Forth Dimension Displays' SXGA-R5:
A compact, direct drive interface suitable for all high performance monocular, biocular and binocular imaging applications.

The SXGA-R5 system is a fast switching, all digital, high-performance reflective microdisplay and interface electronics. Using no colour sub-pixels, the proprietary Time Domain Imaging™ technology provides full colour high resolution images from one all digital microdisplay.

**BENEFITS**
- Digitally controlled colour and greyscale
- High resolution display, best in-class fill-factor
- Compact, plug ‘n play, all digital interface
- Customisable colour gamut
- No sub pixels or colour filters
- Fast switching liquid crystal (typ. 40μs)
- Different display addressing sequences available for diverse applications, customisation service available

**FEATURES**
- SXGA resolution – 1280 x 1024 pixels
- Reflective microdisplay 0.88”/22.4 mm diagonal
- High fill factor > 96%
- 24-bit colour system
- Gamma correction / dither algorithm
- Refresh rate up to 85Hz at SXGA 24-bit colour
- Digital video input (DVI)
- PC based GUI/API for system integration & control

**APPLICATIONS**

**TRAINING AND SIMULATION**
- Monocular viewers
- Biocular viewers
- Binocular viewers
- Head-up displays

**MEDICAL IMAGING**
- Image injection for surgical microscopes
- Stereoscopic imaging
- Ophthalmic diagnostic Instruments

**FILM & TELEVISION PRODUCTION**
- High resolution electronic viewfinders (EVFs)
For further information or to receive a quotation please contact:
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System Outline

Graphical User Interface for system set-up
API for in-system control

System Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>SXGA (1280 x 1024 pixel)</td>
</tr>
<tr>
<td>Maximum Refresh Rate</td>
<td>85Hz (SXGA, 24-bit colour)</td>
</tr>
<tr>
<td></td>
<td>120Hz (WXGA, 24-bit colour)</td>
</tr>
<tr>
<td>Interfaces</td>
<td>DVI / USB 2.0 / RS-232</td>
</tr>
<tr>
<td>Synchronisation Outputs</td>
<td>LED Current Drive / LED Enables / V-Sync</td>
</tr>
<tr>
<td>Power</td>
<td>+12VDC / 5.4W (including Microdisplay &amp; LED drive)</td>
</tr>
<tr>
<td>Weight</td>
<td>69g (Driver Board &amp; Microdisplay)</td>
</tr>
<tr>
<td>Operational Temp Range</td>
<td>-10°C to +50°C</td>
</tr>
</tbody>
</table>

Driver Board Dimensions

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