

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.



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 fastest camera is required to capture the fastest events, the i-SPEED 7 is up to the task.



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 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 289 ns
- 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	Mono 5000 / 40000 • Color 1800 / 14400
Maximum frame rate	1,000,000 fps
Shutter type	Global exposure
Shutter time, standard	1 µs minimum
Shutter time, fast mode	289 ns
WDR	Wide Dynamic Range

SYNCHRONIZATION and CAPTURE

Trigger	TTL T0 to 0-100%
Trigger modes	Circular, ROC, BROCC
Sync	10 Hz – 200 kHz
Luminance histogram	Iris setting aid tool
i-CHEQ 360	Camera status LEDs
i-FOCUS	Focusing aid tool
i-EXPOSURE	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 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	12-36 V
Power consumption	150 w nominal, 200 w max
Mounting	¼x20 and 3/8x16 tripod plate
Battery	2x 14.4 V 90 Wh
Battery life	1 hour
Lens mount	Custom, swappable 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
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 ohm
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

Sensor	Color / Mono
Memory	96 GB (Std) / 144 GB / 192 GB / 288 GB
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	10.0 sec	20.0 sec
1,000,000	336 x 42	-	-	4.5 sec	7.0 sec	14.0 sec

Note: Other resolutions and speeds are available.