KAYA INSTRUMENTS ANNOUNCES

JETCAM

NEW GENERATION OF CAMERAS

Key Features:

- 25 Megapixel up to 80 fps
- 40 Gbps fiber optic interface
- 25 Gbps CoaXPress
- Up to 10 km cable length
- Nikon F mount with integrated lens control
- B4 2/3" mount with integrated lens control
- 3G SDI output for local monitor
- Compatible with KAYA Vision Point™ SDK
- Compatible with KAYA Komodo™ Frame Grabber
- Customization as per user requirements

Applications:

- Slow Motion
- 3D
- Sports judgment
- Broadcasting
- Sports analytics
- Special Effects

JetCam 25
High Performance
POV Camera

Innovative Approach

JetCam 25 is global shutter CMOS digital camera with Fiber or CoaXPress interfaces which supports 25 Megapixels (5120×5120) high quality video at rates up to 80 fps.

Intelligent Design

Camera incorporates 4.5µm x 4.5µm global shutter sensor and a direct lens control without need of external devices. With compact outline and low power design this camera can be fitted into tight spaces. The 3G SDI output enables connection of local monitor as viewfinder or an installation aid.
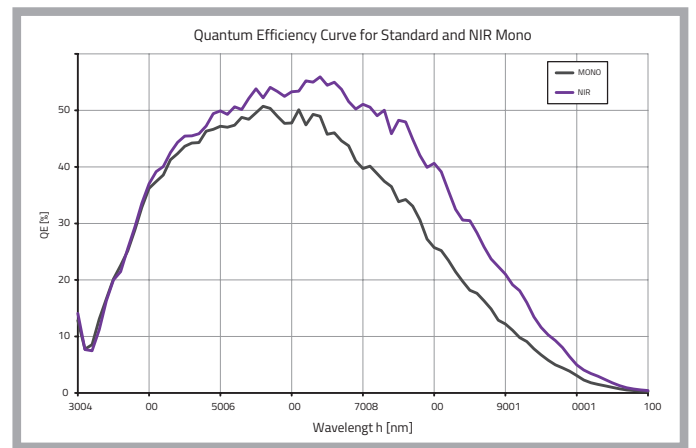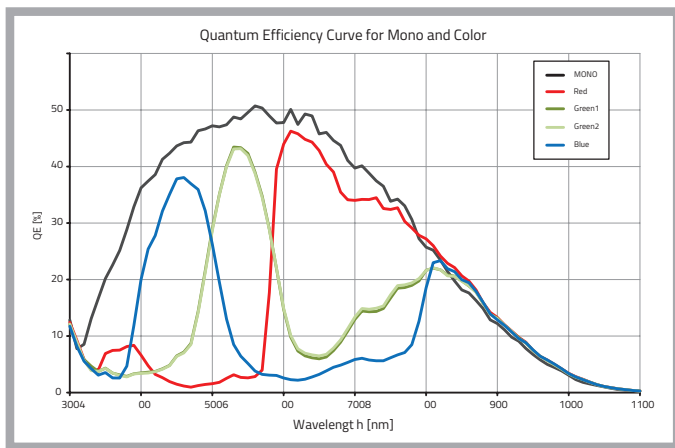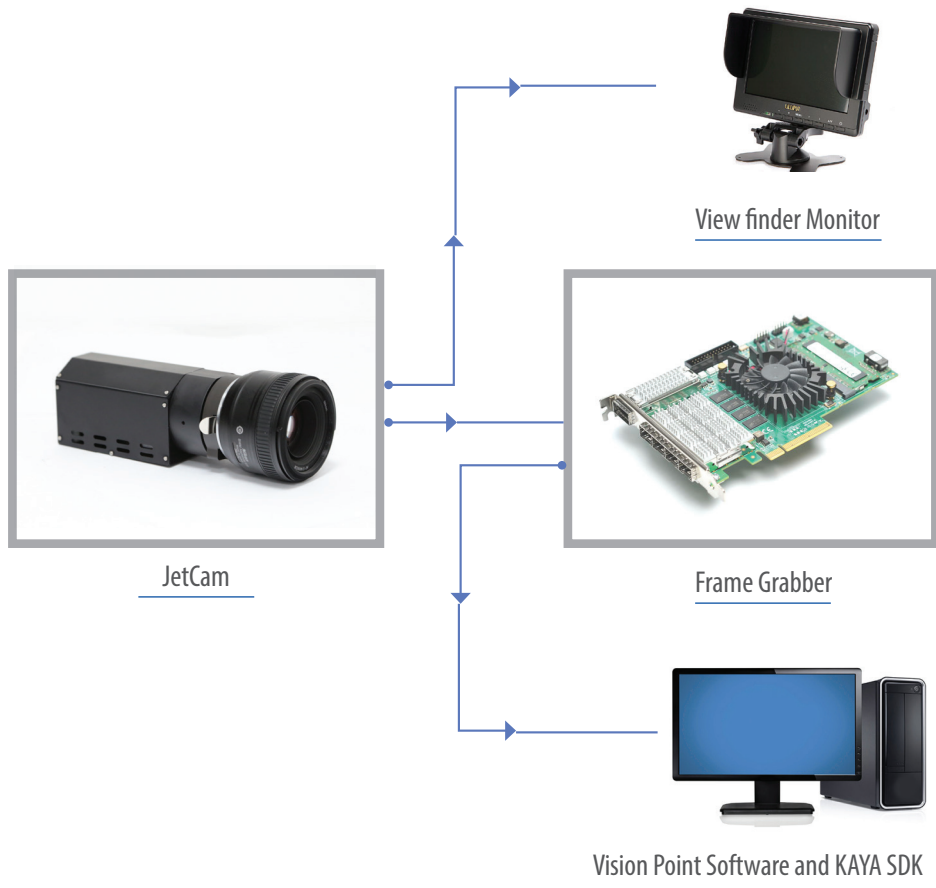
Technical Data (More detailed specifications are available on request)

Pixel size	4.5 µm x 4.5 µm
Resolution	5120 (H) x 5120 (V)
Optical Format	APS—H
Sensor	PYTHON 25k
Conversion Gain	0.085 LSB10/e-, 130 V/e-
Temporal Noise	< 14 e- (Non—Zero ROT, 1x gain)
Responsivity at 550 nm	5.8 V/lux.s
Parasitic Light Sensivity (PLS)	< 1/5000
Quantum Efficiency (QE) X FF	50% at 550 nm
Full Well Charge	> 12000 e-
Pixel FPN	< 0.9 LSB10
PRNU	< 1%
MTF	68% @ 535 nm — X—dir & Y—dir
	68% @ 535 nm — X—dir & Y—dir
PSNL @ 20°C (t_int = 30 ms)	91 LSB10/s, 1100 e-/s
Dark signal @ 20°C	3.9 e-/s, 0.33 LSB10/s
Dynamic range	59 dB
Signal-to-Noise Ratio (SNR max)	41 dB
Video output	Fiber optics up to 40 Gbps, CoaXPress up to 25 Gbps, CLHS up to 40 Gbps, 10GiGE up to 10Gbps
Frame rate	80 fps @25K
Windowing	32 Randomly programmable windows. Normal, sub-sampled and binned readout modes
ADC Resolution	10-bit
Electronic shutter	Global shutter
Image acquisition	Continuous / Triggered
Monochrome/ color	Monochrome / Color
Power input	12 VDC (optional 24 VDC)
Weight (without lens)	1260g
Power consumption	<12W
Operating temperature	-10 C to 50 C (Optional -40 to 70 C)

Lens mount	F-Mount, B4, C-mount
On camera processing	Defect pixel correction
	White balance
	ROI
	Image flip
	Frame counter
	Flat field correction
	LUT
	Gain (Analog / Digital)
	Auto black level
	Nonvolatile storage
Programmable I/O	2x RS232 (RS485 optional)
Lens control	Nikon lens control
	Fujinon lens control
	Custom lens control through RS232/RS485
Complimentary video output	3G SDI

Quantum Efficiency

Quantum Efficiency Curve for Mono and Color

Quantum Efficiency Curve for Standard and NIR Mono

KAYA High Speed Camera Workflow

View finder Monitor

JetCam

Frame Grabber

Vision Point Software and KAYA SDK

Camera Body Dimensions

143.30

102

Side view w/o mount

61

62

Front view w/o mount

65

Top view w/o mount

Back view
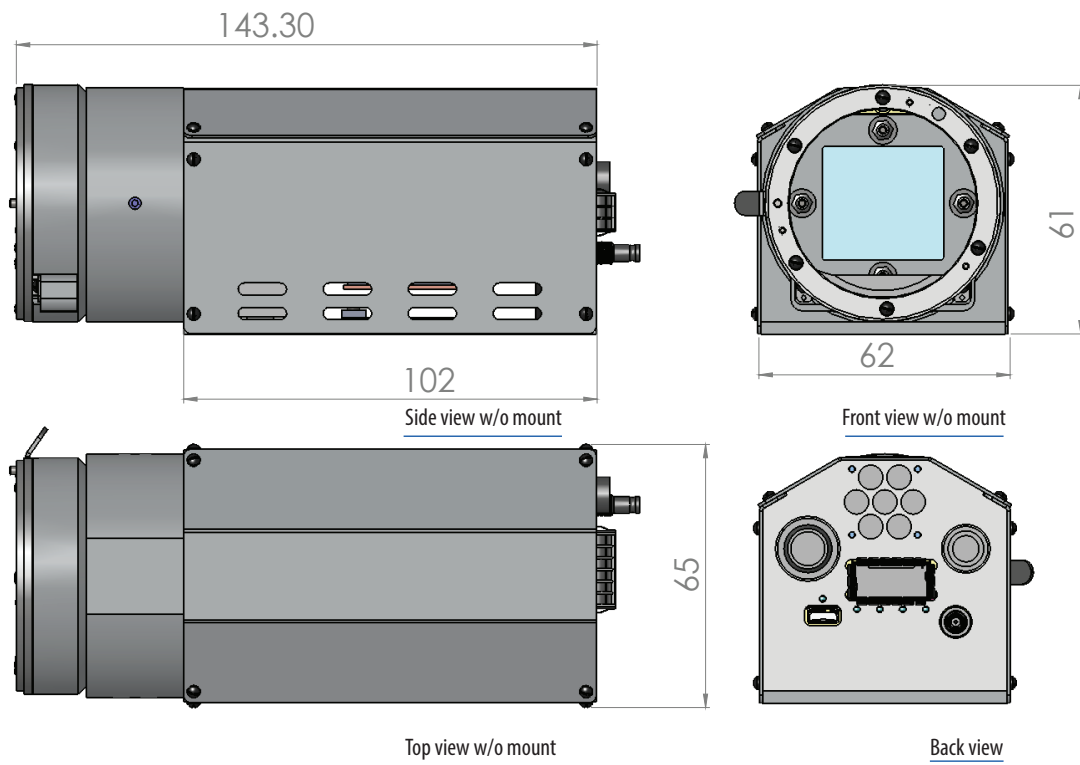
Compatibility

Supported vision standart

CAMERA Link HS

GEN<i>CAM TRANSPORT LAYER

10GiGE VISION

GENTL

CoaXPress

Supported operating systems

Windows

Linux

Supported vision libraries
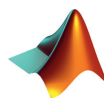
HALCON a product of MVTec

OpenCV

POWERED BY NATIONAL INSTRUMENTS **LabVIEW**

Compatible with most popular machine vision libraries

KAYA Instrument strives to create and maintain compatibility and interfaces for the most common and advanced vision image-processing libraries and applications. Major support is available for **MVTec Halcon, National Instruments LabVIEW** and **MathWorks MATLAB**. Please check our KAYA website for an up-to-date list of other supported libraries and software packages.