MicronViewer 7292M
HIGH PERFORMANCE NEAR INFRARED IMAGING CAMERA

The MicronViewer 7292M is a high performance near infrared camera designed for the detection of near infrared radiation in the spectral range from visible to over 2 microns. It is extremely useful for applications requiring high performance, flexibility and maximum stability.

The camera features a separate camera head and control unit facilitating adjustments while the camera is in use. Front panel controls allow for a variety of different optimization methods. Controls for auto/manual gain and black level selection permit the maximum possible contrast enhancement for the most demanding of low contrast imaging applications. Gamma correction permit the optimization of image uniformity. Aperture and bandwidth controls allow for optimum sharpness with minimum noise. A high/low gain switch provides additional boost of 10µm contrast images.

Features:
• Near infrared imaging to 2µm
• Two-piece camera/controller design
• Adjustable gain/black level for contrast improvement
• Aperture, bandwidth and gamma correction for image optimization

APPLICATIONS
• Laser beam profiling and/or analysis: Nd:YAG (1.3µm), Er:Glass (1.5µm), Ho:YAG (2.1µm)
• Viewing and aligning IR sources
• Thermal imaging of objects hotter than 250°C
• Moisture detection
• Forensic analysis
• Semiconductor sub-surface inspection
MicronViewer 7292M
TWO-PIECE NEAR INFRARED CAMERA

SPECIFICATIONS

**Spectral Sensitivity**
0.4 to 1.9 \(\mu\text{m} \) (7292M); 0.4 to 2.2 \(\mu\text{m} \) (7292M-06)

**Horizontal Resolution**
Up to 700 TV lines

**Dynamic Range**
120:1 (7292M); 60:1 (7292M-06)

**Scanned Area**
9.5 x 12.7 mm\(^2\)

**Damage Threshold**
1 mW/cm\(^2\) (CW), 10 mJ (pulsed)

**Decay Lag after 50 ms**
45-60%

**Sweep Rate**
RS-170 (7292M, 7292M-06); CCIR (7292ME, 7292M-06E)

**Scanning**
2:1 interlace

**Geometric Distortion**
\(\pm0.5\%\) in circle of picture height, 1% overall

**Linearity Distortion**
0.25%

**Synchronization**
Lockable to External H&V Drive or Composite Sync

**Power**
18 W @ 120 VAC

**Voltage Requirement**
98-135 V, 50/60 Hz or 195-260 V, 50/60 Hz

**Size (LxWxH)**
Head (w/o lens): 9\(\frac{1}{4}\)" x 2\(\frac{3}{4}\)" x 2\(\frac{7}{8}\)"
Control Unit: 12\(\frac{3}{4}\)" x 8\(\frac{3}{8}\)" x 3\(\frac{3}{4}\)"

**Weight**
Head (w/o lens): 2.25 lb.
Control Unit: 7.2 lb.

**Mounts**
1.0"-32 lens C-mount thread; Two \(\frac{1}{4}\"-20\) UNC-2B tripod mount on base of head

**Ambient Temperature Range**
Operating: -20ºC to +65ºC (-4°F to +149°F)

**Controls**
Auto/Manual Gain – to optimize contrast
Auto/Manual Black Level – to set the darkest portion of image
Gamma Adjustment – to expand dark scenes or set to unity linearity.
Polarity – allows for selection of normal or inverted image
Enhance – image sharpness

**Video Output Connector**
BNC

**Sync Input Connector**
BNC

Because of ongoing product enhancements, specifications are subject to change without notice.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>7292M MicronViewer</td>
<td>914955</td>
<td>Fixed-mount camera 0.4-1.9µm RS-170 60Hz video output. No lens. Includes AC power supply.</td>
</tr>
<tr>
<td>7292M-06 MicronViewer</td>
<td>914957</td>
<td>Fixed-mount camera 0.4-2.2µm RS-170 60Hz video output. No lens. Includes AC power supply.</td>
</tr>
<tr>
<td>7292M-E MicronViewer</td>
<td>914954</td>
<td>Fixed-mount camera 0.4-1.9µm CCIR 50Hz video output. No lens. Includes AC power supply.</td>
</tr>
<tr>
<td>7292M-06E MicronViewer</td>
<td>914956</td>
<td>Fixed-mount camera 0.4-2.2µm CCIR 50Hz video output. No lens. Includes AC power supply.</td>
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<tr>
<td>1X Objective Lens</td>
<td>915229</td>
<td>25mm F1.8 with integral iris diaphragm</td>
</tr>
<tr>
<td>2X Objective Lens</td>
<td>903020</td>
<td>50mm F1.4 with integral iris diaphragm</td>
</tr>
<tr>
<td>0.5X-3X Zoom Objective Lens</td>
<td>908006</td>
<td>12.5-75mm F1.2 with integral iris diaphragm</td>
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<tr>
<td>Extension Tube Set</td>
<td>908007</td>
<td>Set of spacers that fit between lens and camera permitting close focusing</td>
</tr>
<tr>
<td>1&quot; Long Pass Filters</td>
<td></td>
<td>Select cut-on wavelength (nm): 700, 750, 800, 850, 900, 950, 1000, more</td>
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<tr>
<td>1&quot; Short Pass Filters</td>
<td></td>
<td>Select cut-off wavelength (nm): 700, 750, 800, 850, 900, 950, 1000, more</td>
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<tr>
<td>1&quot; Band Pass Filters</td>
<td></td>
<td>Select center wavelength (nm): 700, 710, …, 1050, 1060, more</td>
</tr>
<tr>
<td>1&quot; Neutral Density Filters</td>
<td></td>
<td>Select optical density: 0.1, 0.2, …, 0.9, 1.0, 1.5, 2.0, 3.0, more</td>
</tr>
</tbody>
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Contact us today to discuss how our near infrared cameras can meet your application requirements.