Economical High-Speed Cameras in a Compact Package for Laptop Control

Compact, Versatile and Easy to Use

The i-SPEED 210 and the i-SPEED 211 are the perfect high-speed cameras for real-world situations where access, portability and rapid deployment matter. These cameras fit in the palm of your hand; when tethered to a laptop or Ethernet cable, they can fit almost anywhere – under dashboards, in engine compartments, in machinery and more.

Providing a balance between cost, speed, resolution and compact size, the i-SPEED 210 and i-SPEED 211 are ideal high-speed cameras for budget-conscious test laboratories, production lines and test facilities. The high-sensitivity CMOS sensor provides over 1.3 million pixels of resolution at 500 fps -- suitable for slowing down most life science, robotics and machinery applications. The global exposure shutter makes this a true professional high-speed camera capable of recording complicated rotating objects, but at a price that will not break a laboratory budget.

The 1-hour battery that comes standard on the model 211 coupled with a standard laptop make this camera ideal for untethered portable field work. Add a layer of rugged durability with the optional Hi-G shock package.

FEATURES

- SVGA resolution 1280 x 1024 CMOS sensor
- Maximum frame rate of 79,500 frames per second
- Fits in the palm of your hand; the 210 is a 2.5” cube and the 211 is a 3.5” cube
- Excellent light sensitivity
- Full resolution to 500 fps (1,750 fps in quad mode)
- Certified to 100 G shock, 10 G vibration
- Up to 8 GB of memory for long recordings
- Interchangeable C-mount lenses
- 1 hr battery charge while recording, 1.5 hours while in standby (Model 211 only)
IMAGER

Frame rate at full resolution: 500 fps (1,750 fps in quad mode)
Shutter: Global electronic shutter: 2 μs to 1 s
Spectral bandwidth: 400 - 900 nm
Amplification: Digital gain 1 - 4 in 8 steps
Maximum resolution: 1280 x 1024
Maximum frame rate: 79,500 fps
Sensor diagonal: Size 22.9 mm
Pixel size: 14 μm square
Bit depth: 10 bit
Light sensitivity: 2,500 mono / 2,000 color

SYNCHRONIZATION and CAPTURE

210 Memory: 2 GB / 4 GB
211 Memory: 4 GB / 8 GB
Memory segments: 16
Video: AVI (JPG, BMP)
Image sequence: TIFF, BMP, JPG, DNG, PNG

PHYSICAL and ENVIRONMENTAL

210 Dimensions inches: 2.5 (W) x 2.5 (H) x 2.6 (L)
Dimensions mm: 64 (W) x 64 (H) x 66 (L)
Weight: 0.66 lbs (300 g) without lens
211 Dimensions inches: 3.7 (W) x 2.7 (H) x 3.6 (L)
Dimensions mm: 94 (W) x 69 (H) x 92 (L)
Weight: 2.00 lbs (900 g) without lens
Input voltage: 10 - 30 VDC
Power consumption: 210 / 7.5 w max
211 / 15 w max
Mounting: ¼-20
Battery charge: Recording: 1 hr, standby: 1.5 hr (model 211 only)
Lens options: C mount / F mount / FG mount
G shock: Hi-G 100 G shock, 10 G vibration
Temperature °F: 41 to 113 operation
Temperature °C: 5 to 45 operation
Ethernet: 1 Gb
Remote control: via supplied software

CONNECTIVITY

IRIG input: B synchronization*
Network: 1 Gb RJ45
Power input: 6 pin female connector
Trigger: External signal/switch triggering
Input/output: 8 pin female I/O module (model 211 only)
Trigger modes: Video trigger, burst trigger mode

PURCHASING OPTIONS

Sensor: Color / mono
210 Memory: 2 GB / 4 GB
211 Memory: 4 GB / 8 GB
Package: Standard / Hi-G rated
Warranty: 1 yr (std) / 2 yr

*Model 211 only

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FRAME RATES, RESOLUTION and DURATION

<table>
<thead>
<tr>
<th>FPS</th>
<th>Resolution</th>
<th>Record Time(s)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2 GB</td>
<td>4 GB</td>
</tr>
<tr>
<td>500</td>
<td>1280 x 1024</td>
<td>3.3 s</td>
</tr>
<tr>
<td>700</td>
<td>1280 x 720</td>
<td>3.3 s</td>
</tr>
<tr>
<td>1,000</td>
<td>1280 x 512</td>
<td>3.3 s</td>
</tr>
<tr>
<td>1,250</td>
<td>800 x 600</td>
<td>3.6 s</td>
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<tr>
<td>1,850</td>
<td>640 x 480</td>
<td>3.8 s</td>
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<tr>
<td>2,000</td>
<td>512 x 512</td>
<td>4.1 s</td>
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<tr>
<td>5,650</td>
<td>320 x 240</td>
<td>4.9 s</td>
</tr>
<tr>
<td>18,500</td>
<td>128 x 100</td>
<td>9.1 s</td>
</tr>
<tr>
<td>79,500</td>
<td>128 x 10</td>
<td>21.1 s</td>
</tr>
</tbody>
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Note: Other resolutions and speeds are available.

Specifications subject to change
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