The SPOT™ Insight Color digital camera is a feature-rich complete documentation system with a low price. Its liquid crystal color filter measures red, green and blue values at each pixel, creating high resolution, true color images with incredible detail. IEEE 1394 Firewire™ connectivity enables effortless installation on computers and laptop portability.

The SPOT Insight comes with the easy to use SPOT Basic software which is fully compatible with both Windows® and Mac® operating systems. The SPOT software includes real time image previewing, acquisition, scale bar addition, report generation, time lapse, and measuring capabilities. SPOT Insight cameras come with a 2-year warranty and are supported by an experienced team of imaging specialists. The suggested applications for this camera include brightfield color imaging, time lapse experiments and bright fluorescence imaging.

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Shot image capture</td>
<td>More than doubles the resolution when compared to color mosaic image capture technology</td>
</tr>
<tr>
<td>1600 x 1200 1.92 Mp image capture</td>
<td>Resolves fine detail</td>
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<tr>
<td>Programmable gain (1-32x)</td>
<td>Facilitates live mode previews of low light specimens</td>
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<tr>
<td>Dual channel 20 MHz readout</td>
<td>Produces high-speed live images for real-time focusing and framing</td>
</tr>
<tr>
<td>42-bit x RGB color image capture</td>
<td>Extra bit depth is ideal for image enhancement</td>
</tr>
<tr>
<td>High quantum efficiency CCD</td>
<td>Increases sensitivity for faster image captures</td>
</tr>
<tr>
<td>Interline progressive scan CCD</td>
<td>Electronic shuttering eliminates mechanical shutter shortcomings related to speed, wear, and vibration</td>
</tr>
<tr>
<td>FireWire® interface</td>
<td>Allows for effortless installation, hot-swapping, and laptop connectivity for greater ease of use</td>
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</tbody>
</table>
### Lens Mount
- **C-mount**

### Computer Interface
- **FireWire® IEEE 1394a interface**

### Trigger Connectors
- **External trigger input (TTL)**
- **Exposure sync output (TTL)**

### Tripod Mount
- **1/4"-20**

### Weight
- **1.6lbs. (0.72kg)**

### Size
- **2.79" x 3.75" x 7.68" (71mm x 95mm x 180mm)**

### Power Requirements
- **100-240VAC, 47-63Hz**

### Operating Environment
- **0 to 30°C ambient, 0 to 80% relative humidity (non-condensing)**

### Certifications
- **CE, FCC Class A, RoHS**

### Quantum Efficiency

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Blue</th>
<th>Green</th>
<th>Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>350</td>
<td>35%</td>
<td>40%</td>
<td>45%</td>
</tr>
<tr>
<td>400</td>
<td>40%</td>
<td>45%</td>
<td>50%</td>
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<tr>
<td>450</td>
<td>45%</td>
<td>50%</td>
<td>55%</td>
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<tr>
<td>500</td>
<td>50%</td>
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<tr>
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<tr>
<td>600</td>
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<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>650</td>
<td>65%</td>
<td>70%</td>
<td>75%</td>
</tr>
<tr>
<td>700</td>
<td>70%</td>
<td>75%</td>
<td>80%</td>
</tr>
</tbody>
</table>

### Sensor
- **Resolution**: 1.92 Mp Cosite Color Sampled
- **Sensor Type**: Kodak KAI-2020-M with cover glass. Monochrome progressive scan interline CCD
- **Active Pixels**: 1600 x 1200
- **Pixel Size**: 7.4µm x 7.4µm
- **Active Imager Size**: 11.8 mm x 8.9 mm 14.8 mm diagonal
- **Optical Format**: 1"
- **Exposure Time**: 0.5 ms to 536 seconds
- **Binning**: 1x1, 2x2, 3x3, 4x4
- **Region of Interest**: User selectable from 50x50 to full resolution
- **Read Noise**: 17 e- rms
- **Full Well Depth**: 33,333 e-
- **Non-Linearity**: <1%
- **Bit Depth**: 14-bit
- **Sensor Readout Frequency**: 20 MHz

### SPOT Software
**SPOT Basic Software Features**
- Live mode viewing window with controls
- Image capture window
- Image capture setups are user defined, named and saved
- Auto or manual exposure for Live and captured images
- Zoom control on Live and captured images
- Auto white balance
- Spot or average metering
- Correct Color Technology™ using ICC/ColorSync corrections
- Flatfield correction
- Annotation
- Calibration mark
- Measurement tools
- Image enhancement tools
- Sequential image capture and playback
- Report generator
- Interactive print dialog
- Help menu

**Computer Operating System Compatibility**
- **Mac®**: OS X
- **Windows®**: XP, Vista®, 7 (32 bit versions only)

**Minimum Computer Requirements**
- **Mac®**: 400MHz Power PC, 512MB RAM, FireWire® IEEE 1394a port
- **PC**: 1GHz Pentium, 512MB RAM, FireWire® IEEE 1394a port

**SPOT Advanced Software**
- Available (includes macro feature, floating taskbars and image archiving database)

**SPOT Advanced Software Modules**
- Available (adds image display intensity scaling, peripheral device control and extended depth of focus)

**Software Development Kit**
- Available for Mac® and Windows®

**Native Drivers for 3rd Party Software**
- Available (call or visit our website)

### SPOT Imaging Solutions
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Data Sheet: Insight 2.0 3-Shot Color Rev. B