Airbag testing

J-PRI – a compact 5 Megapixel high-speed camera

The J-PRI camera comes in three different configurations with up to 2560x1920 pixel and up to 2000 fps. A unique approach allows cameras with basic configurations to record in maximum configuration with a «Pay-as-you-Record» function.

J-PRI Configuration 1
1500x1125 pixels / 2500fps and higher (by reducing resolution)

J-PRI Configuration 2
2000x1125 pixels / 2500fps and higher (by reducing resolution)

J-PRI Configuration 3
2560x1920 pixels / 2000fps and higher (by reducing resolution)

Pay-as-you-Record
Buy a 24hr license for Configuration 2 or 3 and record 24hrs with full unlocked camera specs.

Unique features and benefits

• **High Resolution** 2560 x 1920 @ 2000fps

• **Packed with memory** – J-PRI is available with memory sizes of 16 / 32 / 64 GB.

• **Software** – The Imaging Studio v4 software suite leaves nothing to be desired and functions well with the most demanding applications

• **PAR: Pay-as-you-Record** – Invest in a basic camera and unlock full features by buying a license when needed

Resolution vs frame rate
Config 1-3

Size Y	Max FPS Config 3 (Size X max. 2560)	Max FPS Config 2 (Size X max. 2000)	Max FPS Config 1 (Size X max. 1500)
1920	2060	⇦ PAR	⇦ PAR
1856	2130	⇦ PAR	⇦ PAR
1792	2200	⇦ PAR	⇦ PAR
1728	2280	⇦ PAR	⇦ PAR
1664	2370	⇦ PAR	⇦ PAR
1600	2460	⇦ PAR	⇦ PAR
1536	2560	⇦ PAR	⇦ PAR
1472	2660	⇦ PAR	⇦ PAR
1408	2780	⇦ PAR	⇦ PAR
1344	2910	⇦ PAR	⇦ PAR
1280	3040	⇦ PAR	⇦ PAR
1216	3200	⇦ PAR	⇦ PAR
1152	3360	2500	2500
1088	3550	2580	2580
1024	3760	2740	2740
960	4000	2920	2920
896	4260	3130	3130
832	4570	3380	3380
768	4920	3660	3660
704	5330	3990	3990
640	5820	4390	4390
576	6400	4880	4880
512	7110	5490	5490
448	8000	6270	6270
384	9140	7320	7320
320	10670	8780	8780
256	12810	10980	10980
192	16010	14640	14640
128	21340	21340	21340
64	32000	32000	32000

Resolution and fps may be set individually in the given speed ranges. Gain in fps by reducing the vertical resolution.
PAR: Pay-as-you-Record option

Recording time in sec vs memory size at full resolution and max fps of the configuration

Memory size (GB)	1500 x 1125	2000 x 1125	2560 x 1920
16	2.4 sec	2.0 sec	1.5 sec
32	4.9 sec	4.1 sec	3.1 sec
64	9.9 sec	8.3 sec	6.2 sec

Optical specifications

Sensor Type	CMOS Sensor
Pixel Size	7.8 micron
Sensor Format	19.96mm x 14.97mm / diagonal 24.95mm
Light Sensitivity	ISO 7200 (mono) ISO 2400 (color)
Exposure Time	Global, from 1/framing speed down to 2 µsec
Dynamic Range	10 Bit
Gain	3 gain settings available by means of control software
Lens Mount	F-Mount, optional C-Mount or Canon EF-Mount

Camera and control features

Buffer Type	Circular buffer, parametrized by software
Trigger IN	Trigger input for start stop recording, falling edge, switch closure
Trigger Modes	Pre- post recording settings adjustable in steps of 1 frame
Lens Mount	F-Mount, other mounts on request
I/O Tolerance	TTL compatible I/O
Power	10…36V / 40Watts
Sync in / out	Sync in / out on camera
Auto Download	Auto download to PC after recording

Imaging studio features

Imaging Studio	Software suite to parameterize and control camera, handle data download and conversion of native files into most common single images and movie formats. Runs on Windows 10
Parameterization	Set all camera parameters for recording by convenient and easy-to-use software interface supports graphical setting of resolution
Display	Display multiple cameras simultaneously
Editing	Play back, edit and save sequences after recording with a few clicks
OSD (on screen display)	OSD with camera parameters
Overlay	Overlay of recorded image with user adjustable opacity
Motion Analysis	Basic 2D motion analysis with automatic tracking of up to 5 points optional
Export	Export of AOS native file format to avi, mpeg, mp4, bmp, tif, png, jpg
Image Processing	Manual or automatic color correction and white balance functionality
Batch Converter	Convert native files to movie files using off-line batch conversion

Data interface

Data	Gigabit Ethernet
I/O	Solid 14 pin LEMO connector
AK-I/O	18 pin all in one push-pull connector according "Arbeitskreis" optional
Armed OUT	Armed out to indicate camera status ready for recording
Synchronisation	Synchronisation in - output for phase lock operation of camera
Strobe	Strobe out for synchronisation of strobed LED illumination

Physical specifications
(preliminary product information)

Size	w:98 x h:98 x l:118 mm (w: 3.8" x h3.8" x 4.6")
Weight	1.5kg
Storage Temp.	-40℃ … +70℃ non condensing
Working Temp.	-5℃ to +40℃
Mounting	3 x M6 on top and bottom / 1/4" UNC for tripod mount
CE	Complies with CE

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