Application Note

P-Iris Lenses supported by Prosilica GT Cameras
Introduction

P-iris (Precise iris) lenses allow the camera to adjust to an exact F-number without drift, through the usage of a stepper motor. The host system knows the exact position of the iris at all times, allowing for a closed loop feedback system. This document presents a list of P-iris lenses supported by the Prosilica GT cameras.

Note

This is not a comprehensive list. New lenses from Kowa, Schneider, Computar, and Fujinon are available. Please contact the lens manufacturer for more information.

For detailed information on P-iris lens operation with Prosilica GT cameras see the technical Manual:

http://www.alliedvision.com/en/support/technical-documentation

For detailed information on the control attributes for P-iris controls:

http://www.alliedvision.com/fileadmin/content/documents/products/cameras/various/features/GigE_Camera_and_Driver_Attributes.pdf

LM35JC5MM

Manufacturer: Kowa
Focal length: 35 mm
Optical format: 2/3”
Mount: C
P-iris frequency: 200
P-iris num steps: 190

<table>
<thead>
<tr>
<th>F-number</th>
<th>2</th>
<th>2.08</th>
<th>2.22</th>
<th>2.49</th>
<th>2.99</th>
<th>3.95</th>
<th>5.48</th>
<th>6.80</th>
<th>9.18</th>
<th>13.6</th>
<th>24.48</th>
<th>45.47</th>
</tr>
</thead>
<tbody>
<tr>
<td>LensPiris Position</td>
<td>0</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>150</td>
<td>160</td>
<td>170</td>
<td>180</td>
</tr>
</tbody>
</table>

LM16JC5MM-IR

Manufacturer: Kowa
Focal length: 16 mm
Optical format: 2/3”
Mount: C
P-iris frequency: 200
P-iris num steps: 73

<table>
<thead>
<tr>
<th>F-number</th>
<th>1.41</th>
<th>1.45</th>
<th>1.52</th>
<th>1.63</th>
<th>1.75</th>
<th>1.90</th>
<th>2.09</th>
<th>2.33</th>
<th>2.66</th>
<th>3.11</th>
<th>3.79</th>
<th>4.87</th>
<th>6.57</th>
<th>9.71</th>
<th>18.25</th>
<th>37.94</th>
</tr>
</thead>
<tbody>
<tr>
<td>LensPiris Position</td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td>45</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>65</td>
<td>70</td>
<td>73</td>
</tr>
</tbody>
</table>
### LM25JC5MM-IR

- **Manufacturer:** Kowa
- **F-iris frequency:** 200
- **Focal length:** 25 mm
- **P-iris num steps:** 73
- **Mount:** C

<table>
<thead>
<tr>
<th>LensPiris Position</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
<th>60</th>
<th>65</th>
<th>70</th>
<th>73</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-number</td>
<td>1.41</td>
<td>1.45</td>
<td>1.52</td>
<td>1.63</td>
<td>1.75</td>
<td>1.90</td>
<td>2.09</td>
<td>2.33</td>
<td>2.66</td>
<td>3.11</td>
<td>3.79</td>
<td>4.87</td>
<td>6.57</td>
<td>9.71</td>
<td>18.25</td>
<td>37.94</td>
</tr>
</tbody>
</table>

### LMVZ3510M

- **Manufacturer:** Kowa
- **F-iris frequency:** 200
- **Focal length:** 3.5–10 mm
- **P-iris num steps:** 69
- **Mount:** CS

<table>
<thead>
<tr>
<th>LensPiris Position</th>
<th>0</th>
<th>6</th>
<th>12</th>
<th>18</th>
<th>24</th>
<th>30</th>
<th>36</th>
<th>42</th>
<th>48</th>
<th>54</th>
<th>60</th>
<th>66</th>
<th>69</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-number</td>
<td>1.61</td>
<td>1.61</td>
<td>1.66</td>
<td>1.84</td>
<td>2.05</td>
<td>2.31</td>
<td>2.67</td>
<td>3.15</td>
<td>3.89</td>
<td>5.13</td>
<td>7.61</td>
<td>15.14</td>
<td>31.39</td>
</tr>
</tbody>
</table>

### LMVZ9020M

- **Manufacturer:** Kowa
- **F-iris frequency:** 200
- **Focal length:** 9–20 mm
- **P-iris num steps:** 69
- **Mount:** CS

<table>
<thead>
<tr>
<th>LensPiris Position</th>
<th>0</th>
<th>6</th>
<th>12</th>
<th>18</th>
<th>24</th>
<th>30</th>
<th>36</th>
<th>42</th>
<th>48</th>
<th>54</th>
<th>60</th>
<th>66</th>
<th>69</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-number</td>
<td>1.63</td>
<td>1.72</td>
<td>1.87</td>
<td>2.05</td>
<td>2.27</td>
<td>2.52</td>
<td>2.85</td>
<td>3.27</td>
<td>3.85</td>
<td>4.71</td>
<td>6.10</td>
<td>8.83</td>
<td>11.49</td>
</tr>
</tbody>
</table>

### AG3Z3112KCS-MPIR-V31

- **Manufacturer:** Computar
- **F-iris frequency:** 200
- **Focal length:** 3.1–8 mm
- **P-iris num steps:** 71
- **Mount:** CS

<table>
<thead>
<tr>
<th>LensPiris Position</th>
<th>0</th>
<th>6</th>
<th>12</th>
<th>18</th>
<th>24</th>
<th>30</th>
<th>36</th>
<th>42</th>
<th>48</th>
<th>54</th>
<th>60</th>
<th>66</th>
<th>67</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-number</td>
<td>1.2</td>
<td>1.2</td>
<td>1.4</td>
<td>1.5</td>
<td>1.8</td>
<td>2.0</td>
<td>2.4</td>
<td>3.0</td>
<td>4.1</td>
<td>6.0</td>
<td>11.0</td>
<td>40.0</td>
<td>75.0</td>
</tr>
</tbody>
</table>

### AG4Z1214KCS-MPIR-V31

- **Manufacturer:** Computar
- **F-iris frequency:** 200
- **Focal length:** 12.5–50 mm
- **P-iris num steps:** 71
- **Mount:** CS

<table>
<thead>
<tr>
<th>LensPiris Position</th>
<th>0</th>
<th>6</th>
<th>12</th>
<th>18</th>
<th>24</th>
<th>30</th>
<th>36</th>
<th>42</th>
<th>48</th>
<th>54</th>
<th>60</th>
<th>66</th>
<th>68</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-number</td>
<td>1.7</td>
<td>1.7</td>
<td>1.8</td>
<td>2.0</td>
<td>2.1</td>
<td>2.3</td>
<td>2.9</td>
<td>3.5</td>
<td>4.7</td>
<td>7.0</td>
<td>11.0</td>
<td>25.0</td>
<td>48.0</td>
</tr>
</tbody>
</table>
M13VP288IR

Manufacturer: Tamron  P-iris frequency: 200
Focal length: 2.8–8 mm  P-iris num steps: 82
Optical format: 1/3”  Mount: CS

F-number  |  1.2  |  1.4  |  2.0  |  2.8  |  4.0  |  5.6  |  8.0  |  10.0 |  11.0 |  16.0 |  22.0 |  32.0 | close
---|---|---|---|---|---|---|---|---|---|---|---|---|---
LensPIris Position | 0 | 17 | 36 | 47 | 55 | 62 | 67 | 70 | 71 | 74 | 76 | 77 | 82
Disclaimer

Due to continual product development, technical specifications may be subject to change without notice. All trademarks are acknowledged as property of their respective owners. We are convinced that this information is correct. We acknowledge that it may not be comprehensive. Nevertheless, Allied Vision Technologies (“Allied Vision”) cannot be held responsible for any damage in equipment or subsequent loss of data or whatsoever in consequence of this application note.

Copyright © 2013

This document was prepared by the staff of Allied Vision Canada and is the property of Allied Vision, which also owns the copyright therein. All rights conferred by the law of copyright and by virtue of international copyright conventions are reserved to Allied Vision. This document must not be copied, or reproduced in any material form, either wholly or in part, and its contents and any method or technique available there from must not be disclosed to any other person whatsoever without the prior written consent of Allied Vision.