The Ultimate High-Resolution, High-Speed Camera

There's only one way to capture the fastest events in the world. That's with the highest resolution, fastest camera ever built.

Experience the i-SPEED 726, the pinnacle of the powerful, high-end i-SPEED 7 Series line of high-speed cameras. Packed with value and suited for a wide range of applications, driven by a whopping 3.1 megapixel image sensor. It's a level of performance that captures more than movement. It captures the imagination.

FEATURES

- High-resolution 2048x1536 pixel sensor
- Full resolution to 8,512 frames/second
- 1080p resolution at 12,742 frames/second
- Up to 288 GB of on-board memory for long recordings
- Internal or external SSD drive for fast data transfer
- Class leading 26 GP/sec throughput
- Microlens sensor for exceptional light sensitivity
- Wide Dynamic Range recording
- Global electronic shutter to 1 µs
- 1 hour battery life
- Compatible with all F and EF mount lenses
- Maximum frame rate – 1,000,000 fps
- Flexible frame synchronization from 10 Hz to 200 kHz
- Environmentally rugged package available
- 32 point integrated real-time health monitoring system
**IMAGER**

- **Sensor type**: Custom CMOS
- **Sensor resolution**: 2048 x 1536 pixel
- **Sensor size**: 27.972 mm x 20.736 mm
- **Sensor diagonal**: 34.82 mm
- **Pixel size**: 13.5 μm
- **Bit depth**: 12 bit (36 bit color)
- **ISO (12232-2:2006, D, sat)**: Mono 5,000 / 40,000 (max)
  Color 1,800 / 14,400 (max)
- **Maximum frame rate**: 1,000,000 fps
- **Shutter type**: Global exposure
- **Shutter time, standard**: 1 μs minimum
- **Shutter time, fast mode**: 277 ns
- **WDR**: Wide Dynamic Range

**SYNCHRONIZATION and CAPTURE**

- **Trigger**: TTL T0 to 0-100%
- **Trigger modes**: Circular, ROC, BROC
- **Sync**: 10 Hz – 200 kHz
- **Luminance histogram**: Iris setting aid tool
- **i-CHEQ 360**: Camera status LEDs
- **i-FOCUS**: Focusing aid tool
- **i-EXPOSE**: High/low exposure highlight
- **Control**: PC or CDUe
- **IRIG input**: IRIG – B to sub 1 μs
- **IRIG sync**: Camera sync to IRIG
- **Internal memory**: 96 GB standard, upgrade to 288 GB

**PHYSICAL and ENVIRONMENTAL**

- **Dimensions**
  - Instrumentation package: 14.3 (W) x 6.2 (H) x 6.2 (L) inches, 363 (W) x 157 (H) x 154 (L) mm
  - Rugged package: 14.75 (W) x 6.0 (H) x 5.75 (L) inches, 374 (W) x 150 (H) x 143.5 (L) mm
- **Weight**: 18.7 lb (8.5 kg) with battery
- **Input voltage**: 12-36 V
- **Power consumption**: 150 W nominal, 200 W max
- **Mounting**: 1/4x20 and 3/8x16 tripod plate
- **Battery**: 2x 14.4 V 90 Wh
- **Battery life**: 1 hour
- **Lens mount**: Custom, swappable lens plate
- **EMC**: EN50532-A, EN50524
- **Safety**: BS EN61010-1 (camera), IEC60950 (PSU)
- **CE marking**: EMC directive (camera), EMV directive, LV directive (PSU)
- **Lead free**: RoHS directive
- **WEEE**: Compliant
- **IP rating**: IP 20
- **Temperature °F**: 32 to 104 operation, -4 to 140 storage
- **Temperature °C**: 0 to 40 operation, -20 to 60 storage
- **Pressure**: 71 kpa to 106 kpa
- **Relative humidity**: 95% at 104°F non-condensing
- **G-shock, Instrumentation package**: 10 G
- **G-shock, Rugged package**: 30 G @ 11 ms IEC 68-2-27 Ea, 30 G @ 2 ms IEC 68-2-29 Eb
- **Power input connector**: 6 pin Lemo
- **Trigger input**: BNC 75 Ω
- **Feature connector**: 18 pin Lemo, trigger in / sync / sync out / exposure out / remote power

**CONNECTIVITY**

- **Video outputs**: 2x HD-SDI, HDMI
- **USB**: USB 3
- **Network**: 1 Gb RJ45
- **Video**: AVI (compressed or uncompressed)
- **Image sequence**: TIFF, JPG, RAW
- **Ethernet control**: 1 Gb
- **Remote control**: Via supplied software

**PC SOFTWARE**

- **Standard control**: Control ONE
- **Premium control**: Control MULTI-DAQ
- **Editing**: i-SPEED Movie Maker
- **Analysis**: ProAnalyst® Lite by Xcitex
- **Viewer**: i-SPEED Viewer
- **Utilities**: i-SPEED Lens Calculator, i-SPEED Viewer
- **Software Developers Kit**: C++, LabView
- **Synchronized data acquisition**: USB DAQ, 8 options

**PURCHASING OPTIONS**

- **CDUe**: Portable Control Unit
- **Sensor**: Color / Mono
- **Memory**: 96 GB / 144 GB / 288 GB
- **Shutter time**: 1 μs (std) / 277 ns (subject to export restrictions)
- **Internal SSD**: 500 GB / 1 TB
- **External SSD**: 250 GB / 500 GB / 1 TB
- **Lens mounts**: F mount (Nikkor D) / F mount (Nikkor G) / C mount / EF mount
- **Package type**: Instrumentation / Rugged
- **Warranty**: 1 yr (std) / 2 yr / 3 yr
- **Internal Batteries**: Set of 2 batteries

**FRAME RATES, RESOLUTION and DURATION**

<table>
<thead>
<tr>
<th>FPS</th>
<th>Resolution</th>
<th>36GB</th>
<th>72GB</th>
<th>96GB</th>
<th>144GB</th>
<th>288GB</th>
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<tr>
<td>1,000</td>
<td>2048x1536</td>
<td>–</td>
<td>–</td>
<td>21.6 sec</td>
<td>32.4 sec</td>
<td>64.8 sec</td>
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<tr>
<td>2,000</td>
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<td>–</td>
<td>10.8 sec</td>
<td>16.2 sec</td>
<td>32.4 sec</td>
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<tr>
<td>5,000</td>
<td>2048x1536</td>
<td>–</td>
<td>–</td>
<td>4.3 sec</td>
<td>6.5 sec</td>
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<tr>
<td>7,500</td>
<td>2048x1536</td>
<td>–</td>
<td>–</td>
<td>2.9 sec</td>
<td>4.3 sec</td>
<td>8.6 sec</td>
</tr>
<tr>
<td>8,512</td>
<td>2048x1536</td>
<td>–</td>
<td>–</td>
<td>2.5 sec</td>
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<td>9,942</td>
<td>1904x1422</td>
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<tr>
<td>30,000</td>
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<tr>
<td>50,000</td>
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<td>–</td>
<td>–</td>
<td>2.7 sec</td>
<td>4.1 sec</td>
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<tr>
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<td>–</td>
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<tr>
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<td>–</td>
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<tr>
<td>500,000</td>
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<td>15.3 sec</td>
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*Note: Other resolutions and speeds are available.*