mirror to Lens Separation</td>
<td>This distance between the center of the Y mirror (second mirror in the beam path) and the top edge of the lens housing. It is determined by the user.</td>
</tr>
<tr>
<td>Working Distance</td>
<td>The distance from the edge of the lens housing to the workpiece.</td>
</tr>
<tr>
<td>Scan Field</td>
<td>The area that can be processed by the galvos and scan lens system. It is usually square, but can be circular or rectangular.</td>
</tr>
</tbody>
</table>
F-θ scan lenses play a major role in many of today’s leading-edge laser applications. II-VI manufactures scan lenses for CO₂ laser systems that are used for marking, engraving, via hole drilling, and more.

In a typical scan lens configuration, the F-θ lens is used with one or two axis galvo mirrors that enable fast positioning and precision focusing of the laser beam.

While standard focusing lenses deliver a focused spot to only one point, scan lenses deliver a focused spot to many points on a scan field or workpiece. They also require special considerations in their design and use.

Scan lens applications include:
- marking
- engraving
- rapid prototyping
- drilling circuit board via holes
- cutting cloth
- cutting paper

Our II-VI scan lenses feature:
- the finest optical materials in the world
- special housing designs to optimize performance
- wavelength options from 9.2 to 10.6 μm
- via hole drilling diameters from 75 to 300 μm
- designs featuring 1 to 5 optical elements
- optional protection windows
- low loss AR coatings
- precision optical elements
Singlet lenses ship unmounted; custom mounts available upon request. Contact a II-VI sales representative for more information.

<table>
<thead>
<tr>
<th>part number</th>
<th>lens material</th>
<th>lens ca (mm)</th>
<th>scan field size (mm)</th>
<th>focal length (mm)</th>
<th>lens diameter (mm)</th>
<th>working distance (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL1-10.6-25-60-89.5-U</td>
<td>ZnSe</td>
<td>25</td>
<td>60</td>
<td>89.5</td>
<td>27.9</td>
<td>96</td>
</tr>
<tr>
<td>SL1-10.6-36-40-100-U</td>
<td>ZnSe</td>
<td>36</td>
<td>40</td>
<td>100</td>
<td>40.0</td>
<td>103</td>
</tr>
<tr>
<td>SL1-10.6-40-80-100-U-A</td>
<td>Ge</td>
<td>40</td>
<td>80</td>
<td>100</td>
<td>42.9</td>
<td>106</td>
</tr>
<tr>
<td>SL1-10.6-40-80-150-U</td>
<td>ZnSe</td>
<td>40</td>
<td>80</td>
<td>150</td>
<td>43.0</td>
<td>157</td>
</tr>
<tr>
<td>SL1-10.6-40-120-200-U-A</td>
<td>Ge</td>
<td>40</td>
<td>120</td>
<td>200</td>
<td>42.9</td>
<td>217</td>
</tr>
<tr>
<td>SL1-10.6-40-150-250-U</td>
<td>ZnSe</td>
<td>40</td>
<td>150</td>
<td>250</td>
<td>42.9</td>
<td>263</td>
</tr>
<tr>
<td>SL1-10.6-40-160-200-U-A</td>
<td>ZnSe</td>
<td>40</td>
<td>160</td>
<td>200</td>
<td>42.9</td>
<td>213</td>
</tr>
<tr>
<td>SL1-10.6-43-40-55-U</td>
<td>ZnSe</td>
<td>43</td>
<td>40</td>
<td>55</td>
<td>48.0</td>
<td>59</td>
</tr>
<tr>
<td>SL1-10.6-43-60-88-U</td>
<td>ZnSe</td>
<td>43</td>
<td>60</td>
<td>88</td>
<td>48.0</td>
<td>94</td>
</tr>
<tr>
<td>SL1-10.6-43-70-100-U-C</td>
<td>ZnSe</td>
<td>43</td>
<td>70</td>
<td>100</td>
<td>48.0</td>
<td>106</td>
</tr>
<tr>
<td>SL1-10.6-43-100-150-U</td>
<td>ZnSe</td>
<td>43</td>
<td>100</td>
<td>150</td>
<td>48.0</td>
<td>159</td>
</tr>
<tr>
<td>SL1-10.6-43-120-200-U</td>
<td>ZnSe</td>
<td>43</td>
<td>120</td>
<td>200</td>
<td>48.0</td>
<td>208</td>
</tr>
<tr>
<td>SL1-10.6-43-120-150-U</td>
<td>ZnSe</td>
<td>43</td>
<td>110</td>
<td>150</td>
<td>48.0</td>
<td>160</td>
</tr>
<tr>
<td>SL1-10.6-43-130-200-U</td>
<td>ZnSe</td>
<td>43</td>
<td>140</td>
<td>200</td>
<td>48.0</td>
<td>212</td>
</tr>
<tr>
<td>SL1-10.6-43-130-250-U</td>
<td>ZnSe</td>
<td>43</td>
<td>130</td>
<td>250</td>
<td>48.0</td>
<td>263</td>
</tr>
<tr>
<td>SL1-10.6-43-150-300-U</td>
<td>ZnSe</td>
<td>43</td>
<td>150</td>
<td>300</td>
<td>48.0</td>
<td>312</td>
</tr>
<tr>
<td>SL1-10.6-43-175-360-U-A</td>
<td>ZnSe</td>
<td>43</td>
<td>175</td>
<td>360</td>
<td>48.0</td>
<td>379</td>
</tr>
<tr>
<td>SL1-10.6-43-500-716.5-U</td>
<td>ZnSe</td>
<td>43</td>
<td>500</td>
<td>716.5</td>
<td>48.0</td>
<td>714</td>
</tr>
<tr>
<td>SL1-10.6-43-1600-1908-U</td>
<td>ZnSe</td>
<td>43</td>
<td>1600</td>
<td>1908</td>
<td>48.0</td>
<td>1955</td>
</tr>
<tr>
<td>SL1-10.6-46-50-75-U</td>
<td>ZnSe</td>
<td>46</td>
<td>50</td>
<td>75</td>
<td>48.0</td>
<td>81</td>
</tr>
<tr>
<td>SL1-10.6-46-100-150-U</td>
<td>ZnSe</td>
<td>46</td>
<td>100</td>
<td>150</td>
<td>50.8</td>
<td>159</td>
</tr>
<tr>
<td>SL1-10.6-64-140-200</td>
<td>ZnSe</td>
<td>64</td>
<td>140</td>
<td>200</td>
<td>68.1</td>
<td>215</td>
</tr>
<tr>
<td>SL1-10.6-74-140-200-U</td>
<td>ZnSe</td>
<td>74</td>
<td>140</td>
<td>200</td>
<td>75.0</td>
<td>212</td>
</tr>
</tbody>
</table>
Doublet lenses ship in custom mounts.

<table>
<thead>
<tr>
<th>part number</th>
<th>lens material</th>
<th>lens ca (mm)</th>
<th>scan field size (mm)</th>
<th>focal length (mm)</th>
<th>working distance (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL2-10.6-50-29-45</td>
<td>ZnSe</td>
<td>50</td>
<td>29</td>
<td>45</td>
<td>56</td>
</tr>
<tr>
<td>SL2-10.6-47-50-100</td>
<td>ZnSe</td>
<td>47</td>
<td>50</td>
<td>100</td>
<td>108</td>
</tr>
<tr>
<td>SL2-10.6-60-64-125</td>
<td>ZnSe</td>
<td>60</td>
<td>64</td>
<td>125</td>
<td>133</td>
</tr>
<tr>
<td>SL2-10.6-54-70-122</td>
<td>ZnSe</td>
<td>54</td>
<td>70</td>
<td>122</td>
<td>131</td>
</tr>
<tr>
<td>SL2-10.6-74-100-160</td>
<td>ZnSe</td>
<td>74</td>
<td>100</td>
<td>160</td>
<td>195</td>
</tr>
<tr>
<td>SL2-10.6-58-104-200</td>
<td>ZnSe</td>
<td>58</td>
<td>104</td>
<td>200</td>
<td>217</td>
</tr>
<tr>
<td>SL2-10.6-54-110-170</td>
<td>ZnSe</td>
<td>54</td>
<td>110</td>
<td>170</td>
<td>193</td>
</tr>
<tr>
<td>SL2-10.6-54-140-220</td>
<td>ZnSe</td>
<td>54</td>
<td>140</td>
<td>220</td>
<td>246</td>
</tr>
<tr>
<td>SL2-10.6-80-175-250</td>
<td>ZnSe, Ge</td>
<td>80</td>
<td>175</td>
<td>250</td>
<td>280</td>
</tr>
<tr>
<td>SL2-10.6-82-210-300</td>
<td>ZnSe, Ge</td>
<td>82</td>
<td>210</td>
<td>300</td>
<td>333</td>
</tr>
</tbody>
</table>
F-THETA SCAN LENSES – TRIPLETS (via drilling)

Triplet lenses ship in custom mounts. Note that certain triplets could contain Ge elements. These triplet designs will not transmit visible alignment beams. Contact a II-VI sales representative for more information.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Lens material</th>
<th>Lens ca (mm)</th>
<th>Scan field size (mm)</th>
<th>Focal length (mm)</th>
<th>Working distance (mm)</th>
<th>Spot size (μm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL3-10.6-105-50-100-DW-A</td>
<td>ZnSe</td>
<td>105</td>
<td>50</td>
<td>101</td>
<td>121</td>
<td>94</td>
</tr>
<tr>
<td>SL3-9.249-58-25-70-DW</td>
<td>ZnSe</td>
<td>58</td>
<td>25</td>
<td>70</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>SL3-9.3-100-50-100-DW</td>
<td>ZnSe</td>
<td>105</td>
<td>50</td>
<td>100</td>
<td>120</td>
<td>82</td>
</tr>
<tr>
<td>SL3-9.3-128-60-100-DW</td>
<td>ZnSe</td>
<td>128</td>
<td>60</td>
<td>100</td>
<td>111</td>
<td>87</td>
</tr>
<tr>
<td>SL3-9.4-104-35-75-DW</td>
<td>ZnSe</td>
<td>106</td>
<td>35</td>
<td>75</td>
<td>86</td>
<td>41</td>
</tr>
</tbody>
</table>

PROTECTIVE WINDOWS

To protect scan lenses from backsplatter and other workplace hazards, II-VI offers protective windows that are either included as part of the overall scan lens assembly, or sold separately. These plano-plano windows are available in both ZnSe and Ge materials.

ZnSe protective windows feature our standard AR coating. Ge protective windows feature either our standard AR coating, or an optional hard-carbon coating designed to withstand the most severe conditions likely to be encountered in industrial operations.
GALVO MIRRORS

Scanning laser systems — whether for marking and engraving or for drilling micro via holes — all rely on galvo mirrors to precisely position the laser beam. II-VI manufactures built-to-spec galvo mirrors from mirror-grade silicon substrates. We apply our precision thin film coatings to these substrates, producing highly efficient galvo mirrors that reflect laser light in the 1.0-12.0 μm range.

Ideally suited for Nd:YAG lasers (1.06 μm) and CO₂ lasers (9.3-10.6 μm), II-VI galvo mirrors are suitable for a wide range of industrial applications. And for those applications requiring a visible helium-neon or diode laser alignment beam, our dual wavelength coatings provide maximum reflectivity for the infrared beam of the CO₂ laser while providing good reflectivity for the visible alignment beam.

Sizes of II-VI galvo mirrors typically range from 0.5” to 4.0” in diameter, based on OEM specifications.

II-VI galvo mirrors feature:

- mirror-grade silicon substrates
- greater thermal stability than fused silica substrates
- geometries built to OEM specifications
- highly reflective coatings for Nd:YAG lasers, CO₂ lasers, and CO₂ lasers with coaxial helium-neon or diode laser alignment beams

Applications include:

- laser marking and engraving
- laser drilling
- laser welding
- rapid prototyping
- imaging and printing
- semiconductor processing
  (memory repair, laser trimming)
- remote laser welding
A beam expander is any optical system consisting of two or more elements which changes the size and angular divergence characteristics of a beam passing through it. Beam expanders have two primary uses. By expanding a beam prior to focusing, smaller focal spot sizes can be achieved. Beam expanders also improve a beam’s collimation.

Features include:

- low insertion loss
- high power operation
- visible transmission
- adjustable focus
- customizable designs
- minimum beam deviation

<table>
<thead>
<tr>
<th>part number</th>
<th>input ca (mm)</th>
<th>output ca (mm)</th>
<th>expansion</th>
<th>diameter (mm)</th>
<th>length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BECZ-10.6-C0.7:10.0-D1.25-M1</td>
<td>11.43</td>
<td>17.78</td>
<td>1.25</td>
<td>30.48</td>
<td>57.3</td>
</tr>
<tr>
<td>BECZ-10.6-C0.9:5.6-D1.5M1</td>
<td>17.15</td>
<td>22.86</td>
<td>1.5</td>
<td>30.48</td>
<td>53.69</td>
</tr>
<tr>
<td>BECZ-10.6-C0.57:4.5-D1.55-M1</td>
<td>9</td>
<td>14</td>
<td>1.55</td>
<td>36</td>
<td>47</td>
</tr>
<tr>
<td>BECZ-10.6-C0.675:3.79-D2-A1-MI</td>
<td>11.43</td>
<td>17.15</td>
<td>2</td>
<td>38.1</td>
<td>54.86</td>
</tr>
<tr>
<td>BECZ-10.6-C0.9:3.37-D2.5-MI-A</td>
<td>11.43</td>
<td>22.86</td>
<td>2.5</td>
<td>36</td>
<td>61.37</td>
</tr>
<tr>
<td>BECZ-10.6-C0.7:2.85-D3-M1</td>
<td>11.43</td>
<td>17.78</td>
<td>3</td>
<td>30.48</td>
<td>54.76</td>
</tr>
<tr>
<td>BECZ-10.6-C07:2.5-D4-M1</td>
<td>11.43</td>
<td>17.78</td>
<td>4</td>
<td>30.48</td>
<td>54.66</td>
</tr>
<tr>
<td>BECZ-10.6-C0.7:2.72-D5-M1</td>
<td>11.43</td>
<td>17.78</td>
<td>5</td>
<td>30.48</td>
<td>61.94</td>
</tr>
<tr>
<td>BECZ-10.6-C0.9:2.5-D7.5-M1</td>
<td>11.43</td>
<td>22.86</td>
<td>7.5</td>
<td>30.48</td>
<td>61.94</td>
</tr>
<tr>
<td>BECZ-10.6-C0.9:2.43-D5-M1</td>
<td>11.43</td>
<td>22.86</td>
<td>5</td>
<td>30.5</td>
<td>56.5</td>
</tr>
<tr>
<td>BECZ-10.6-C0.65:2.53-D4-M1</td>
<td>11.43</td>
<td>17.15</td>
<td>4</td>
<td>38.1</td>
<td>54.75</td>
</tr>
</tbody>
</table>
Most CO₂ lasers operate in the wavelength band at 10.6μm. This wavelength band is fine for cutting steel and certain other materials; however, other industrial laser applications — such as plastics processing — need a different, specific wavelength band for maximum production efficiency.

II-VI’s Band-Selective Resonator Optics effectively “lock” a CO₂ laser to a specific wavelength band for specialized industrial applications, such as the 9.3μm band for circuit board drilling and plastics engraving.

Our Band-Selective Resonator Optics can be designed for both standard CO₂ gas mixes and isotope fills.

CO₂ laser types include:

- traditional stable resonator (partially-reflective output coupler, rear mirror, bend mirrors)
- unstable resonator (rear mirror and output total reflector mirror)

Selectable bands (using standard gas mix) include:

- 9.3 μm
- 9.6 μm
- 10.2 μm
- 10.6 μm

By combining different combinations of our Band-Selective Resonator Optics and different gas mixes, one can make the laser lase at other wavelength bands as well, depending on your particular application needs.
All orders received by II-VI Incorporated ("II-VI") are expressly conditioned upon the following conditions of sale:

1) Acceptance
Any additional or different terms set forth in any purchase order or other communication from Buyer are objected to and not binding upon II-VI unless and until accepted in writing by an authorized representative of II-VI.

2) Standard Warranty
II-VI warrants to the Buyer of each product of II-VI's own manufacture ("Product") that each Product will be free from defects in materials and workmanship subject to the following conditions:
The obligations of II-VI under this Standard Warranty shall be limited to either, at the option of II-VI: (1) the replacement or repair of any Product upon the shipment of such Product, freight prepaid by Buyer to the II-VI factory; or (2) the provision to Buyer of a credit against future purchases in an amount equal to the purchase price of the defective Product.

IN NO EVENT WILL II-VI BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF BUYER. THE FOREGOING REMEDIES ARE THE SOLE AND EXCLUSIVE REMEDY OF BUYER FOR ANY BREACH OF WARRANTY UNDER THIS CONTRACT.

All claims under this Standard Warranty must be made within ONE (1) YEAR after the date on which the Product was delivered to Buyer. In the case of a replacement or repair of a Product, Buyer shall only ship a defective Product to II-VI after an authorized representative of II-VI has provided a Return Authorization (RA) number for such warranty claim. Returns will be subject to a restocking fee.

With respect to such returns, Buyer is solely responsible for properly packaging any Product to be returned to II-VI under this Standard Warranty. Products must be packaged in their original manufacturer's packaging or equivalent. Products must be packaged in separate shipping containers with Return Authorization (RA) numbers clearly marked on the outside of the shipping containers. If there are questions regarding proper packaging and shipping, contact II-VI for guidelines. II-VI will not be responsible for replacing or repairing any Product damaged while in transit to II-VI due to faulty or deficient packaging.

This Standard Warranty shall be void and shall not apply with respect to any Product which, upon inspection by II-VI, shows evidence of damage as a result of abuse, misuse, mishandling, accidental damage, alteration, negligent handling, or improper installation or application, or as a result of alteration or other causes beyond the control of II-VI.

This Standard Warranty shall not apply to goods or parts included in or supplied with Products; such goods or parts carry only such warranties, if any, as are provided by the manufacturers of such goods or parts, which warranties may be more restrictive than the Standard Warranty provided by II-VI.

With respect to any previously-purchased Product, II-VI shall have no obligation to install updates or upgrades to any components in such Product, even if the exclusion of such updates or upgrades of such components renders such Product obsolete when compared to a new Product of a substantially similar type.

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION CONTAINED HERIN. THIS WARRANTY voids and excludes any and all other warranties or representations, whether express or implied or arising under any law, relating to the goods, including but not limited to warranties of merchantability and/or fitness for any particular purposes.

NO PERSON, FIRM, OR CORPORATION IS AUTHORIZED TO ASSUME ON BEHALF OF II-VI ANY ADDITIONAL OBLIGATION OR LIABILITY NOT EXPRESSLY PROVIDED HEREIN, EXCEPT IN A WRITING DULY EXECUTED BY AN OFFICER OF II-VI.

3) Limitation of Liability
In no event shall II-VI be liable for any incidental or consequential damages. The liability of II-VI on any claim of any kind shall in no event exceed the price of the Product which gives rise to the claim. Except as to title, all such liability shall terminate upon expiration of the warranty period of the Product.

The invalidity of any of the previous paragraphs shall not affect the remainder of this paragraph or any other paragraph in this section.

4) Patent Infringement
Buyer shall hold II-VI harmless against any expense or loss resulting from infringement of patents or trademarks arising from compliance with Buyer's design or specifications.

5) Delivery and Title
Delivery dates are approximate and are based upon prompt receipt of all necessary information from Buyer. Under no circumstances does II-VI guarantee date of shipment. Unless otherwise specified by II-VI, shipment will be made and title will pass F.O.B. point of shipment. II-VI shall ship Products as it deems appropriate unless instructed otherwise in writing by Buyer.

6) Risk of Loss
Risk of loss or damage shall pass to Buyer upon shipment. Loss or damage that occurs during shipping by a carrier selected by Buyer is Buyer's responsibility.

7) Uncontrollable Delays
II-VI shall not be liable for delivery delays due to causes beyond its reasonable control including, but not limited to, acts of God, acts of Buyer, acts of military authority, governmental priorities, labor strikes, and transportation delays.

8) Financial Conditions
If II-VI determines in good faith that the financial condition of Buyer at any time does not justify the continuation of production or shipment on the terms of payment originally specified, II-VI may require full or partial payment in advance. In the event of Buyer bankruptcy or insolvency, II-VI shall be entitled to cancel any outstanding order and shall receive reimbursement for its cancellation charges.

9) Payment Terms
Unless terms are specifically set forth on the Order Acknowledgement, Buyer shall pay at such time and such terms as specified in II-VI's original invoice. Any quotations shall be valid for the period stated on the quotation.

10) Cancellation
Buyer may cancel its order after shipment has been made. Buyer may cancel its order prior to shipment only upon written notice and consent of II-VI. If II-VI consents to any such cancellation, Buyer may be required to pay cancellation charges which include lost profits and all expenses incurred in connection with the cancelled order.

11) Jurisdiction
The validity, performance, and all matters relating to the interpretation and effect of this agreement shall be governed by the laws of the Commonwealth of Pennsylvania.
To place an order, contact a II-VI Sales Representative at any of the following locations:

**II-VI INFRARED**
375 SAXONBURG BLVD
SAXONBURG, PA 16056
UNITED STATES
888-558-1504 (toll-free in USA)
724-352-1504 (phone)
724-352-4980 (fax)
info@iiviinfrared.com (email)

**II-VI WEST**
36570 BRIGGS ROAD
MURRIETA, CA 92563
UNITED STATES
800-262-5273 (toll-free in USA)
951-926-7640 (phone)
951-926-1984 (fax)
info@iiviinfrared.com (email)

**II-VI JAPAN**
WBG MARIVE EAST 17F
2-6 NAKASE, MIHAMA-KU
CHIBA-SHI, CHIBA 261-7117
JAPAN
81 43297 2693 (phone)
81 43297 3003 (fax)
center@ii-vi.co.jp (email)

**II-VI OPTICS (SUZHOU) CO. LTD.**
NO 12, SUTONG ROAD
SUZHOU INDUSTRIAL PARK
SUZHOU, CHINA 215021
86 512 6761 9295 (phone)
86 512 6761 5049 (fax)
twosix@ii-vi.com.cn (email)

**II-VI SINGAPORE PTE. LTD.**
BLK. 5012, TECH PLACE II
#04-07 & #05-07/12,
ANG MO KIO AVE. 5
SINGAPORE 569876
65 6481 8215 (phone)
65 6481 8702 (fax)
info@ii-vi.com.sg (email)

**II-VI UK LTD.**
21 BURLEY ROAD
OAKHAM, RUTLAND
LE15 6DH
ENGLAND
44 1572 771 778 (phone)
44 1572 771 779 (fax)
ii-viuk@oakham.uk.com (email)

**II-VI LOT SUISSE S.a.r.l.**
MOULIN-DU-CHOC
1122 ROMANEL-SUR-MORGES
SWITZERLAND
41 2186 990 33 (phone)
41 2186 993 08 (fax)
info@ii-vi-lot.ch (email)

**II-VI LOT GmbH**
IM TIEFEN SEE 58
D-64293 DARMSTADT
GERMANY
49 6151 880 629 (phone)
49 6151 896 667 (fax)
info@ii-vi-lot.de (email)

II-VI WEST
BAAIKENSSTRAAT 21/2
B-9240 ZELE
BELGIUM
+32 (0) 52 45 86 10 (phone)
+32 (0) 52 45 86 11 (fax)
sales@ii-vi.be (email)

II-VI LOT SUISSE S.a.r.l.
II-VI BELGIUM N.V.
MOULIN-DU-CHOC
1122 ROMANEL-SUR-MORGES
SWITZERLAND
41 2186 990 33 (phone)
41 2186 993 08 (fax)
info@ii-vi-lot.ch (email)

II-VI LOT GmbH
IM TIEFEN SEE 58
D-64293 DARMSTADT
GERMANY
49 6151 880 629 (phone)
49 6151 896 667 (fax)
info@ii-vi-lot.de (email)