Extreme Performance for Research, Ballistics and Testing

6,642fps @ 2048x1536 | 20GPx/s throughput | ISO 16,000 / 125,000

• High resolution 2048x1536 pixel sensor (3.1MPx)
• 1080p resolution at 9,942 frames/second
• Up to 288 GB of on-board memory for long recordings
• Internal or external SSD drive for fast data transfer
• Microlens sensor for exceptional light sensitivity
• Wide Dynamic Range recording
• Global electronic shutter to 293 ns*
• 1 hour battery life
• Compatible with all Nikon F and Canon 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
• Upgrade path between models

* Subject to export regulations, shorter shutter speeds are available by request. Contact IX Cameras for more information.

iX Cameras
ix-cameras.com
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)
Light sensitivity Mono (Gain off/on): 16000 / 125000
Light sensitivity Color (Gain off/on): 4000 / 32000
Maximum frame rate: 1,000,000 fps
Shutter type: Global exposure
Shutter time, standard: 1 μs minimum
Shutter time, fast mode: 293 ns
WDR: Wide Dynamic Range

SYNCHRONIZATION and CAPTURE

Trigger: TTL 1 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: IRIG – B to sub 1 μs
IRIG output: IRIG to CDUe
IRIG sync: Camera sync to IRIG
Internal memory: 72 GB standard, upgrade to 288 GB

PHYSICAL and ENVIRONMENTAL

Dimensions
Instrumentation package
inches: 14.3 (W) x 6.2 (H) x 6.2 (L)
mm: 363 (W) x 157 (H) x 154 (L)
Rugged package
inches: 14.75 (W) x 6.0 (H) x 5.75 (L)
mm: 374 (W) x 150 (H) x 143.5 (L)
Weight: 18.7 lb (8.5 kg) with battery
Input voltage: 12-36 V
Power consumption: 150 W nominal, 200 W max
Mounting: 14x20 and 3/8x16 tripod plate
Battery: 2x 14.4 V 90 Wh
Battery life: 1 hour
Lens mount: Custom, swappable lens plate
EMC: EN55022-2, EN55024
Safety: BS EN61010-1 (camera), IEC60950 (PSU)
CE marking: EMC directive (camera), CE 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: IXV, AV (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: 72 GB / 96 GB / 144 GB / 288 GB
Shutter time: 1 μs (std) / 293 ns (subject to export restrictions)
Internal SSD: 500GB / 1TB / 2TB
External SSD: 250GB / 500GB / 1TB / 2TB
Lens mounts: F mount (Nikkor D) / F mount (Nikkor G)
C mount / F mount
Package type: Instrumentation / Rugged
Warranty: 1 yr (std) / 2 yr / 3 yr
Internal Batteries: Set of 2 batteries

FRAME SPEEDS, RESOLUTION, and DURATION (in seconds)

<table>
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<tr>
<th>Frame Speed</th>
<th>Resolution</th>
<th>72GB</th>
<th>96GB</th>
<th>144GB</th>
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Note: Other resolutions and speeds are available.