# 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 megapixel image sensor. Need we say more? It's a level of performance that captures more than movement. It captures the imagination.



i-SPEED 726R shown in heavy duty, rugged environmental package

Choose from the sleek new Instrumentation package or elect to upgrade your camera to the high-G rated Rugged package with its environment resistant aluminum casing. When the ultimate in testing is required for capturing the ultimately fast event,



The i-SPEED 726 camera is controlled both by PC and the new 7 Series touchscreen CDUe

# **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
- · Class leading 26 GP/sec throughput
- · Microlens sensor for exceptional light sensitivity
- Wide Dynamic Range recording
- Global electronic shutter to 289 ns\*
- · 1 hour battery life
- Internal or external SSD drive for fast data transfer
- · 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

\* Upgrade



# i-SPEED. 726

## **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)

Mono 5000 / 40000 · Color 1800 / 14400 ISO

Maximum frame rate 1,000,000 fps Shutter type Global exposure Shutter time, standard 1 µs minimum Shutter time, fast mode 250 ns

**WDR** Wide Dynamic Range

### SYNCHRONIZATION and CAPTURE

TTL T0 to 0-100% Trigger **Trigger modes** Circular, ROC, BROC Svnc 10 Hz - 200 kHz Luminance histogram Iris setting aid tool i-CHEQ 360 Camera status LEDs i-FOCUS Focusing aid tool i-EXPOSURE

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

High/low exposure highlight

**Dimensions inches** 14.3 (W) x 6.2 (H) x 6.2 (L) **Dimensions mm** 363 (W) x 157 (H) x 154 (L) Weight 18.7 lb (8.5 kg) with battery

Input voltage

Power consumption 150 w nominal 200 w max Mounting 1/4x20 and 3/8x16 tripod plate

2x 14.4 V 90 Wh **Battery** 

**Battery life** 1 hour

Lens mount Custom lens plate **EMC** EN55032-A, EN55024

Safety BS EN61010-1 (camera), IEC60950 (PSU)

**CE** marking EMC directive (camera),

EMC 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

95% at 104°F non-condensing Relative humidity

G-shock, Instrumentation

package

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 ohm

18 pin Lemo, trigger in / sync / sync out / Feature connector

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

Via supplied software Remote control

#### PC SOFTWARE

Standard control Control ONE Premium control Control MULTI-DAQ Editina i-SPEED Movie Maker ProAnalyst® Lite by Xcitex **Analysis** 

Viewer i-SPEED Viewer

Hilities i-SPEED Lens Calculator, i-SPEED Viewer

**Software Developers Kit** C++, LabView Synchronized data acquisition USB DAQ, 8 options

## PURCHASING OPTIONS

Sensor Color / Mono

96 GB (Std) / 144 GB / 192 GB / 288 GB Memory Shutter time 1 µs (std) / 289 ns (upon request)

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

# FRAME RATES, RESOLUTION and DURATION

FPS	Resolution	36GB	72GB	96GB	144GB	288GB
100	2048x1536	-	-	216 sec	324 sec	648 sec
200	2048x1536	-	-	108 sec	162 sec	324 sec
300	2048x1536	-	-	72 sec	108 sec	216 sec
500	2048x1536	-	-	43 sec	65 sec	130 sec
1,000	2048x1536	-	-	22 sec	32 sec	65 sec
2,000	2048x1536	-	-	11 sec	16 sec	32 sec
5,000	2048x1536	-	-	4.3 sec	6.5 sec	13 sec
8,512	2048x1536	-	-	2.5 sec	3.8 sec	7.6 sec
10,000	1904x1410	-	-	2.6 sec	3.8 sec	7.7 sec
12,742	1920x1080	-	-	2.5 sec	3.8 sec	7.6 sec
15,000	1512x1134	-	-	2.7 sec	4.0 sec	8.0 sec
20,000	1344x978	-	-	2.6 sec	3.9 sec	7.8 sec
30,000	1064x798	-	-	2.7 sec	4.0 sec	8.1 sec
50,000	1064x474	-	-	2.7 sec	4.1 sec	8.2 sec
100,000	1064x228	-	-	2.8 sec	4.2 sec	8.5 sec
200,000	1064x102	-	-	3.2 sec	4.7 sec	9.5 sec
300,000	1064x60	-	-	3.6 sec	5.4 sec	10.8 sec
500,000	1232x24	-	-	4.6 sec	7.0 sec	13.9 sec
750,000	1120x12	-	-	6.8 sec	10 sec	20 sec
1,000,000	336 x 42	-	-	4.5 sec	7.0 sec	14.0 sec

Note: Other resolutions and speeds are available.



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