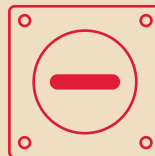
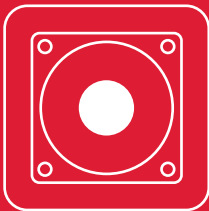
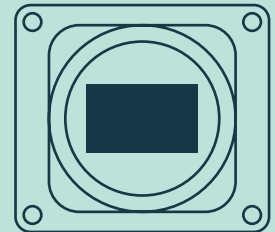
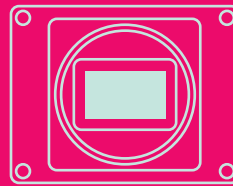
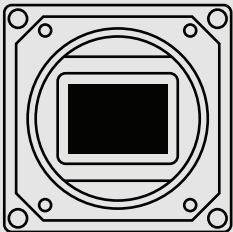
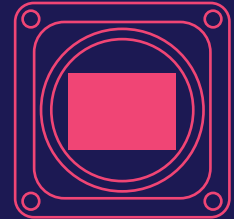
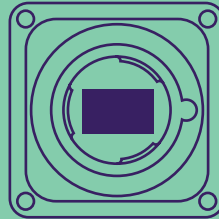
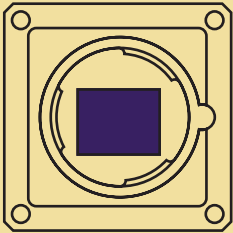
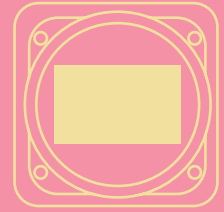
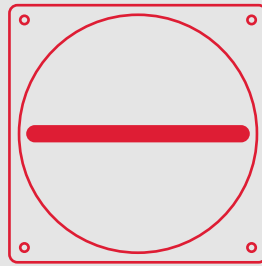
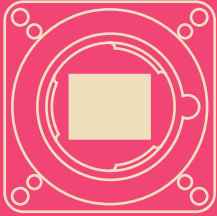


VIEWWORKS



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Vieworks Industrial Camera

SELECTION GUIDE

VIEWORKS

Vieworks Industrial Cameras

Your vision solution

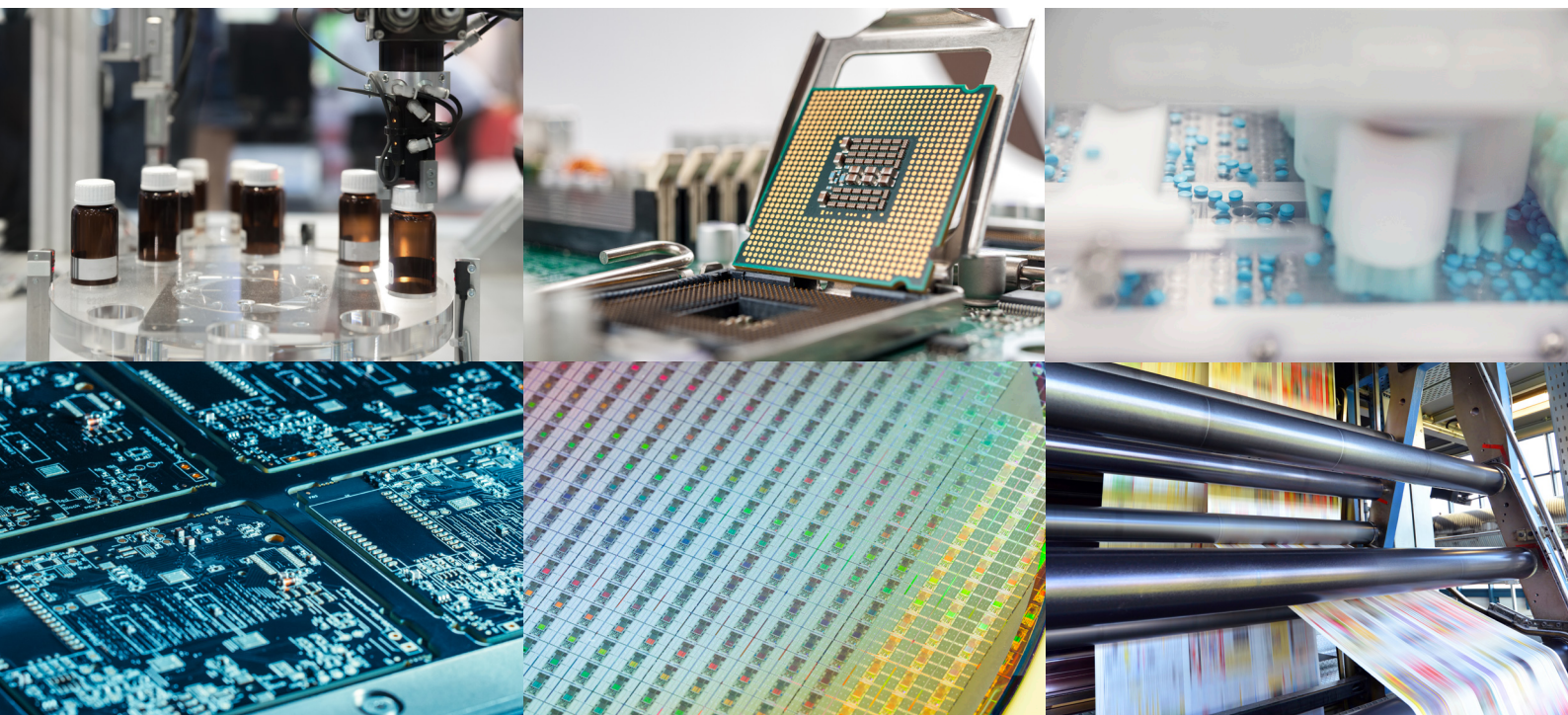
As your vision partner, Vieworks provides the vision solution you need. From VGA cameras to 152 megapixel cameras, Vieworks offers wide ranging resolutions suitable for a broad range of applications. With frame rates of up to 454 fps, Vieworks' cameras capture high quality images in an instant even in the most demanding environments. To optimize your vision system, Vieworks offers a broad selection of industry standard interfaces. Take your pick from Camera Link, CoaXPress 1.0, CoaXPress 2.0, CoaXPress-over-Fiber, GigE Vision, and 10GigE Vision interfaces.

With industry-leading technology







Vieworks' advanced technologies place Vieworks' cameras ahead of other cameras in the industry. The world's first hybrid time delayed integration (TDI) line scan sensor was introduced to the market with Vieworks' VTDI (Vieworks TDI) cameras. VTDI combines the advantages of both CCD and CMOS image sensors, capturing images with up to 256 times greater sensitivity. Vieworks' pixel shifting technology incorporates the elaborate nano-stage technology to acquire ultra high resolution images beyond a sensor's physical limitations. By lowering the sensor temperature up to 20 degrees Celsius below ambient temperature, Vieworks' thermoelectric cooling (TEC) technology allows for stable performance with reduced noise. With continuous investment in innovative technology, Vieworks will continue to prove and expand its position as a leader in machine vision technology.

Quality cameras made by Vieworks from scratch






Vieworks' cameras are designed and manufactured from start to finish in South Korea. With full in-house capacity to research and develop industrial cameras, Vieworks takes agile and integrated actions to meet changing customer needs. Vieworks' specialized customer support team provides timely assistance to questions that arise after purchase. From product development to customer support, Vieworks' cameras are made and managed entirely by Vieworks.




Area Scan

	VC Series	VN Series	VNP Series	VP Series	VQ Series	VX Series
						
Resolution	2 MP – 151 MP	25 MP – 200 MP	200 MP – 604 MP	25 MP – 152 MP	VGA – 20 MP	25 MP
Frame rate	4.2 fps – 454 fps	4.8 fps – 72 fps	1.5 fps – 30 fps	4.2 fps – 31 fps	6 fps – 291 fps	4.7 fps
Interface	Camera Link CXP-6 CXP-12 CoaXPress-over-Fiber 10GigE	CXP-6	CXP-6	Camera Link CXP-6 CXP-12	Camera Link Gigabit Ethernet	Gigabit Ethernet
Features	Conventional	Pixel shifting	Pixel shifting Cooling	Cooling	Compact	Lens control




TDI Line Scan

	VT Series (M42)	VT Series (M58)	VT Series (M72)	VT Series (M95)	VTC Series
					
Resolution	3k – 6k	9k	4k – 18k	16k – 23k	2k
Line rate	19 kHz – 250 kHz	543 kHz	47 kHz – 250 kHz	100 kHz – 300 kHz	19 kHz – 140 kHz
Interface	Camera Link CXP-6 Gigabit Ethernet	CXP-12	Camera Link CXP-6	CXP-6 CXP-12	Camera Link CXP-6 Gigabit Ethernet
Mount	M42	M58	M72	M95	M42

Line Scan

	VL Series
	
Resolution	2k – 16k
Line rate	50 kHz – 200 kHz
Interface	Camera Link CXP-12
Mount	M42, M72

Accessories

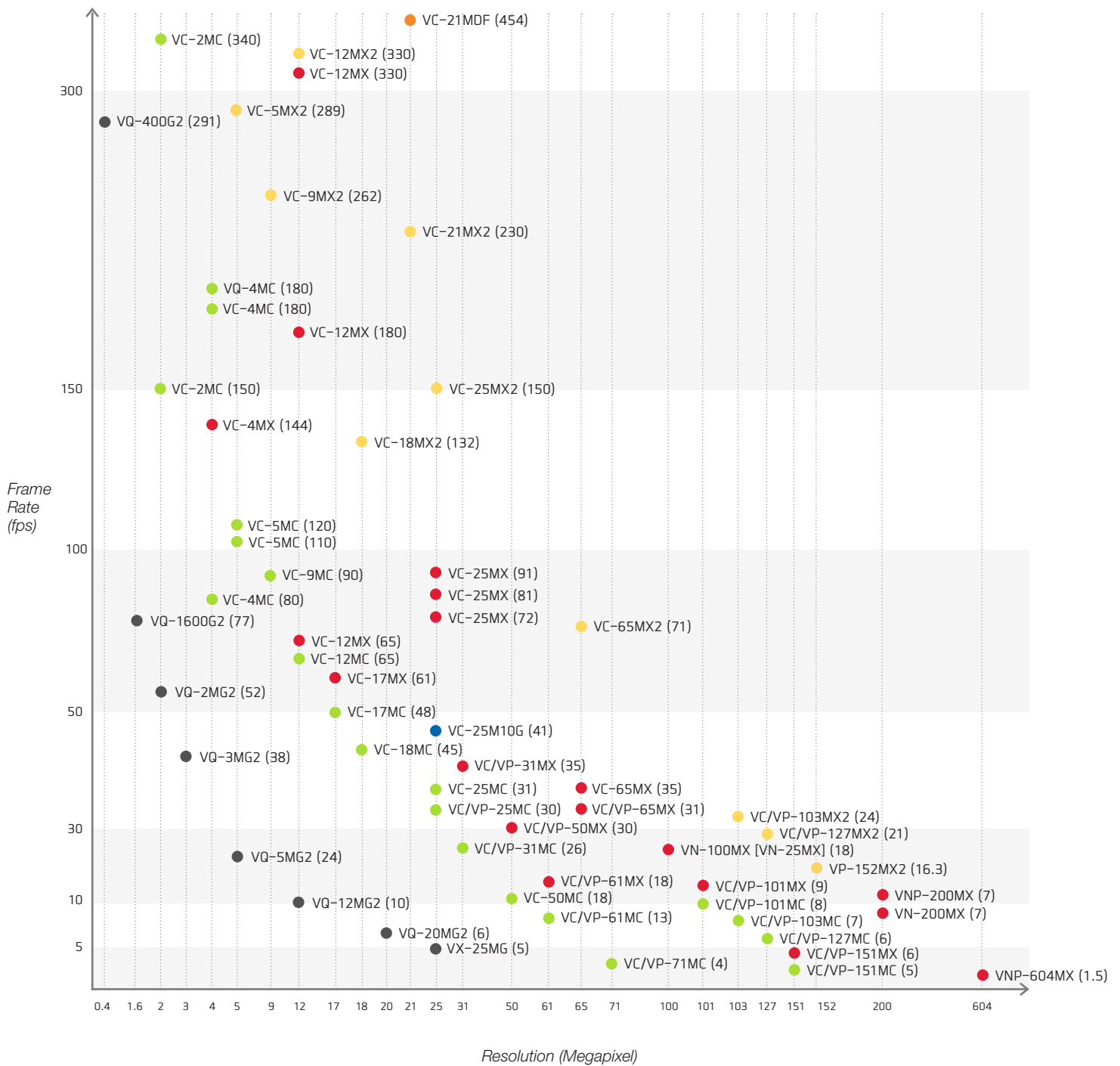
VLink Series	LCM Series	VIS & Configurator
		

Graph of Resolution and Frame Rate

Area Scan Cameras

Interface Table

- 10 Gigabit Ethernet
- Gigabit Ethernet
- Camera Link
- CXP-6
- CXP-12
- CoaXPress-over-Fiber

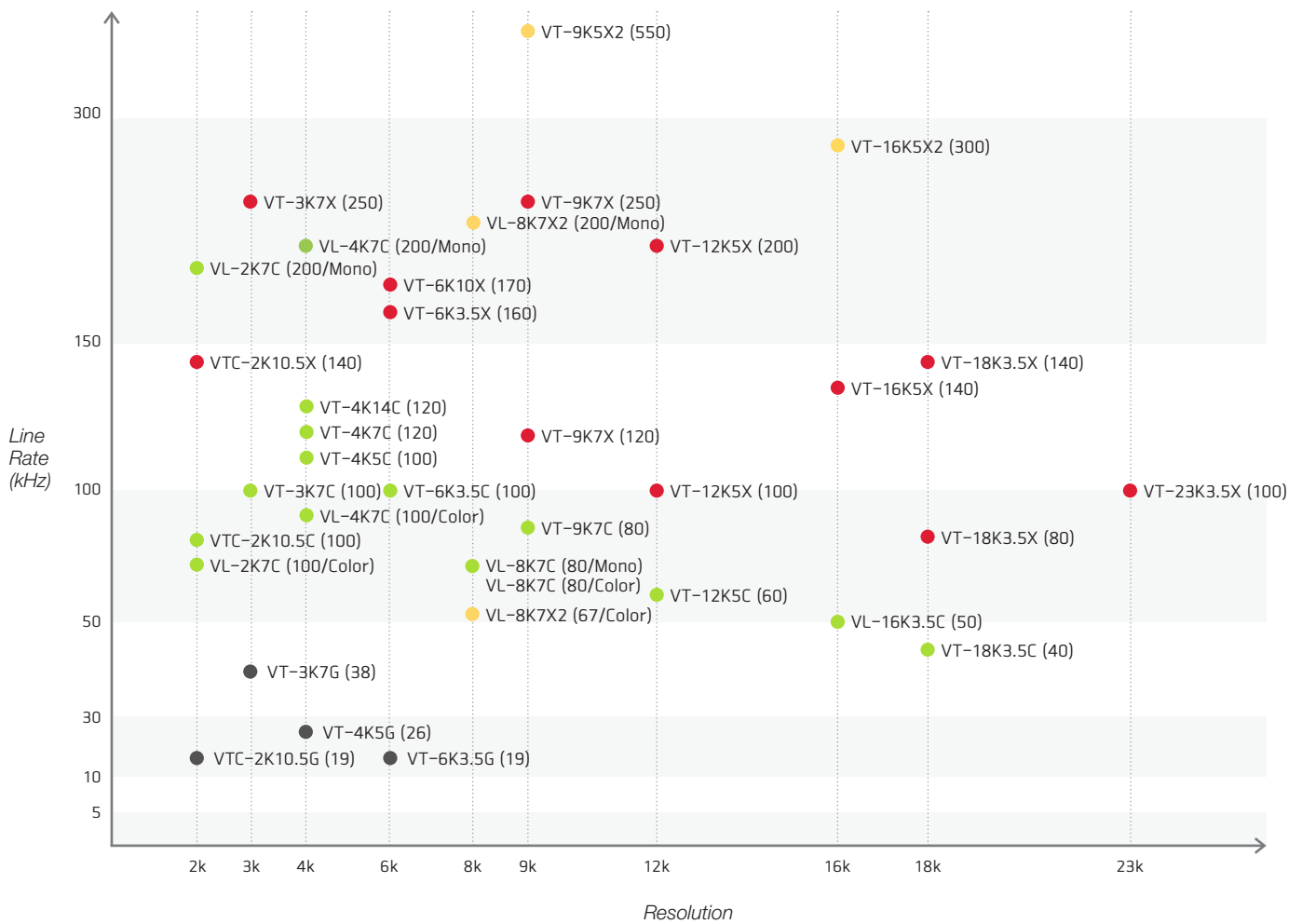


Graph of Resolution and Line Rate

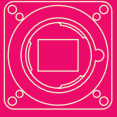
TDI Line Scan & Line Scan Cameras

Interface Table

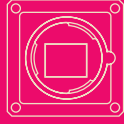
- Gigabit Ethernet
- Camera Link
- CXP-6
- CXP-12



Area Scan Cameras



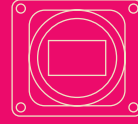
VC Series



VN Series



VP Series



VNP Series



VQ Series

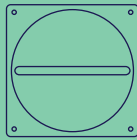


VX Series

TDI Line Scan Cameras

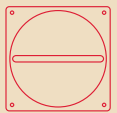


VTC Series



VT Series

Line Scan Cameras



VL Series

08

VC Series	08
VN Series	10
VP Series	11
VNP Series	12
VQ Series	13
VX Series	14

15

VTC Series	15
VT Series	16

19

VL Series	19
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CAMERA Link 10 GIGABIT VISION CXP-6 CXP-12 CoaXPRESS[®]-over-Fiber

VC Series is a family of CMOS area scan cameras equipped with a wide range of sensors. The series offers high speed image processing capabilities and precise exposure control for diverse machine vision applications.

Ultra High Resolution and High Speed

Better Usability

- Global shutter and rolling shutter
- C, F, and other mounts may be available upon request
- Camera Link, 10 Gigabit Ethernet, and CoaXPRESS interfaces

Applications



FPD
(Flat Panel Display)



Semiconductor



Electronics



Aerial Imaging



Surveillance



Motion Analysis



ITS
(Intelligent Transportation Systems)



Life Sciences



Pharmaceutical



Food,
Beverages

CXP-12



Model	Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm ²)
					H×V (mm ²)	Diagonal	Optical		
VC-5MX2-M/C 289	2592×2160	289 fps	8/10 bits	CXP-12 2 Lanes	6.5×5.4	8.45 mm	1/2"	GMAX2505	2.5×2.5
VC-9MX2-M/C 262	4192×2160	262 fps	8/10 bits	CXP-12 2 Lanes	10.5×5.4	11.8 mm	2/3"	GMAX2509	2.5×2.5
VC-12MX2-M/C 330 F	4096×3072	335 fps	8 bits	CXP-12 4 Lanes	22.53×16.90	28.16 mm	APS-like	CMV12000	5.5×5.5
VC-18MX2-M/C 132	4480×4096	132 fps	8/10 bits	CXP-12 2 Lanes	11.27×10.24	15.22 mm	1"	GMAX2518	2.5×2.5
VC-21MX2-M/C 230 I	5120×4096	229 fps	8/10/12 bits	CXP-12 4 Lanes	23.04×18.43	29.5 mm	APS-C	GSPRINT4521	4.5×4.5
VC-25MX2-M/C 150 I	5120×5120	150.2 fps	8/10 bits	CXP-12 4 Lanes	12.8×12.8	18.1 mm	1.1"	GMAX0505	2.5×2.5
VC-65MX2-M/C 71 I	9344×7000	71.1 fps	8/10 bits	CXP-12 4 Lanes	29.9×22.4	37.4 mm	2.3"	GMAX3265	3.2×3.2
VC-103MX2-M/C 24 I	11264×9200	24.7 fps	8/10/12 bits	CXP-12 4 Lanes	36.1×29.4	46.6 mm	2.9"	GMAX32103	3.2×3.2
VC-127MX2-M/C 21 H	13376×9528	21.9 fps	8/10/12/14 bits	CXP-12 4 Lanes	46.15×32.87	56.73 mm	3.6"	IMX661	3.45×3.45

* F and M72 mounts are available for VC CoaXPRESS Series. Contact us to request a custom mount.



▪ CXP-6

CXP-6

Model	Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm^2)
					H×V (mm ²)	Diagonal	Optical		
VC-4MX-M 144 F	2048×2048	144 fps	8 bits	CXP-6 1 Lane	11.26×11.26	15.92 mm	1"	CMV4000	5.5×5.5
VC-12MX-M/C 65 H	4096×3000	64.6 fps	8 bits	CXP-6 4 Lanes	14.13×10.35	17.6 mm	1.1"	IMX253	3.45×3.45
VC-12MX-M/C 180	4096×3072	180 fps	8 bits	CXP-6 4 Lanes	22.53×16.90	28.16 mm	APS-like	CMV12000	5.5×5.5
VC-12MX-M/C 330 F	4096×3072	330 fps	8 bits	CXP-6 8 Lanes	22.53×16.90	28.16 mm	APS-like	CMV12000	5.5×5.5
VC-17MX-M/C 61 H	5440×3076	61.3 fps	8/10/12 bits	CXP-6 4 Lanes	18.76×10.61	21.7 mm	4/3"	IMX387	3.45×3.45
VC-25MX-M/C 42 I	5120×5120	41.7 fps	8/10/12 bits	CXP-6 2 Lanes	12.8×12.8	18.1 mm	1.1"	GMAX0505	2.5×2.5
VC-25MX-M/C 72	5120×5120	72 fps	8/10 bits	CXP-6 4 Lanes	23.04×23.04	32.58 mm	35 mm	VITA25K	4.5×4.5
VC-25MX-M/C 81 D	5120×5120	81 fps	8 bits	CXP-6 4 Lanes	23.04×23.04	32.58 mm	APS-H	PYTHON25K	4.5×4.5
VC-25MX-M/C 91 I	5120×5120	91 fps	8/10 bits	CXP-6 4 Lanes	12.8×12.8	18.1 mm	1.1"	GMAX0505	2.5×2.5
VC-31MX-M/C 35 H	6464×4852	35.4 fps	8/10/12 bits	CXP-6 4 Lanes	22.30×16.73	27.9 mm	APS-C	IMX342	3.45×3.45
VC-50MX-M/C 30	7920×6004	30 fps	8/10/12 bits	CXP-6 4 Lanes	36.43×27.62	45.72 mm	35 mm	CMV50000	4.6×4.6
VC-61MX-M/C 18 H	9568×6380	17.93 fps	8/10/12/14/16 bits	CXP-6 4 Lanes	35.98×23.99	43.3 mm	2.7"	IMX455	3.76×3.76
VC-65MX-M/C 31 I	9344×7000	31 fps	8/10/12 bits	CXP-6 4 Lanes	29.9×22.4	37.4 mm	2.3"	GMAX3265	3.2×3.2
VC-65MX-M/C 35 I	9344×7000	35.5 fps	8/10 bits	CXP-6 4 Lanes	29.9×22.4	37.4 mm	2.3"	GMAX3265	3.2×3.2
VC-101MX-M/C 9 H	11648×8742	8.7 fps	8/10/12/14/16 bits	CXP-6 4 Lanes	43.80×32.87	55 mm	3.4"	IMX461	3.76×3.76
VC-151MX-M/C 6 H	14192×10640	6.2 fps	8/10/12/14/16 bits	CXP-6 4 Lanes	53.36×40.01	66.7 mm	4.2"	IMX411	3.76×3.76

* F and M72 mounts are available for VC CoaXPress Series. Contact us to request a custom mount.

▪ CoaXPress-over-Fiber

CoaXPress-over-Fiber

Model	Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm^2)
					H×V (mm ²)	Diagonal	Optical		
VC-21MDF-M/C 460	5120×4096	454 fps	8/10 bits	CoaXPress-over-Fiber	23.04×18.43	29.5 mm	APS-C	GSPRINT4521	4.5×4.5

▪ Camera Link

Camera Link

Model	Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm^2)
					H×V (mm ²)	Diagonal	Optical		
VC-2MC-M/C 150	2048×1088	148.5 fps	8/10 bits	Camera Link	11.26×5.98	12.75 mm	2/3"	CMV2000	5.5×5.5
VC-2MC-M/C 340	2048×1088	337.6 fps	8/10 bits	Camera Link	11.26×5.98	12.75 mm	2/3"	CMV2000	5.5×5.5
VC-4MC-M/C 80	2048×2048	78.9 fps	8/10 bits	Camera Link	11.26×11.26	15.92 mm	1"	CMV4000	5.5×5.5
VC-4MC-M/C 180	2048×2048	179.5 fps	8/10 bits	Camera Link	11.26×11.26	15.92 mm	1"	CMV4000	5.5×5.5
VC-5MC-M/C 110 H	2448×2048	109.5 fps	8/10/12 bits	Camera Link	67.08×56.12	8.8 mm	1/1.8"	IMX547	2.74×2.74
VC-5MC-M/C 120	2600×2160	120.6 fps	8/10/12 bits	Camera Link	6.5×5.4	8.45 mm	1/2"	GMAX2505	2.5×2.5
VC-9MC-M/C 90	4200×2160	90.7 fps	8/10/12 bits	Camera Link	10.5×5.4	11.8 mm	2/3"	GMAX2509	2.5×2.5
VC-12MC-M/C 65	4096×3072	64.3 fps	8/10 bits	Camera Link	22.53×16.90	28.14 mm	APS-like	CMV12000	5.5×5.5
VC-17MC-M/C 48 H	5440×3076	48.4 fps	8/10/12 bits	Camera Link	18.76×10.61	21.7 mm	4/3"	IMX387	3.45×3.45
VC-18MC-M/C 45	4504×4096	44.9 fps	8/10/12 bits	Camera Link	11.27×10.24	15.22 mm	1"	GMAX2518	2.5×2.5
VC-25MC-M/C 30	5120×5120	30.9 fps	8/10 bits	Camera Link	23.04×23.04	32.58 mm	35 mm	VITA25K	4.5×4.5
VC-25MC-M/C 30 D	5120×5120	30.1 fps	8/10 bits	Camera Link	23.04×23.04	32.58 mm	APS-H	PYTHON25K	4.5×4.5
VC-25MC-M/C 31 I	5120×5120	31.7 fps	8/10/12 bits	Camera Link	12.8×12.8	18.1 mm	1.1"	GMAX0505	2.5×2.5
VC-31MC-M/C 26 H	6464×4852	26.2 fps	8/10/12 bits	Camera Link	22.30×16.73	27.9 mm	APS-C	IMX342	3.45×3.45
VC-50MC-M/C 18	7920×6004	17.5 fps	8/10/12 bits	Camera Link	36.43×27.62	45.72 mm	35 mm	CMV50000	4.6×4.6
VC-61MC-M/C 13 H	9568×6380	13.68 fps	8/10/12 bits	Camera Link	35.98×23.99	43.3 mm	2.7"	IMX455	3.76×3.76
VC-71MC-M/C 4	10000×7096	4.2 fps	8/10/12 bits	Camera Link	31.00×24.11	38 mm	35 mm	CHR71000	3.1×3.1
VC-101MC-M/C 8 H	11648×8742	8.1 fps	8/10/12 bits	Camera Link	43.80×32.87	55 mm	3.4"	IMX461	3.76×3.76
VC-103MC-M/C 7 I	11264×9200	7.6 fps	8/10/12 bits	Camera Link	36.1×29.4	46.6 mm	2.9"	GMAX32103	3.2×3.2
VC-127MC-M/C 6 H	13376×9528	6.2 fps	8/10/12 bits	Camera Link	46.15×32.87	56.73 mm	3.6"	IMX661	3.45×3.45
VC-151MC-M/C 5 H	14192×10640	5.5 fps	8/10/12 bits	Camera Link	53.36×40.01	66.7 mm	4.2"	IMX411	3.76×3.76

* C, F, and M72 mounts are available for VC Camera Link Series. Contact us to request a custom mount.

▪ 10 Gigabit Ethernet

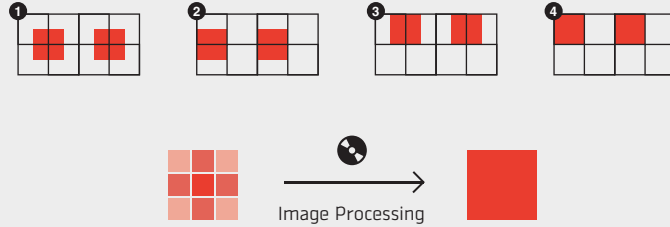
10 GIG E

Model	Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm^2)
					H×V (mm ²)	Diagonal	Optical		
VC-25M10G-M/C 41 I	5120×5120	41.7 fps	8/10p/10/12p/12 bits	10 GigE	12.8×12.8	18.1 mm	1.1"	GMAX0505	2.5×2.5



CXP-6

VN Series is designed for applications in which an object is stationary and extremely high resolution is required. The series is equipped with advanced pixel shifting technology based on precise piezoelectric stages.



Outstanding Pixel Shifting Technology

- Vieworks' proprietary nano-stage pixel shifting technology
- Increases the resolution from 4 to 9 times
- True color image
- Improved fill factor

Field-Proven Performance and Reliability

- Adopted by major flat panel display manufacturers
- Stable performance and reliability

Better Usability

- FFC (flat field correction)
- Pixel defect correction
- CoaXPress interface

Applications

FPD
(Flat Panel Display)

Document
Scanning

Semiconductor

Electronics

CXP-6



Model	Resolution	Extended Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm ²)
						H×V (mm ²)	Diagonal	Optical		
VN-25MX-M/C 72	5120×5120	15360×15360	72 fps	8/10 bits	CXP-6 4 Lanes	23.04×23.04	32.58 mm	35 mm	VITA25K	4.5×4.5
VN-200MX-M/C 30	7920×6004	23760×18012	30 fps	8/10/12 bits	CXP-6 4 Lanes	36.43×27.62	45.72 mm	35 mm	CMV50000	4.6×4.6

* F and M72 mounts are available for VN Series. Contact us to request a custom mount.



VP Series cameras are thermoelectric cooled, high performance cameras. These cameras provide stable operating conditions and allow longer exposure time for higher sensitivity.

Perfect Cooling Technology

Steadily maintains the operating sensor temperature up to 20 degrees below ambient temperature

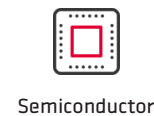
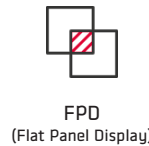
Excellent Heat Dissipation Structure

- Prevents condensation that forms on the cold surface of the sensor by implementing Vieworks' signature chamber structure
- Sturdy yet compact camera design

Better Usability

- FFC (flat field correction)
- Pixel defect correction
- Camera Link and CoaXPress interfaces

Applications



Camera Link



Model	Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm ²)
					H×V (mm)	Diagonal	Optical		
VP-25MC-M/C 30	5120×5120	30.9 fps	8/10 bits	Camera Link	23.04×23.04	32.58 mm	35 mm	VITA25K	4.5×4.5
VP-31MC-M/C 26 H	6464×4852	26.2 fps	8/10/12 bits	Camera Link	22.30×16.73	27.9 mm	APS-C	IMX342	3.45×3.45
VP-61MC-M/C 13 H	9568×6380	13.68 fps	8/10/12 bits	Camera Link	35.98×23.99	43.3 mm	2.7"	IMX455	3.76×3.76
VP-71MC-M/C 4	10000×7096	4.2 fps	8/10/12 bits	Camera Link	31.00×24.11	38 mm	35 mm	CHR71000	3.1×3.1
VP-101MC-M/C 8 H	11648×8742	8.1 fps	8/10/12 bits	Camera Link	43.80×32.87	55 mm	3.4"	IMX461	3.76×3.76
VP-103MC-M/C 7 I	11264×9200	7.6 fps	8/10/12 bits	Camera Link	36.1×29.4	46.6 mm	2.9"	GMAX32103	3.2×3.2
VP-127MC-M/C 6 H	13376×9528	6.2 fps	8/10/12 bits	Camera Link	46.15×32.87	56.73 mm	3.6"	IMX661	3.45×3.45
VP-151MC-M/C 5 H	14192×10640	5.5 fps	8/10/12 bits	Camera Link	53.36×40.01	66.7 mm	4.2"	IMX411	3.76×3.76

CXP-6



VP-31MX-M/C 35 H	6464×4852	35.4 fps	8/10/12 bits	CXP-6 4 Lanes	22.30×16.73	27.9 mm	APS-C	IMX342	3.45×3.45
VP-50MX-M/C 30	7920×6004	30 fps	8/10/12 bits	CXP-6 4 Lanes	36.43×27.62	45.72 mm	35 mm	CMV50000	4.6×4.6
VP-61MX-M/C 18 H	9568×6380	17.93 fps	8/10/12/14/16 bits	CXP-6 4 Lanes	35.98×23.99	43.3 mm	2.7"	IMX455	3.76×3.76
VP-65MX-M/C 31 I	9344×7000	31 fps	8/10/12 bits	CXP-6 4 Lanes	29.9×22.4	37.4 mm	2.3"	GMAX3265	3.2×3.2
VP-101MX-M/C 9 H	11648×8742	8.7 fps	8/10/12/14/16 bits	CXP-6 4 Lanes	43.80×32.87	55 mm	3.4"	IMX461	3.76×3.76
VP-151MX-M/C 6 H	14192×10640	6.2 fps	8/10/12/14/16 bits	CXP-6 4 Lanes	53.36×40.01	66.7 mm	4.2"	IMX411	3.76×3.76

CXP-12



VP-103MX2-M/C 24 I	11264×9200	24.7 fps	8/10/12 bits	CXP-12 4 Lanes	36.1×29.4	46.6 mm	2.9"	GMAX32103	3.2×3.2
VP-127MX2-M/C 21 H	13376×9528	21.9 fps	8/10/12/14 bits	CXP-12 4 Lanes	46.15×32.87	56.73 mm	3.6"	IMX661	3.45×3.45
VP-152MX2-M/C 16**	16544×9200	16.3 fps	8/10/12 bits	CXP-12 4 Lanes	53.0×29.4	60.6 mm	Medium Format	Vieworks	3.2×3.2

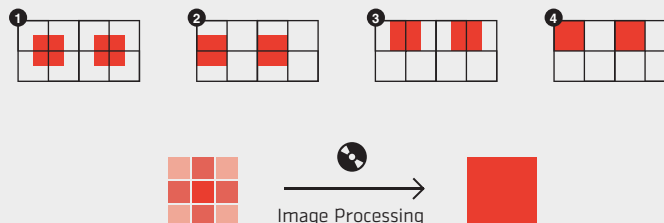
* No mount, F and M72-mount are available for VP Series. Contact us to request a custom mount.

** VP-152MX2 color model to be added.



CXP-6

VNP Series, Vieworks' pixel shifting and cooled cameras, is designed for applications which require not only extremely high resolution but also high image quality.



Outstanding Pixel Shifting Technology

- Vieworks' proprietary nano-stage pixel shifting technology
- Increases the resolution from 4 to 9 times
- True color image
- Improved fill factor

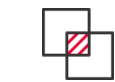
Perfect Cooling Technology

Steadily maintains the operating sensor temperature up to 20 degrees below ambient temperature

Better Usability

- FFC (flat field correction)
- Pixel defect correction
- CoaXPress interface

Applications



FPD
(Flat Panel Display)



Document
Scanning



Semiconductor



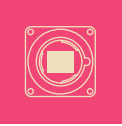
Electronics

▪ CXP-6



Model	Resolution	Extended Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm^2)
						H×V (mm ²)	Diagonal	Optical		
VNP-200MX-M/C 30	7920×6004	23760×18012	30 fps	8/10/12 bits	CXP-6 4 Lanes	36.43×27.62	45.72 mm	35 mm	CMV50000	4.6×4.6
VNP-604MX-M/C 6 H	14192×10640	28384×21280	6.2 fps	8/10/12 bits	CXP-6 4 Lanes	53.36×40.01	66.7 mm	4.2"	IMX411	3.76×3.76

* F and M72 mounts are available for VNP Series. Contact us to request a custom mount.



VQ Series provides high quality and reliable performance at a fair price. Its compact dimension makes it applicable for a wide range of applications, and it is accessible for machine vision starters thanks to its Gigabit Ethernet based interface.

Ultra Compact Cameras

The smallest cameras with compact housing and lightweight design with 28 mm x 28 mm dimension

Seamless Installation and High Availability

- PoE Gigabit Ethernet interface for easy system integration
- Cost-effective solution

Better Usability

- Pixel defect correction
- Camera Link and Gigabit Ethernet interfaces

Applications



Automotive



Robotics



Factory Automation



Food, Beverages



Pharmaceutical



ITS
(Intelligent Transportation Systems)

Camera Link



Model	Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm ²)
					H×V (mm ²)	Diagonal	Optical		
VQ-4MC-M/C 180 F	2048×2048	180 fps	8/10 bits	Camera Link	11.26×11.26	15.92 mm	1"	CMV4000	5.5×5.5

Gigabit Ethernet



VQ-400G2-M/C 291 H	720×540	291 fps	8/10/12/16 bits	GigE	5.02×3.75	6.3 mm	1/2.9"	IMX287	6.9×6.9
VQ-1600G2-M/C 77 H	1440×1080	77 fps	8/10/12/16 bits	GigE	4.97×3.73	6.3 mm	1/2.9"	IMX273	3.45×3.45
VQ-2MG2-M/C 52 H	1920×1200	52 fps	8/10/12/16 bits	GigE	6.62×4.14	7.9 mm	1/2.3"	IMX392	3.45×3.45
VQ-3MG2-M/C 38 H	2048×1536	38 fps	8/10/12/16 bits	GigE	7.07×5.30	8.9 mm	1/1.8"	IMX265	3.45×3.45
VQ-5MG2-M/C 24 H	2448×2048	24 fps	8/10/12/16 bits	GigE	8.45×7.07	11.1 mm	2/3"	IMX264	3.45×3.45
VQ-12MG2-M/C 10 H	4096×3000	9.9 fps	8/10/12/16 bits	GigE	14.13×10.35	17.6 mm	1.1"	IMX304	3.45×3.45
VQ-20MG2-M/C 6 H	5472×3648	6 fps	8/10/12/16 bits	GigE	13.13×8.76	15.86 mm	1"	IMX183	2.4×2.4

* C-mount is available for VQ Series. Contact us to request a custom mount.



VX Series is ideal for aerial imaging and ground surveillance applications that require photographic quality resolution and easy-to-use system integration.

Optimal Solution for Outdoors

- Robust cameras that pass strict reliability tests including the 10G vibration test and the 70G shock test
- Stable operation in wide-temperature environments, from -50 °C to 80 °C

Easy Control

- Various functions for easy control of the camera
- Auto exposure, auto focus, auto gain, and lens aperture control

Better Usability

- FFC (flat field correction)
- Pixel defect correction
- Anti-smear
- Gigabit Ethernet interface

Applications



Aerial Imaging



Surveillance



Electronics



Motion Analysis

Gigabit Ethernet



Model	Resolution	Frame Rate	Pixel Data	Interface	Sensor Size			Sensor	Pixel Size (μm ²)
					H×V (mm ²)	Diagonal	Optical		
VX-25MG-M 5	5120×5120	4.7 fps	8 bits	GigE	23.04×23.04	32.58 mm	35 mm	VITA25K	4.5×4.5

* F-mount and interface for Canon-EF adapter are available for VX Series. Contact us to request a custom mount.



VTC Series is a line of time delayed integration (TDI) color line scan cameras that provide faster line rates and higher sensitivity than existing line scan cameras.

The World's First Hybrid TDI Line Scan Sensor

- Combines light sensitivity of CCD-based TDI pixel array with CMOS readout electronics
- High sensitivity of 80 stages

True Color

- 24-bit RGB to display excellent color reproduction
- Excellent color image processing: color correction matrix, white balance, gamma

Various Trigger Methods

- Supports external trigger, frame start trigger, software trigger
- Provides “Rescaler Mode” to set the accuracy

Better Usability

- FFC (flat field correction)
- Pixel defect correction
- Camera Link, Gigabit Ethernet, and CoaXPress interfaces

Applications



Print Scanning



Web Inspection



Food, Beverages



Pharmaceutical



Semiconductor



Electronics

Camera Link



Model	Resolution	Line Rate	TDI Stage	Pixel Data	Interface	Sensor	Pixel Size (μm ²)
VTC-2K10.5C-C 100	2160×80	100 kHz	20/40/60/80	8/10/12 bits	Camera Link	Vieworks	10.5×10.5

Gigabit Ethernet



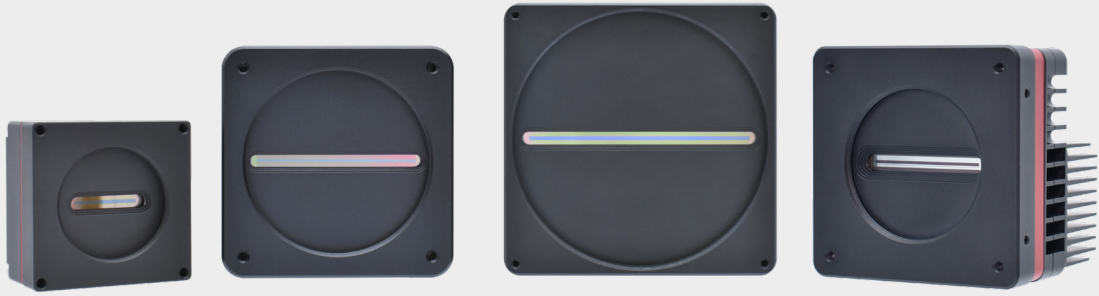
VTC-2K10.5G-C 19	2160×80	19 kHz (Max 100 kHz)	20/40/60/80	8/10/12 bits	GigE	Vieworks	10.5×10.5
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CXP-6



VTC-2K10.5X-C 140	2160×80	140 kHz	20/40/60/80	8/10/12 bits	CXP-6 2 Lanes	Vieworks	10.5×10.5
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* C and F mounts are also available for the M42-based VTC Series. Contact us to request a custom mount.



VT Series, Vieworks' standard time delayed integration (TDI) line scan cameras, captures images with up to 256 times higher sensitivity.

The World's First Hybrid TDI Line Scan Sensor

- Combines light sensitivity of CCD-based TDI pixel array with CMOS readout electronics
- High sensitivity of 256 stages

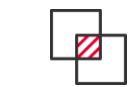
Wide Range of TDI Line Scan Sensors

- 3k to 23k resolution
- 3.5 μm , 5 μm , 7 μm , and 14 μm pixel size

Better Usability

- Improved MTF (modulation transfer function) for VT-S series
- FFC (flat field correction)
- DSNU, PRNU correction
- Camera Link, Gigabit Ethernet, and CoaXPress interfaces

Applications



FPD
(Flat Panel Display)



Semiconductor



DNA Sequencer



Document
Scanning



Food,
Beverages



▪ **M42 Mount**



Model	Resolution	Line Rate	TDI Stage	Pixel Data	Interface	Sensor	Pixel Size (μm ²)
VT-3K7G-E 38	3200×32	38 kℓ	32	8/10/12 bits	GigE	Vieworks	7.0×7.0
VT-3K7G-H 38	3200×128	38 kℓ	32/64/96/128	8/10/12 bits	GigE	Vieworks	7.0×7.0
VT-4K5G-E 26	4640×64	26 kℓ	64	8/10/12 bits	GigE	Vieworks	5.0×5.0
VT-4K5G-H 26	4640×256	26 kℓ	64/128/192/256	8/10/12 bits	GigE	Vieworks	5.0×5.0
VT-6K3.5G-E 19	6560×64	19 kℓ	64	8/10/12 bits	GigE	Vieworks	3.5×3.5
VT-6K3.5G-H 19	6560×256	19 kℓ	64/128/192/256	8/10/12 bits	GigE	Vieworks	3.5×3.5
VT-3K7C-E 100	3200×32	100 kℓ	32	8/10/12 bits	Camera Link	Vieworks	7.0×7.0
VT-3K7C-H 100	3200×128	100 kℓ	32/64/96/128	8/10/12 bits	Camera Link	Vieworks	7.0×7.0
VT-4K5C-E 100	4640×64	100 kℓ	64	8/10/12 bits	Camera Link	Vieworks	5.0×5.0
VT-4K5C-H 100	4640×256	100 kℓ	64/128/192/256	8/10/12 bits	Camera Link	Vieworks	5.0×5.0
VT-6K3.5C-E 100	6560×64	100 kℓ	64	8/10/12 bits	Camera Link	Vieworks	3.5×3.5
VT-6K3.5C-H 100	6560×256	100 kℓ	64/128/192/256	8/10/12 bits	Camera Link	Vieworks	3.5×3.5
VT-3K7X-E 250	3200×32	250 kℓ	32	8/10/12 bits	CXP-6 2 Lanes	Vieworks	7.0×7.0
VT-3K7X-H 250	3200×128	250 kℓ	32/64/96/128	8/10/12 bits	CXP-6 2 Lanes	Vieworks	7.0×7.0
VT-4K5X-E 200	4640×64	200 kℓ	64	8/10/12 bits	CXP-6 2 Lanes	Vieworks	5.0×5.0
VT-4K5X-H 200	4640×256	200 kℓ	64/128/192/256	8/10/12 bits	CXP-6 2 Lanes	Vieworks	5.0×5.0
VT-6K3.5X-E 160	6560×64	160 kℓ	64	8/10/12 bits	CXP-6 2 Lanes	Vieworks	3.5×3.5
VT-6K3.5X-H 160	6560×256	160 kℓ	64/128/192/256	8/10/12 bits	CXP-6 2 Lanes	Vieworks	3.5×3.5

* C and F mounts are also available for the M42-based VT Series. Contact us to request a custom mount.

▪ **M58 Mount – 9k TDI Line Scan**



Model	Resolution	Line Rate	TDI Stage	Pixel Data	Interface	Sensor	Pixel Size (μm ²)
VT-9K5X2-H 550	9056×(256+32)	543 kℓ	Band 1: 4 ~ 256 Band 2: 2 ~ 32	8/10/12 bits	CXP-12 4 Lanes	GLT5009BSI	5.0×5.0

▪ **M72 Mount**



Model	Resolution	Line Rate	TDI Stage	Pixel Data	Interface	Sensor	Pixel Size (μm ²)
VT-4K7C-E 120	4096×32	125 kℓ	32	8/10/12 bits	Camera Link	Vieworks	7.0×7.0
VT-4K7C-H 120	4096×128	125 kℓ	32/64/96/128	8/10/12 bits	Camera Link	Vieworks	7.0×7.0
VT-4K14C-E 120	4096×16	125 kℓ	16	8/10/12 bits	Camera Link	Vieworks	14.0×14.0
VT-4K14C-H 120	4096×64	125 kℓ	16/32/48/64	8/10/12 bits	Camera Link	Vieworks	14.0×14.0
VT-9K7C-E 80	8912×32	94 kℓ	32	8/10/12 bits	Camera Link	Vieworks	7.0×7.0
VT-9K7C-H 80	8912×128	94 kℓ	32/64/96/128	8/10/12 bits	Camera Link	Vieworks	7.0×7.0
VT-12K5C-E 60	12480×64	67 kℓ	64	8/10/12 bits	Camera Link	Vieworks	5.0×5.0
VT-12K5C-H 60	12480×256	67 kℓ	64/128/192/256	8/10/12 bits	Camera Link	Vieworks	5.0×5.0
VT-18K3.5C-E 40	17824×64	47 kℓ	64	8/10/12 bits	Camera Link	Vieworks	3.5×3.5
VT-18K3.5C-H 40	17824×256	47 kℓ	64/128/192/256	8/10/12 bits	Camera Link	Vieworks	3.5×3.5



▪ **M72 Mount – 4k / 6k / 9k / 12k / 18k TDI Line Scan**

CXP-6

Model	Resolution	Line Rate	TDI Stage	Pixel Data	Interface	Sensor	Pixel Size (μm ²)
VT-6K10X-E 170	6240×32	172 k/s	32	8/10/12 bits	CXP-6 4 Lanes	Vieworks	10.0×10.0
VT-6K10X-H 170	6240×128	172 k/s	32/64/96/128	8/10/12 bits	CXP-6 4 Lanes	Vieworks	10.0×10.0
VT-9K7X-E 120	8912×32	125 k/s	32	8/10/12 bits	CXP-6 4 Lanes	Vieworks	7.0×7.0
VT-9K7X-S 120	8912×128	125 k/s	32/64/96/128	8/10/12 bits	CXP-6 4 Lanes	Vieworks	7.0×7.0
VT-9K7X-E 250	8912×32	250 k/s	32	8/10/12 bits	CXP-6 4 Lanes	Vieworks	7.0×7.0
VT-9K7X-S 250	8912×128	250 k/s	32/64/96/128	8/10/12 bits	CXP-6 4 Lanes	Vieworks	7.0×7.0
VT-12K5X-E 100	12480×64	100 k/s	64	8/10/12 bits	CXP-6 4 Lanes	Vieworks	5.0×5.0
VT-12K5X-S 100	12480×256	100 k/s	64/128/192/256	8/10/12 bits	CXP-6 4 Lanes	Vieworks	5.0×5.0
VT-12K5X-E 200	12480×64	200 k/s	64	8/10/12 bits	CXP-6 4 Lanes	Vieworks	5.0×5.0
VT-12K5X-S 200	12480×256	200 k/s	64/128/192/256	8/10/12 bits	CXP-6 4 Lanes	Vieworks	5.0×5.0
VT-18K3.5X-E 80	17824×64	80 k/s	64	8/10/12 bits	CXP-6 4 Lanes	Vieworks	3.5×3.5
VT-18K3.5X-S 80	17824×256	80 k/s	64/128/192/256	8/10/12 bits	CXP-6 4 Lanes	Vieworks	3.5×3.5
VT-18K3.5X-E 140	17824×64	142 k/s	64	8/10/12 bits	CXP-6 4 Lanes	Vieworks	3.5×3.5
VT-18K3.5X-S 140	17824×256	142 k/s	64/128/192/256	8/10/12 bits	CXP-6 4 Lanes	Vieworks	3.5×3.5

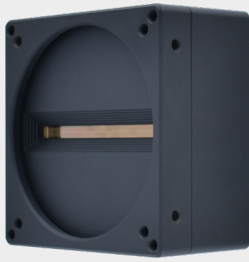
* Contact us to request a custom mount.

▪ **M95 Mount – 16k / 23k TDI Line Scan**

CXP-6 CXP-12

Model	Resolution	Line Rate	TDI Stage	Pixel Data	Interface	Sensor	Pixel Size (μm ²)
VT-16K5X-E 140	16384×64	140 k/s	64	8/10/12 bits	CXP-6 4 Lanes	Vieworks	5.0×5.0
VT-16K5X-S 140	16384×256	140 k/s	64/128/192/256	8/10/12 bits	CXP-6 4 Lanes	Vieworks	5.0×5.0
VT-23K3.5X-E 100	23360×64	100 k/s	64	8/10/12 bits	CXP-6 4 Lanes	Vieworks	3.5×3.5
VT-23K3.5X-S 100	23360×256	100 k/s	64/128/192/256	8/10/12 bits	CXP-6 4 Lanes	Vieworks	3.5×3.5
VT-16K5X2-E 300	16384×64	300 k/s	64	8/10/12 bits	CXP-12 4 Lanes	Vieworks	5.0×5.0
VT-16K5X2-H 300	16384×256	300 k/s	64/128/192/256	8/10/12 bits	CXP-12 4 Lanes	Vieworks	5.0×5.0

* Contact us to request a custom mount.



VL Series offers color and monochrome line scan camera models with wide-ranging resolution, delivering greater speed and more sensitivity than ever before.

High Performance and Cost-Effective Solution

Better Usability

- Compact size for easy system integration
- M42, M72, and customized mounts
- Camera Link and CoaXPress interfaces

Various Image Modes

- Single, dual line
- Multi line
- Horizontal binning
- Vertical binning
- H & V binning

Applications



Web Inspection



Print Scanning



Electronics

Monochrome – 2k / 4k / 8k / 16k Line Scan



Model	Resolution	Line Rate	Pixel Data	Interface	Sensor	Pixel Size (μm ²)
VL-2K7C-M200 I-2	2048×2	200 kHz	8/10/12 bits	Camera Link	Vieworks	7.0×7.0
VL-4K7C-M200 I-2	4096×2	200 kHz	8/10/12 bits	Camera Link	GL0402	7.0×7.0
VL-8K7C-M80 F-1	8192×1	80 kHz	8/10/12 bits	Camera Link	DR-1x8k-7	7.0×7.0
VL-8K7C-M80 F-2	8192×2	80 kHz	8/10/12 bits	Camera Link	DR-2x8k-7	7.0×7.0
VL-16K3.5C-M50 F-1	16384×1	50 kHz	8/10/12 bits	Camera Link	DR-16k-3.5	3.5×3.5
VL-8K7X2-M200 I-2	8192×2	200 kHz	8/10/12 bits	CXP-12 2 Lanes	GL7008	7.0×7.0

Color – 2k / 4k / 8k Line Scan



Model	Resolution	Line Rate	Pixel Data	Interface	Sensor	Pixel Size (μm ²)
VL-2K7C-C100 I-2	2048×2	100 kHz	8/10/12 bits	Camera Link	Vieworks	7.0×7.0
VL-4K7C-C100 I-2	4096×2	100 kHz	8/10/12 bits	Camera Link	GL0402	7.0×7.0
VL-8K7C-C80 F-2	8192×2	80 kHz	8/10/12 bits	Camera Link	DR-2x8k-7	7.0×7.0
VL-8K7X2-C67 I-4	8192×4	67 kHz	8/10/12 bits	CXP-12 2 Lanes	GL7008	7.0×7.0

* Contact us to request a custom mount.

Accessories



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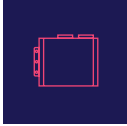
VLink Series	21
LCM Series	22

Software



23

Software	23
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VLink Series is a cost-effective Camera Link repeater that can dramatically increase the maximum distance between a camera and a frame grabber.

- Triples the maximum distance between camera and frame grabber
- Supports Camera Link Base/Medium/Full
- PoCL compatibility allows the use of PoCL camera and frame grabber
- Supports cascade configuration to extend for greater distances
- Optional power input receptacle to be used with the non-PoCL frame grabber



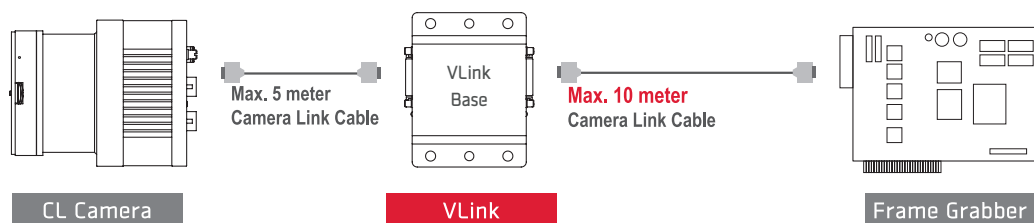
Model	VLink-Base	VLink-Full
Camera Link Configuration	Base	Base / Medium / Full
Pixel Clock	20 ~ 85	
Connector Type	MDR 26 / PoCL Compliant	
Operating Temperature	0 ~ 50°C	
Power Requirements	8 ~ 24 V DC	
Power Supply	Power adapter (not included) or PoCL	
Power Consumption	Typ. 2W	Typ. 4W
Dimension (W × H × L) / Weight	92 mm × 23 mm × 68 mm / 160 g	92 mm × 23 mm × 87.5 mm / 400 g

*Max. Cable Length by Pixel Clock

Configuration		Camera to VLink	VLink to VLink or Grabber
Cable Length	40 MHz	< 10 m	< 20 m
	60 MHz	< 8 m	< 15 m
	85 MHz	< 5 m (4 m at 10 Tap)	< 10 m

* Max. cable length may vary depending on the type of cables and systems. Standard Camera Link cables are recommended.

- Triples the Link Distance





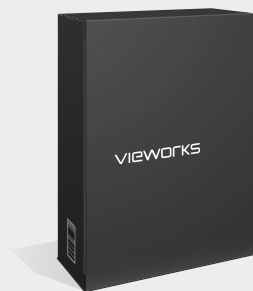
LCM Series EF Lens Controller Module



LCM is an EF lens controller module compatible with all Vieworks industrial cameras. With Vieworks LCM, users can utilize their PC for an easier adjustment of lenses and acquire images with more precision.

- Easy remote control of EF lens
- Rigid and compact construction
- Wide range of supported cameras with various mounts
- Easy-to-use interface functioning on PC and MAC

Item	Description
Power Supply	DC 12V, 500 mA (6 W)
Temperature	Operating: -20 ~ 70 °C Storage: -30 ~ 80 °C
Interface	RS-232 serial port (Default communication speed: 115200 baud, 8 data, no parity 1 stop) RS-232 Tx typical +-5V 6, RS-232 Rx min swing 0.8V/2.4V, max swing -25V/+25V
Compatible Lens	Cameras with EF Lenses
Lens Input	1
Lens Mount	Vieworks V-mount (Available to customize with M42, T, M58)
Compliance	KC, FCC, CE
Software	Windows GUI



VIS 7.X – SDK for CoaXPress & GigE Cameras

The new version of VIS includes full support of the new CoaXPress interface as well as Gigabit Ethernet interface. VIS 7.X includes powerful tools such as Device Observer, IP Changer, and Spider Logger.

- GenICam standard version 3.0
- SDK (VwGigE API and VwCXP API) – Supporting C/C++, .Net sample
- Supported Platforms – Windows 7, Windows 10

VIS-Shadow – GigE SDK for Linux

The VIS-Shadow is a software package for operating Vieworks GigE cameras with Linux operating systems.

- GenICam 3.0 and GenTL 1.3 compliant
- Qt 4.8.1 compliant
- Ubuntu 18.04 (32 bits / 64 bits) supported

Configurator – Control Software for Camera Link

Designed to operate with all Vieworks Camera Link cameras, Configurator enables users to control all advanced camera features and determine the best settings for their applications.

Download

The latest VIS, VIS-Shadow, and Configurator related documents can be downloaded from Vieworks download center download.vieworks.com.