Thermo Scientific I3710D-UV
Intensified Solid State Camera

The Thermo Scientific camera I3710D-UV is an intensified gated UV sensitive, high gain, gated intensified CID based camera consisting of a model 3710D solid state RS-170 version camera with 12 x 13.7 micron (4:3 aspect ratio) pixels, fiberoptically coupled to a high performance UV sensitive 18mm second generation MCP image intensifier.

**Designed for UV Imaging**
The I3710D-UV is an intensified gated UV sensitive CID based camera consisting of the reliable 3710D RS-170 version camera which is fiberoptically coupled to an 18mm GENII-UV microchannel plate image intensifier. The GENII-UV tube has an S-20 photocathode with suprasil input window for optimal ultraviolet response to 190nm, and is resistant to browning due to radiation. The camera is equipped with high speed gating for shutter intervals <100ns, and exhibits low noise / high gain performance with typical light gain of 12,000X.

**Maximum Flexibility**
Intensifier gating may be controlled automatically, or manually via control knob or with external TTL input. Intensifier gain is manually controlled via the Gain control knob, or by the AutoGain feature. The MCP uses a low noise photocathode sensitive from 190nm to at least 700nm.

Internal adjustments allow for control of black level setup, edge enhancement and 2X video gain boost.
Options include digital control, optical coupling, Autogate/Autogain only, Progressive Scan, and CCIR format.
The I3710D-UV camera features a 2:1 interlace scan 776(H) x 512(V) CID array with 12 x 13.7 micron pixels in a compact remote head connected to the camera control unit via flexible 2 meter cable.

**Features:**
- CID (Charge Injection Device)
  - High resolution, High MTF
  - High speed gating to 50ns minimum
  - Excellent image at 7 x 10(5) rads/hr
  - 18mm DEP GENII-UV image intensifier
  - Sensitivity 5 x 10(-7)fc at faceplate
  - Typical 12,000X light gain
  - UV through visible response
  - Auto Gate/Gain with manual control
  - RS-170, 2:1 Interface scanning format
  - 12 x 13.7 micron contiguous pixel

**Applications:**
- UV or low light level inspection and measurement
- Remote gaging, metrology
- Fluorescence microscopy
- Research
- Machine vision
- Spectroscopy
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The I3710D-UV intensified solid state camera is part of a proven line of intensified cameras and sensors whose applications span a full spectrum of industries and applications. Thermo Scientific CIDTEC Cameras & Imagers have been in business for over 25 years with imaging products in scientific, machine vision, aerospace, medical, and radiation hardened markets.

Typical Photocathode Responsivity (mA/W):

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Responsivity (mA/W)</th>
<th>QE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200nm</td>
<td>28.0 mA/W</td>
<td>17%</td>
</tr>
<tr>
<td>300nm</td>
<td>38.0 mA/W</td>
<td>15%</td>
</tr>
<tr>
<td>400nm</td>
<td>62.2 mA/W</td>
<td>19%</td>
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<tr>
<td>520nm</td>
<td>55.5 mA/W</td>
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<tr>
<td>600nm</td>
<td>29.1 mA/W</td>
<td>6%</td>
</tr>
<tr>
<td>700nm</td>
<td>8.5 mA/W</td>
<td>2%</td>
</tr>
</tbody>
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*note: export restrictions may apply