

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
1stVision Inc Andover, MA, USA; 978-474-0044; www.1stvision.com; info@1stvision.com								
Allied Vision Goldeye SWIR GigE and Camera Link Series	InGaAs	M	Area array	320 × 256, 640 × 480	SWIR	Digital I/O, Ethernet, GigE, Camera Link	344	106 MB/s
Allied Vision Mako and Alvium GigE and USB3 Series	CMOS	C+M	Area array	VGA–31 MPixels	NIR, VIS	Digital I/O, Ethernet, GigE, USB3, MIPI-CSI2	≥1000	400 MB/s
IDS Imaging GigE, 5GigE, and USB3 Series	CMOS	C+M	Area array	VGA-45 MPixels	NIR, VIS	Digital I/O, Ethernet, GigE, 5 GigE, 10 GigE, USB3	396	500 MB/s
Teledyne Dalsa Linea GigE, 5GigE, and Camera Link Line Scan Series	CMOS	C+M	Line scan	2048 × 1–32, 768 × 1	NIR, SWIR, VIS	Digital I/O, Ethernet, GigE, 5 GigE, Camera Link	—	≥80 kHz
Teledyne Dalsa Genie Nano GigE, 5GigE, Camera Link, and CoaXpress Series	CMOS	C+M	Area array	VGA–67 MPixels	LWIR, NIR, VIS	Digital I/O, Ethernet, GigE, 5 GigE, 10 GigE	≥1000	1608 MB/s
Active Silicon Ltd Iver, UK; 44-1753-650600; www.activesilicon.com; sales@activesilicon.com								
Harrier 10x AF-Zoom Camera	CMOS	C+M	Area array	1920 × 1080	VIS	LVDS, 3G/HD-SDI, USB/HDMI, HDMI, IP H.264	60	—
Harrier 36x AF-Zoom Camera Global Shutter	CMOS	C+M	Area array	1920 × 1080	VIS	LVDS, HD-SDI, USB/HDMI, HDMI, IP H.264	30, 60	—
Harrier 55x AF-Zoom Camera	CMOS	C+M	Area array	1920 × 1080	VIS	LVDS, 3G/HD-SDI, USB/HDMI, HDMI, IP H.264	30	—
Harrier 18x AF-Zoom HDMI 4K Camera	CMOS	C+M	Area array	4K (3840 × 2160), 1920 × 1080	VIS	HDMI, CVBS	30 (4K), 60 (Full HD)	—
Harrier 23x AF-Zoom IP 4K Camera	CMOS	C+M	Area array	4K (3840 × 2160), 1920 × 1080	VIS	IP H.265/H.264	30 (4K), 60 (Full HD)	—
Tamron MP3010M-EV	CMOS	C+M	Area array	1920 × 1080	VIS	LVDS, HDMI, CVBS, USB 3, 3G/HD-SDI, HD-VLC, H.264	60	—
Sony FCB-EV9500L	CMOS	C+M	Area array	1920 × 1080	VIS	LVDS, USB 3, HDMI, 3G/HD-SDI, HD-VLC, CVBS, H.264	60	—
Sony FCB-EV9520L	CMOS	C+M	Area array	1920 × 1080	VIS	LVDS, USB 3, HDMI, 3G/HD-SDI, HD-VLC, CVBS, H.264	60	—
Alkeria Srl Cascina, (PI), Italy; 39-050-778-060; www.alkeria.com; sales@alkeria.com								
ARIA	CMOS	C+M	Area array	0.4–2 MPixels	NIR, VIS	USB3	522	—
CELERA One	CMOS	C+M	Area array	2–12 MPixels	NIR, VIS	USB3	175	—
NOTA	CMOS	C+M	Area array	2–12 MPixels	VIS	USB3	161	—
CELERA P	CMOS	Polarized	Area array	5 MPixels	VIS	Dual-USB3	154	—
NECTA	CMOS	C+M	Line scan	2–8K	NIR, VIS	USB3	—	95 kHz
Allied Vision Technologies GmbH Stadtraa, Germany; 49-36428-677-0; www.alliedvision.com; info@alliedvision.com								
Alvium USB3 and CSI-2	CMOS, InGaAs	C+M	Area array	0.3–24.6 MPixels	NIR, UV, VIS, VSWIR	USB3, MIPI CSI-2	≤691	—
Mako	CCD & CMOS	C+M	Area array	0.3–12.4 MPixels	NIR, VIS	GigE	≤286	—
Manta	CCD & CMOS	C+M	Area array	0.3–24.6 MPixels	NIR, VIS	GigE	≤286	—
Prosilica GT	CCD & CMOS	C+M	Area array	1.2–31.4 MPixels	NIR, VIS	GigE	≤53.7	—

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Allied Vision Technologies GmbH Stadtroda, Germany; 49-36428-677-0; www.alliedvision.com ; info@alliedvision.com								
Goldeye	InGaAs	M	—	0.1–1.3 MPixels	SWIR, VSWIR, XSWIR	Camera Link, GigE	≤344	—
Bonito PRO	CMOS	C+M	Area array	26.2 MPixels	NIR, VIS	CoaXPress	79.7	—
Alvium G1	CMOS, InGaAs	C+M	Area array	0.4–24.6 MPixels	VIS, VSWIR	GigE	≤276	—
Alvium G5	CMOS, InGaAs	C+M	Area array	0.5–24.6 MPixels	UV, VIS, VSWIR	5GigE	≤691	—
Alvium FPD-Link III and GMSL2	CMOS	C+M	Area array	0.4–24.6 MPixels	NIR, UV, VIS	MIPI CSI-2	≤499	—
Balluff Inc Florence, KY, USA; 859-727-2200; www.balluff.com ; balluff@balluff.com								
BVS 3D-RV0	3D	C+M	Area array	1280 × 960	VIS	Digital I/O, GigE	bis 25	—
BVS CA-BN2	CMOS	C+M	Area array	1456 × 1088–5328 × 4608	VIS	Digital I/O, PCI Express	24.1–226.5	—
BVS CA-SF2	CMOS	C+M	Area array	728 × 544–5328 × 4608	VIS	Digital I/O, RS-232, USB3	15.4–436.9	—
BVS CA-GXT	CMOS	C+M	Area array	5328 × 3040–5328 × 4608	VIS	Digital I/O, 10GigE, RS-232	50.5–76.5	—
BVS CA-GX2	CMOS	C+M	Area array	1456 × 1088–6480 × 4856	VIS	Digital I/O, GigE	7.5–149.9	—
BVS CA-GX0	CMOS	C+M	Area array	728 × 544–5544 × 3692	VIS	Digital I/O, GigE, RS-232	5.8–299.8	—
BVS 3D-RV1	3D	M	Area array	4096 × 3008	VIS	—	9	—
BVS CA-BN4	CMOS	C+M	Area array	5328 × 4608	VIS	Digital I/O, PCI Express	55.5–234	—
Basler AG Ahrensburg, Germany; 49-4102-463-500; www.baslerweb.com ; sales.europe@baslerweb.com								
Basler ace 2	CMOS	C+M	Area array	640 × 512–5328 × 4608	SWIR, UV, VIS	GigE, 5GigE, USB3, CXP-12	≤240	—
Basler ace U	CMOS	C+M	Area array	640 × 480–5473 × 3648	VIS	GigE, USB3	≤751	—
Basler ace L	CMOS	C+M	Area array	4096 × 2160–4096 × 3000	VIS	GigE, USB3	≤42	—
Basler boost	CMOS	C+M	Area array	1936 × 1464–13,376 × 9528	VIS	CXP-12	≤400	—
Basler blaze	CMOS	M	Area array	640 × 480	NIR	GigE	30	—
Baumer Optronic GmbH Radeberg, Germany; 49-3528-4386-0; www.baumer.com/vision ; sales.cc-vt@baumer.com								
CX/CX.I cameras	CMOS	C+M	Area array	1280 × 1024–5312 × 4592	POL, UV, VIS	GigE, USB3, Digital I/O, power outputs	≤224	—
CX.XC cameras	CMOS	C+M	Area array	2448 × 2048–5312 × 4592	SWIR, VIS	GigE, Digital I/O	≤24	—
LX series	CMOS	C+M	Area array	800 × 620–9244 × 7000	NIR, UV, VIS	10GigE, Dual GigE, GigE, Camera Link, Digital I/O, power outputs	≤1622	—
AX series	CMOS	C+M	Area array	2048 × 1536, 2448 × 2048	VIS	Ethernet, RS232, Micro HDMI, USB, SD slot, Digital I/O, power outputs	≤77	—
IX series	CMOS	C+M	Area array	1280 × 800	VIS	GigE, Digital I/O	≤50	—
BGFRM Technology (Imalligent) Shanghai, China; 86-4001828892; www.imalligent.com ; info@imalligent.com								
TRS-010B	3D	M	Area array	5120 × 5120	VIS	GigE	1	—
VRD-1300B	3D	C+M	Area array	2448 × 2048	VIS	GigE	8	—
VRD-600B	3D	C+M	Area array	2448 × 2048	VIS	GigE	8	—
VR-2300B	3D	M	Area array	2048 × 1536	VIS	GigE	8	—
VR-1300B	3D	M	Area array	2048 × 1536	VIS	GigE	8	—
VR-1300B	3D	M	Area array	2048 × 1536	VIS	GigE	8	—
VR-600B	3D	M	Area array	2048 × 1536	VIS	GigE	8	—
VR-400B	3D	M	Area array	2048 × 1536	VIS	GigE	8	—
VRH9-280B	3D	M	Area array	4200 × 2160	VIS	GigE	11.6	—

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BGFRM Technology (Imalligent) Shanghai, China; 86-4001828892; www.imalligent.com; info@imalligent.com								
VRH9-200B	3D	M	Area array	4200 × 2160	VIS	GigE	11.6	—
VRH9-160B	3D	M	Area array	4200 × 2160	VIS	GigE	11.6	—
VRH9-120B	3D	M	Area array	4200 × 2160	VIS	GigE	11.6	—
VRH9-080B	3D	M	Area array	4200 × 2160	VIS	GigE	11.6	—
VRH9-040B	3D	M	Area array	4200 × 2160	VIS	GigE	11.6	—
VRH9-020B	3D	M	Area array	4200 × 2160	VIS	GigE	11.6	—
Canon Medical Components USA Inc Irvine, CA, USA; 810-357-5022; https://mcu.canon/vsd; vsd-sales@mcu.canon								
SV-2000 Video Borescope Tablet Console or CCU	CMOS	C	Area array	400 × 400, 720 × 720	VIS	HDMI, USB 3.0	—	30 Hz
JCS-HR5U One-piece 1080p with USB	CMOS	C	Area array	1920 × 1080	VIS	HDMI, USB 3.0	—	59.94 Hz
IK-HD5UM 3CMOS, 1080p 2-Piece Remote Head	CMOS	C+M	Area array	1920 × 1080	NIR, VIS	3G-SDI, DVI, USB 3.0, RS-232	—	50, 59.94 Hz
Ultra HD IK-4K, 3-Chip Ultra HD 4K Video Camera (2-Piece Remote Head)	CMOS	C	Area array	3840 × 2160, 1920 × 1080	VIS	4- 3G-SDI, RS-232	—	59.94 Hz
JCT-TF5G/7G	CMOS	C	Area array	728 × 544, 1456 × 1088	VIS	Camera Link, PoCL	—	59.4 MHz
CMICRO Corp Takamatsu, Kagawa, Japan; 81-45-548-5448; www.cmicro.co.jp/en; support@cmicro.co.jp								
RSB400H	CMOS	C	Line scan	4096 × 3	VIS	Camera Link, CoaXPress	—	21.4 kHz
HOB200H	CMOS	M	Line scan	2048 (10 × 180 µm pixels)	VIS	Camera Link	—	69.9 kHz
FXS800A	CMOS	M	Line scan	8192	VIS	CoaXPress	—	72.4 kHz
NDB100H	InGaAs	M	Line scan	1024 × 2	Dual-band, SWIR	Camera Link, GigE	—	40 kHz
KFB300	3D	M	Area array	2048 × 1088	VIS	Ethernet	—	2 kHz
Cognex Natick, MA, USA; 508-650-3000; www.cognex.com; news@cognex.com								
In-Sight 3800 Vision System	CMOS	C+M	Area array	≤5MP (2448 × 2048)	VIS	Ethernet	200	—
In-Sight 2800 Vision System	CMOS	C+M	Area array	≤2MP (1920 × 1080)	VIS	Ethernet	—	≤45 Hz
In-Sight SnAPP Vision Sensor	CMOS	C+M	Area array	≤1.6MP (1440 × 1080)	VIS	Ethernet	45	—
In-Sight D900 Vision System	CMOS	C+M	Area array	≤5MP (2592 × 1944)	VIS	Ethernet	51	—
3D Displacement Sensors	3D	C+M	—	—	—	Ethernet	—	10 kHz
Cubert GmbH Ulm, Germany; 49-731-708156-00; https://cubert-hyperspectral.com; sales@cubert-gmbh.de								
ULTRIS S5 Hyperspectral Camera	CMOS	C	Area array	290 × 275 pixels	Hyperspectral	GigE	15	—
ULTRIS X20 Hyperspectral Camera	CMOS	C	Area array	410 × 410 pixels	Hyperspectral	GigE	8	—
ULTRIS X20 Plus Hyperspectral Camera	CMOS	C+M	Area array	410 × 410 (Spectral), 1880 × 1880 (Panchromatic)	Hyperspectral	GigE	8	—
ULTRIS XMR Hyperspectral Camera	CMOS	C	Area array	1000 × 1000 pixels	Hyperspectral	USB 3.0	17Hz (8 bit)/12Hz (12 bit)	—
ULTRIS SWIR-1 Hyperspectral Camera	InGaAs	C	Area array	200 × 200 pixels	Hyperspectral	USB 3.0	80	—

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e-con Systems Riverside, CA, USA; 408-766-7503; www.e-consystems.com; camerasolutions@e-consystems.com								
STURDeCAM34	CMOS	C	—	—	VIS	GMSL2	60	—
RouteCAM_CU22_IP67	CMOS	C	—	—	VIS	PoE	60	—
See3CAM_CU31	CMOS	C	—	—	VIS	USB 3.2/2.0	30	—
RouteCAM_CU25	CMOS	C	—	—	VIS	PoE	60	—
e-CAM56_CUOAGX	CMOS	C	—	—	VIS	MIPI CSI-2	79	—
Emergent Vision Technologies Inc Port Coquitlam, BC, Canada; 866-780-6082; www.emergentvisiontec.com; sales@emergentvisiontec.com								
HZ-10000-G	CMOS	C+M	Area array	4608 × 2176	VIS	100GigE	1000	—
LZ-16KG5	CMOS	C+M	Line scan	16K × 16	VIS	100GigE	—	400 kHz–16K (Single line), 133 kHz–16K (Trilinear)
HB-127-S	CMOS	C+M	Area array	13,400 × 9528	VIS	25GigE	17	—
HZ-21000-G	CMOS	C+M	Area array	5120 × 4096	VIS	100GigE	542	—
HB-25000-SB	CMOS	C+M	Area array	5320 × 4600	VIS	25GigE	98	—
HZ-100-G	CMOS	C+M	Area array	11,276 × 9200	VIS	100GigE	24	—
HZ-2000-G	CMOS	C+M	Area array	2048 × 1216	VIS	100GigE	3462	—
HB-30000-S	CMOS	C+M	Area array	6464 × 4852	VIS	25GigE	35.4	—
HR/HT-50000	CMOS	C+M	Area array	7920 × 6004	VIS	10GigE	23	—
HR/HT-12000-S	CMOS	C+M	Area array	4096 × 3000	VIS	10GigE	80	—
HR/HT-8000-S	CMOS	C+M	Area array	4096 × 2160	VIS	10GigE	110	—
PACE Series	CMOS	C+M	Line scan	4K × 2–9K 256 TDI	VIS	10GigE	—	70–172 kHz (Single line), 23–57 kHz (Trilinear)
Accel Series	CMOS	C+M	Line scan	8K × 4–16K × 16	VIS	25GigE	—	100–304 kHz (Single line), 33–100 kHz (Trilinear)
HR-8000-SB-U	CMOS	M	Area array	2848 × 2848	UV	10GigE	145	—
HB-8000-SB-U	CMOS	M	Area array	2848 × 2848	UV	25GigE	201	—
EPiX Inc Buffalo Grove, IL, USA; 847-465-1818; www.epixinc.com; epix@epixinc.com								
SILICON VIDEO 25	CMOS	C+M	Area array	5120 × 5120	VIS	Camera Link, Camera Link Extended-Full	212	1000 MHz
SILICON VIDEO 20	CMOS	C+M	Area array	5120 × 3684	VIS	Camera Link, Camera Link Extended-Full	30–240	—
SILICON VIDEO 1820CL	CMOS	C	Area array	4608 × 3288	VIS	Camera Link, Camera Link Extended-Full, Camera Link Extended, Camera Link Full, LVDS	24	4360 Mbps
SILICON VIDEO 10C6 & 10M6	CMOS	C	Area array	3840 × 2764	VIS	LVDS	7	1000 MHz
SILICON VIDEO 5C10/5M10	CMOS	C+M	Area array	2592 × 1944	VIS	LVDS	10	700 MHz
SILICON VIDEO 1C45, 1M45	CMOS	C+M	Area array	1280 × 960	VIS	LVDS	45–1200	1000 MHz
SVWGAC or SVWGAM	CMOS	C+M	Area array	752 × 480	VIS	LVDS	60–1338	1000 MHz
SILICON VIDEO 035	CMOS	C	Area array	640 × 480	VIS	Analog, NTSC, NTSC/PAL/RS-170, PAL	30	768 kHz
SILICON VIDEO 9M001	CMOS	M	Area array	1280 × 1024	VIS	LVDS	43	600 kHz
Hamamatsu Corp Bridgewater, NJ, USA; 908-231-0960; www.hamamatsu.com; photonics@hamamatsu.com								
High Speed InGaAs Line Scan Camera (C15333-10E)	InGaAs	M	Line scan	1024 × 1	SWIR	GigE	40 klps	40 kHz
VGA InGaAs area Camera (C12741-03)	InGaAs	M	Area array	320 × 256	SWIR	USB3	216	—

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Hamamatsu Corp Bridgewater, NJ, USA; 908-231-0960; www.hamamatsu.com; photonics@hamamatsu.com								
RGBNIR multiline Camera (C16006)	CMOS	C+M	Line scan	8192 × 4	NIR, VIS	Camera Link	20 × 4 kfps	—
Compact InGaAs Line Scan Camera (C15853-02)	InGaAs	M	Line scan	1024 × 1	SWIR	USB 3.1 Gen1	40 kfps	15 MHz
ORCA-Fusion (C14440-20UP)	CMOS	M	Area array	2304 × 2304	VIS	CoaXPress, Digital I/O, USB3	100	—
QVGA Standard/ extended InGaAs area Camera (C16090 series)	InGaAs	M	Area array	320 × 256	SWIR	USB 3.1 Gen1	500	—
Headwall Photonics Inc Bolton, MA, USA; 978-353-4100; www.headwallphotonics.com; sales@headwallphotonics.com								
Hyperspec MV.X Imaging System	CMOS	C+M	Line scan	—	Hyperspectral, NIR, VIS	Ethernet	—	—
Hyperspec MV.C VNIR	CMOS	C+M	Line Scan	—	Hyperspectral, NIR, VIS	USB 3.1	—	—
Hyperspec MV.C NIR Imaging System	InGaAs	C+M	Line scan	—	Hyperspectral,, NIR	Ethernet	—	—
HySpex by NEO Oslo, Norway; 47-40-00-18-58; www.hyspex.com; hyspexsales@neo.no								
Baldur S-384N	MCT	M	Line scan	—	Hyperspectral, SWIR	Camera Link, LVDS, 5V/12V/24V TTL	400	—
Baldur S-640iN	InGaAs	M	Line scan	—	Hyperspectral, SWIR	GigE, LVDS, 5V/12V/24V TTL	500	—
Baldur V-1024N	CMOS	M	Line scan	—	Hyperspectral, NIR, VIS	Camera Link	1000	—
IDS Imaging Development Systems GmbH Obersulm, Germany; 49-7134-96196-0; www.ids-imaging.com; info@ids-imaging.com								
IDS NXT rio & rome	CMOS	C+M	Area array	1440 × 1088–3088 × 2076	VIS	Digital I/O, GigE, RS-232	—	—
Ensenso x Camera Family	CMOS	M	Area array	1456 × 1088, 2448 × 2048	VIS	Digital I/O, GigE	—	—
Ensenso N Camera Family	CMOS	M	Area array	1280 × 1024	NIR, VIS	Digital I/O, GigE	—	—
GigE uEye CP Camera Family	CMOS	C+M	Area array	800 × 600–4912 × 3684	NIR, VIS	Digital I/O, GigE	≤396	—
USB 3 uEye CP Camera Family	CMOS	C+M	Area array	800 × 600–5536 × 3692	NIR, VIS	Digital I/O, USB3	≤251	—
IMPERX Boca Raton, FL, USA; 561-989-0006; www.imperx.com; sales@imperx.com								
65 MP C9440 CMOS Cheetah Camera	CMOS	C+M	Area array	—	NIR	CoaXPress	34.7	—
31MP C6440 CMOS Cheetah Camera	CMOS	C+M	Area array	—	NIR	CoaXPress, 10GigE	35.4	—
20MP C4440 CMOS Cheetah Camera	CMOS	C+M	Area array	—	NIR	CoaXPress, 10GigE	43	—
17 MP C5440 CMOS Cheetah Camera	CMOS	C+M	Area array	—	NIR	CoaXPress, 10GigE	61.3	—
31MP C6410 CMOS Cheetah Camera (optional Thermal Electric Cooler)	CMOS	C+M	Area array	—	NIR	Camera Link, PoE	3.7	—
Instrument Systems GmbH Munich, Germany; 49-8945-4943-0; www.instrumentsystems.com; sales@instrumentsystems.com								
LumiTop X20 Low Luminance Imaging Colorimeter	CMOS	C	Area array	5496 × 3672	VIS	GigE	—	—
LumiTop X150 High-Resolution Imaging Colorimeter	CMOS	C	Area array	14,192 × 10,640	VIS	CoaXPress	—	—

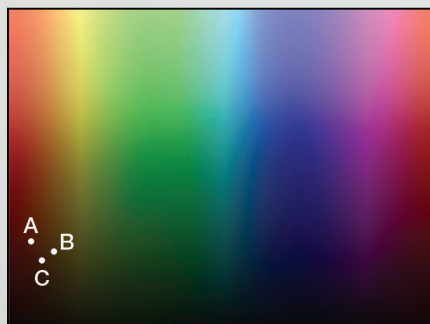
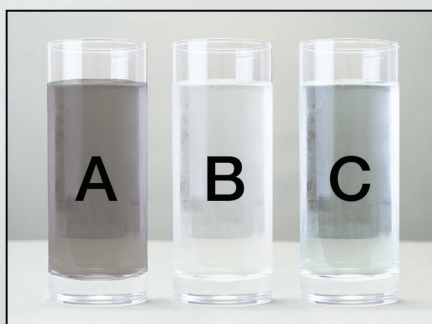
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Instrument Systems GmbH Munich, Germany; 49-8945-4943-0; www.instrumentsystems.com ; sales@instrumentsystems.com								
LumiTop 4000 Imaging Colorimeter	CMOS	C	Area array	4096 × 3000	VIS	GigE	—	—
VTC 2400 IR Farfield Camera	CMOS	M	Area array	5 MPixels	IR	Ethernet	—	—
VTC 4000 IR Nearfield Camera	CMOS	M	Area array	12 MPixels, 1.4 × 1 mm (FoV)	IR	Ethernet	—	—
IO Industries Inc London, ON, Canada; 519-663-9570; www.ioindustries.com ; sales@ioindustries.com								
Victorem 4KSDI-Mini	CMOS	C+M	Area array	4096 × 2160	VIS	HD-SDI	60	—
Victorem 120B68-CV	CMOS	C+M	Area array	4096 × 3008	VIS	CoaXPress	68	—
Redwood 654G71-CX	CMOS	C+M	Area array	9344 × 7000	VIS	CoaXPress	71	—
Volucam 120B68-V	CMOS	C+M	Area array	4096 × 3008	VIS	10GigE, HD-SDI	68	—
8KSDI	CMOS	C+M	Area array	8192 × 4320	VIS	HD-SDI	60	—
ix Cameras Ltd Woburn, MA, USA; 339-645-0778; www.ix-cameras.com ; info@ix-cameras.com								
i-SPEED 511	CMOS	C+M	Area array	1920 × 1080	NIR, UV, VIS	Ethernet, GigE, HDMI, HD-SDI, Proprietary, USB3	100–1,000,000	10 GPx/s
i-SPEED 514	CMOS	C+M	Area array	1920 × 1080	NIR, UV, VIS	Ethernet, GigE, HDMI, HD-SDI, Proprietary, USB3	100–1,000,000	13 GPx/s
i-SPEED 717	CMOS	C+M	Area array	2072 × 1536	NIR, UV, VIS	Proprietary	2.45 million	17 GPx/s
i-SPEED 721	CMOS	C+M	Area array	2072 × 1536	NIR, UV, VIS	Proprietary	2.45 million	21 GPx/s
i-SPEED 727	CMOS	C+M	Area array	2072 × 1536	NIR, UV, VIS	Proprietary	2.45 million	27 GPx/s
JADAK, a Novanta Co North Syracuse, NY, USA; 315-701-0678; www.jadaktech.com ; info@jadaktech.com								
Allegro LW-AL-CMV2000	CMOS	C+M	Area array	2048 × 1024	NIR, VIS	GigE, USB3	300	—
Allegro LW-AL-CMV4000	CMOS	C+M	Area array	2048 × 2048	NIR, VIS	GigE, USB3	150	—
Allegro LW-AL-CMV12000	CMOS	C+M	Area array	4096 × 3072	NIR, VIS	GigE, USB3	50	—
Allegro LW-AL-IMX172	CMOS	C+M	Area array	4000 × 3000	VIS	GigE, USB3	35	—
Allegro LW-AL-IMX178	CMOS	C+M	Area array	3094 × 2080	VIS	GigE, USB3	60	—
JAI San Jose, CA, USA; 408-383-0300; www.jai.com ; camerasales.americas@jai.com								
Go-X Series	CMOS	C+M	Area array	2.3–24.5 MPixels	VIS	GigE, 5GigE, CoaXPress, USB3	4–112	—
Spark Series	CMOS	C+M	Area array	5–45 MPixels	VIS	Camera Link, Camera Link Extended, Camera Link Full, GigE, CoaXPress, USB3	9–253	—
Apex Series	CMOS	C	Area array	1.6–3.2 MPixels	VIS	Camera Link, Camera Link Extended, Camera Link Full, GigE, 5GigE, 10GigE, USB3	12–126	—
Fusion Series	CMOS	C+M	Area array	1.6–3.2 MPixels	Multispectral, NIR, VIS	GigE, 5GigE, 10GigE	107–226	—
Sweep+ Series	CMOS	C+M	Line scan	2048 × 1, 4096 × 1, 8192 × 1	Multispectral, NIR, VIS	GigE, 5GigE, 10GigE, Fiber Optic	—	16–97 kHz
KAYA Instruments Boca Raton, FL, USA; 561-698-2899; www.kayainstruments.com ; info@kayainstruments.com								
Iron 661 CoaXPress 12G Camera	CMOS	C+M	—	127 MPixels	—	CoaXPress 12G	22	—
Iron 3265 CoaXPress 12G Camera	CMOS	C+M	—	65 MPixels	—	CoaXPress 12G / PCIe	71	—
Iron 4502 CoaXPress 12G Camera	CMOS	C+M	—	2.1 MPixels	—	CoaXPress 12G	2456	—
Iron 4521 CoaXPress 12G Camera	CMOS	C+M	—	21 MPixels	—	CoaXPress 12G	272	—
Iron CoaXPress 2020BSI Camera	CMOS	M	—	4 MPixels	—	CoaXPress 12G	74	—

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
KEYENCE Corp of America Itasca, IL, USA; 888-539-3623; www.keyence.com/usa ; marketing@keyence.com								
VS-C2500X (25 MPixel C-Mount Smart Camera)	CMOS	C+M	Area array	5120 × 5120	VIS	Proprietary	35	—
VS-L1500X (15 MPixel Standard Zoom Smart Camera)	CMOS	C+M	Area array	4400 × 3296	VIS	Proprietary	44	—
CA-HF6400 (64 MPixel High-Speed Area Camera)	CMOS	C+M	Area array	8192 × 7808	VIS	Proprietary	17.4	—
CA-HL08MX (8K Resolution High-speed Line Scan Camera)	CMOS	M	Line scan	1 × 8192	VIS	Proprietary	—	97.7 kHz
XT-060 (Inline 3D Camera, 60mm FOV)	CMOS	C+M	—	3072 × 3072	VIS	Proprietary	—	—
LUCID Vision Labs Inc Richmond, BC, Canada; www.thinklucid.com ; sales@thinklucid.com								
Helios2+ ToF 3D Camera High-Speed/HDR Mode	ToF	M	Area array	640 × 480	3D	GigE, PoE+	30	125 MB/s
Helios2 Narrow 31° x 24° Field of View ToF Camera	ToF	M	Area array	640 × 480	3D	GigE, PoE+	30	125 MB/s
Atlas 5GBASE-T Camera 2.8 MP to 31.4 MP	CMOS	C+M	Area array	≤6464 × 4852	NIR, VIS	5GigE, PoE	≤173	600 MB/s
Atlas 5GBASE-T IP67 Camera 2.8 MP to 24.5 MP	CMOS	C+M	Area array	≤5320 × 4600	NIR, VIS	5GigE, PoE	≤173	600 MB/s
Phoenix Camera 0.4 MP to 20 MP	CMOS	C+M	Area array	≤5472 × 3648	NIR, VIS	GigE PoE	≤286	125 MB/s
Triton IP67 Camera 0.4 MP to 24.5 MP	CMOS	C+M	Area array	≤5300 × 4600	NIR, VIS	GigE PoE	≤286	125 MB/s
Triton2 IP67 2.5 GigE Camera 1.6 MP to 24.5 MP	CMOS	C+M	Area array	≤5300 × 4600	NIR, VIS	GigE, 2.5GigE, PoE	≤166	312 MB/s
Triton2 SWIR IP67 Camera 3.2 and 5.2 MP	CMOS	M	Area array	2560 × 2048	SWIR	2.5GigE, PoE	85	125 MB/s
Triton10 - 10GigE Camera with RDMA	CMOS	C+M	Area array	≤5320 × 4600	NIR, VIS	10GigE	—	—
Atlas SWIR IP67 Camera 0.3 MP and 1.3 MP	CMOS	M	Area array	1280 × 1024	SWIR	GigE, PoE	85	1 Gbps
Atlas10 UV Camera	CMOS	M	Area array	2840 × 2840	UV	GigE, PoE	126	1250 MB/s
Atlas 10GBASE-T Camera 5.0 MP to 65 MP	CMOS	C+M	Area array	<9344 × 7000	NIR, VIS	GigE, 10GigE, PoE+	≤205	1250 MB/s
Triton2 4K Line Scan Camera	CMOS	M	Line scan	4096 × 2 px	NIR, VIS	2.5GigE, PoE	60 kHz	125 MB/s
Triton2 EVS Event-Based Camera (Shutter-free)	CMOS	—	Area array	1280 × 720	Event-Based, VIS	2.5GigE	>10k	125 MB/s
Mega Phase Industrial Inspection Technology (Shanghai) Co Ltd Shanghai, Guangdong, China; 86-1992-1093166; www.megaphase3d.com/en ; sales@mega-phase.cn								
Sizector 3D Camera S162 Series S162170	3D	M	Area array	5328 × 3040	VIS	USB3	4, 14.5 (binning)	—
Sizector 3D Camera M Series M051040	3D	M	Area array	2472 × 2064	VIS	USB3	2.5, 8.6 (binning)	—
Sizector 3D Camera SX Series SQ081017	3D	M	Area array	2856 × 2848	VIS	USB3	1.4, 4.8 (binning)	—
Sizector 3D Camera SX Series SQ162053	3D	M	Area array	5328 × 3040	VIS	USB3	1, 3.6 (binning)	—
Hybrid Data Camera DH200	CMOS	M	Area array	4512 × 4512	Multispectral, NIR, UV	USB3	5, 18.5 (binning)	—
Mega Speed Corp Minnedosa, MB, Canada; 204-867-3767; www.megaspeedusa.com ; sales@megaspeedusa.com								
Mega Speed MS140K	CMOS	C+M	Area array	1920 × 1080–64 × 16	VIS	GigE	35–225,000	—
Mega Speed MAX V1	CMOS	C+M	Area array	1920 × 1080–640 × 16	VIS	GigE	2400	—

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
Mega Speed Corp Minnedosa, MB, Canada; 204-867-3767; www.megaspeedusa.com; sales@megaspeedusa.com								
Mega Speed MAX V3	CMOS	C+M	Area array	1920 × 1080– 640 × 16	VIS	GigE	35–200,000	—
Mega Speed X8 PRO	CMOS	C+M	Area array	1280 × 800– 640 × 16	VIS	GigE	4000– 512,000	—
Mega Speed MS35K PRO Cart	CMOS	C+M	Area array	1920 × 1080– 640 × 480	VIS	GigE	3000	—
Mikrotron, a brand of SVS-Vistek GmbH Gilching, Germany; 49-8105-3987-60; www.mikrotron.de; info@svs-vistek.com								
EoSens®1.1M/CCX12-CM	CMOS	C+M	Area array	1280 × 864	VIS	CoaXPress-12	3674	3.78 GB/s
EoSens®2.0M/CCX12-CM	CMOS	C+M	Area array	1920 × 1080	VIS	CoaXPress-12	2247	4.34 GB/s
EoSens®3.0M/CCX5-CM	CMOS	C+M	Area array	1696 × 1710	VIS	CoaXPress-6	566	1.53 GB/s
EoSens®4.0M/CCX6-CM	CMOS	C+M	Area array	2336 × 1728	VIS	CoaXPress-6	563	2.12 GB/s
EoSens®9.5M/CCX12-M58	CMOS	C+M	Area array	4096 × 2304	VIS	CoaXPress-12	510	4.81 GB/s
EoSens®10M/CCX12-FM	CMOS	C+M	Area array	4608 × 2176	VIS	CoaXPress-12	478	4.46 GB/s
EoSens®21M/CCX12-FM	CMOS	C+M	Area array	5120 × 4096	VIS	CoaXPress-12	230	4.49 GB/s
EoSens®Creation 1.1MCCX12-CM2	CMOS	C+M	Area array	1280 × 864	VIS	CoaXPress-12	3674	3.78 GB/s
EoSens®Creation 2.0MCCX12-CM2	CMOS	C+M	Area array	1920 × 1080	VIS	CoaXPress-12	2247	4.34 GB/s
EoSens®Creation 2.0MCXGE-CM2	CMOS	C+M	Area array	1920 × 1080	VIS	10GigE	536	1.04GB/s
NET USA Inc Highland, IN, USA; 219-934-9042; www.net-usa-inc.com; info@net-usa-inc.com								
Corsight Intel Atom Based Smart Camera System	CMOS	C+M	Area ar- ray/ Line scan	1280 × 1024– 2448 × 2048	NIR, VIS	Gigabit Ethernet, USB2.0, DisplayPort, WiFi, Bluetooth, GSM, RS-232, Digital I/O	35–1050	—
GigEPRO	CMOS	C+M	Area array	1280 × 1024– 3840 × 2748	NIR, VIS	Gigabit Ethernet	7–61	—
3iCube	CMOS	C+M	Area array	1280 × 1024– 3840 × 2748	NIR, VIS	USB3, iControl SKD, USB3 Vision: SynView SDK, UVC	7.5–60	—
HDselect	CMOS	C	Area array	1920 × 1080	VIS	USB3, HDMI	60	—
IOflex	CMOS	C	Area array	1920 × 1080	VIS	USB 2.0, UVC	30	—
iam Xilinx Zynq Ultrascal SOC (ARM + FPGA) Smart Camera incl. AI Accelerator	CMOS	C+M	Area array	728 × 544– 4072 × 3046	NIR, SWIR, VIS	Gigabit Ethernet, Digital I/O	34–280	—
Omron Automation America Hoffman Estates, IL, USA; 224-575-6514; automation.omron.com/en/us; amy.wang@omron.com								
SWIR Series	CMOS	M	Area array	0.34, 1.3 MP	SWIR	GigE Vision, USB3 Vision, Camera Link	—	—
M Series USB3 Vision Cameras	CMOS	C+M	Area array	0.4–20 MPixels	VIS	USB3	≤527	—
M Series GigE Vision Cameras	CMOS	C+M	Area array	0.4–20 MPixels	VIS	GigE Vision 2.1	≤282	—
Omron FH Vision System	CCD & CMOS	C+M	Area array	640 × 480, 720 × 540, 1600 × 1200, 2040 × 1088, 2040 × 2048, 2448 × 2048, 2592 × 1944, 4084 × 3072, 4092 × 3000, 5544 × 3692	VIS	Camera Link, Digital I/O, Ethernet, GigE, RS-232, EtherCAT	≤524	—
Omron FHV7 Smart Camera	CMOS	C+M	Area array	720 × 540, 1440 × 1080, 2048 × 1536, 2448 × 2048, 3072 × 2048, 4000 × 3000	VIS	Digital I/O, Ethernet, GigE, RS-232, EtherCAT	≤430	—

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
Opto Engineering Mantova, (MN), Italy; 39-0376-699111; www.opto-e.com; press@opto-e.com								
ITALA G series	CMOS	C+M	Area array	728 × 544– 6480 × 4860	VIS	GigE	3.7–296.5	—
ITALA G.EL series	CMOS	C+M	Area array	1456 × 1088– 5328 × 4608	VIS	GigE	4.8–74.2	—
ITALA G.SWIR series	CMOS	M	Area array	1296 × 1032	SWIR, VIS	GigE	87.8	—
ITALA G.IP series	CMOS	C+M	Area array	728 × 544– 5328 × 4608	VIS	GigE	4.8–296.5	—
ITALA 10G series	CMOS	C+M	Area array	2472 × 2064– 6480 × 4860	VIS	10GigE	21.7–231.2	—
COE LS-X series	CMOS	C+M	Line scan	4096 × 2	VIS	GigE	19–28	—
Percipio Technology Ltd Shanghai, China; 86-218-015-8012; www.percipio.xyz; info@percipio.xyz								
FM855-E1	3D	C+M	Area array	Depth 1280 × 960; RGB 2560 × 1920	IR, NIR	Ethernet, GigE	16	—
PS800-E1	3D	C+M	Area array	Depth 1280 × 960; RGB 2560 × 1920	IR, NIR	Ethernet, GigE	2.5	—
FS820-E1	3D	C+M	Area array	Depth 1280 × 800; RGB 1920 × 1080	IR, NIR	Ethernet, GigE	10	—
PS801-E1	3D	C+M	Area array	Depth 1280 × 960; RGB 2560 × 1920	IR, NIR	Ethernet, GigE	1	—
TL460-S1-E1	3D	C+M	Area array	Depth 640 × 480; RGB 1920 × 1080	IR, NIR	Ethernet, GigE	30	—
Photoneo sro Bratislava, Slovakia; 421-948-766-479; www.photoneo.com; sales@photoneo.com								
PhoXi 3D Scanner	CMOS	M	Area array	2064 × 1544	VIS	1GigE	3–4	—
Alpha 3D Scanner	CMOS	M	Area array	1440 × 1080	VIS	1GigE	3–4	—
MotionCam-3D	CMOS	M	Area array	1120 × 800	VIS	1GigE	20	—



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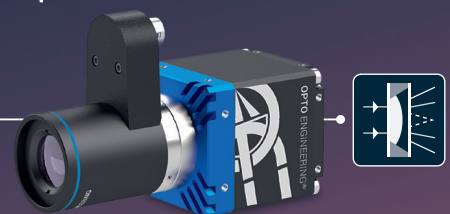
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10GigE Vision PoE cameras



ITALA G.SWIR

GigE Vision VIS-SWIR PoE cameras



CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
Photoneo sro Bratislava, Slovakia; 421-948-766-479; www.photoneo.com ; sales@photoneo.com								
MotionCam-3D Color	CMOS	C	Area array	1120 × 800	VIS	1GigE	20 (depth acquisition), 12 (color, depth acquisition)	—
Photonfocus AG Lachen, Switzerland; 41-55-451-00-00; www.photonfocus.com ; sales@photonfocus.com								
MV4-D1280U-H01-GT photonSPECTRAL	CMOS	M	Area array	1280 × 1024	NIR, UV, VIS	10GigE, 10GigE Vision, Digital I/O, RS-422/LVDS	140	—
MV3-D640I-M01-G2 photonSPECTRAL	InGaAs	M	Area array	650 × 512	SWIR	GigE, GigE Vision, Digital I/O, RS-422/LVDS	300	—
MV4-D3904-L01-3D06-G2 photon3D	CMOS	M	Area array	3904 × 2192	VIS	GigE, GigE Vision, Digital I/O, RS-422/LVDS	12,000	12 kHz
MV4-D9344-G01-GT photonHIRES	CMOS	C+M	Area array	9344 × 7000	VIS	10GigE, 10GigE Vision, Digital I/O, RS-422/LVDS	18	—
MV4-D2048x1088-C01-HS02-GT photonSPECTRAL	CMOS	M	Area array	2048 × 1088	Hyperspectral, NIR, VIS	10GigE, 10GigE Vision, Digital I/O, RS-422/LVDS	340	—
Photron USA Inc San Diego, CA, USA; 858-684-3555; www.photron.com ; image@photron.com								
FASTCAM Mini AX	CMOS	C+M	Area array	1024 × 1024	VIS	GigE	6400–900,000	—
FASTCAM Mini UX	CMOS	C+M	Area array	1280 × 1024	VIS	GigE	4000–800,000	—
FASTCAM Mini WX	CMOS	C+M	Area array	2048 × 2048	VIS	GigE	1080–80,000	—
FASTCAM NOVA R2	CMOS	C+M	Area array	2048 × 2048	VIS	1GigE/10GigE	1400–100,000	—
FASTCAM NOVA R3-4K	CMOS	C+M	Area array	4096 × 2304	VIS	1GigE/10GigE	750–150,000	—
FASTCAM NOVA R5-4K	CMOS	C+M	Area array	4096 × 2304	VIS	1GigE/10GigE	1250–200,000	—
FASTCAM NOVA S20	CMOS	C+M	Area array	1024 × 1024	VIS	1GigE/10GigE	18,750–1,100,000	—
FASTCAM NOVA S6	CMOS	C+M	Area array	1024 × 1024	VIS	1GigE/10GigE	6400–800,000	—
FASTCAM NOVA S9	CMOS	C+M	Area array	1024 × 1024	VIS	1GigE/10GigE	9000–900,000	—
FASTCAM NOVA S12	CMOS	C+M	Area array	1024 × 1024	VIS	1GigE/10GigE	12,800–1,000,000	—
FASTCAM NOVA S16	CMOS	C+M	Area array	1024 × 1024	VIS	1GigE/10GigE	16,000–1,100,000	—
FASTCAM MH6	CMOS	C+M	Area array	1920 × 1400	VIS	GigE	750–5000	—
FASTCAM MINI R5-4K	CMOS	C+M	Area array	4096 × 2304	VIS	1GigE/10GigE	1250–200,000	—
Pharsighted E9-80S	CMOS	C+M	Area array	640 × 480	VIS	1GigE/10GigE	272,000–2,457,000	—
Pharsighted E9-100S	CMOS	C+M	Area array	640 × 480	VIS	1GigE/10GigE	326,000–2,720,000	—
PHYTEC Messtechnik GmbH Mainz, Germany; 49-6131-9221-0; www.phytec.de ; contact@phytec.de								
VM-016-M	CMOS	C+M	Area array	1280 × 800	VIS	MIPI CSI-2	60	—
VM-017-L	CMOS	C+M	Area array	2592 × 1944	VIS	FPD-Link III	60	—
VM-017-M	CMOS	C+M	Area array	2592 × 1944	VIS	MIPI CSI-2	60	—
VM-020-L	CMOS	C+M	Area array	1920 × 1200	VIS	FPD-Link III	96	—
VM-020-M	CMOS	C+M	Area array	1920 × 1200	VIS	MIPI CSI-2	120	—

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
Pixelink Ottawa, ON, Canada; 613-247-1211; www.navitar.com/product/pixelink-cameras ; sales.pixelink@ametek.com								
PL-X9524 (24 MP)	CMOS	C+M	Area array	5328 × 4608	VIS	10GigE	44	—
PL-X9520 (20 MP)	CMOS	C+M	Area array	4512 × 4512	VIS	10GigE	52	—
PL-X9512 (12 MP)	CMOS	C+M	Area array	4096 × 3000	VIS	10GigE	65	—
PL-X957 (7 MP)	CMOS	C+M	Area array	3216 × 2200	VIS	10GigE	154	—
PL-D7924 (24 MP)	CMOS	C+M	Area array	5328 × 4608	VIS	USB3	17	—
PL-D7920 (20 MP)	CMOS	C+M	Area array	4512 × 4512	VIS	USB3	21	—
PL-D7620 (20 MP)	CMOS	C+M	Area array	5472 × 3648	VIS	USB3	20	—
PL-D7512 (12 MP)	CMOS	C+M	Area array	4096 × 3000	VIS	USB3	35	—
PL-D7912 (12 MP)	CMOS	C+M	Area array	4096 × 3000	VIS	USB3	23	—
PL-D759 (9 MP)	CMOS	C+M	Area array	4096 × 2160	VIS	USB3	48	—
PL-D799 (9 MP)	CMOS	C+M	Area array	4096 × 2160	VIS	USB3	32	—
PL-D757 (7 MP HDR)	CMOS	C+M	Area array	3208 × 2200	VIS	USB3	57	—
PL-D797 (7 MP)	CMOS	C+M	Area array	3208 × 2200	VIS	USB3	27	—
PL-D755 (5 MP)	CMOS	C+M	Area array	2448 × 2048	VIS	USB3	80	—
PL-D753 (3 MP HDR)	CMOS	C+M	Area array	1936 × 1464	NIR, VIS	USB3	141	—
Princeton Infrared Technologies Inc (PIRT) Monmouth Junction, NJ, USA; 609-917-3380; www.princetonirtech.com ; sales@princetonirtech.com								
1280SciCam Scientific SWIR Camera	InGaAs Photodiode array	M	Area array	1280 × 1024	IR, Multispectral, NIR, SWIR, VIS	Camera Link	95	—
MVCam SWIR Camera	InGaAs	M	Area array	1280 × 1024	IR, Multispectral, NIR, SWIR, VIS	Camera Link	90	—
1280BPCam	T2SL	M	Area array	1280 × 1024	E-SWIR, IR, Multispectral, NIR, VIS	Camera Link	100	—
PIRT1280A1-12	InGaAs	M	Area array	1280 × 1023	IR, Multispectral, NIR, SWIR, VIS	—	90	—
Radiant Vision Systems Redmond, WA, USA; 425-844-0152; www.radiantvisionsystems.com ; info@radiantvs.com								
ProMetric I61 Imaging Colorimeter	CMOS	C+M	Area array	9568 × 6380	NIR, VIS	10 GigE	—	—
ProMetric I45 Imaging Colorimeter	CMOS	C+M	Area array	8192 × 5460	NIR, VIS	10 GigE	—	—
ProMetric I16-G Imaging Colorimeter	CMOS	C+M	Area array	5312 × 3032	VIS	Ethernet 1000	—	—
ProMetric Y45 Imaging Photometer	CMOS	M	Area array	8192 × 5460	NIR, VIS	10 GigE	—	—
ProMetric Y16-G Imaging Photometer	CMOS	M	Area array	5312 × 3032	VIS	Ethernet 1000	—	—
Raptor Photonics Ltd Larne, Co Antrim, UK; 44-282-827-0141; www.raptorphotonics.com ; sales@raptorphotonics.com								
Falcon III	EMCCD	M	Area array	1000 × 1000	UV, VIS, X-ray	Camera Link	32	30 Hz
Ninox 1280	InGaAs	M	Area array	1280 × 1024	Hyperspectral, NIR, SWIR, VIS	Camera Link	60	10–60 Hz
Eagle	CCD	M	Area array	2048 × 2048, 1024 × 1024, 2048 × 512	NIR, UV, VIS, X-ray	Camera Link	—	7 Hz
Owl 320 HS	InGaAs	M	Area array	320 × 256	Hyperspectral, SWIR, VIS	Camera Link	—	349 Hz
Ninox Ultra 640 SWIR	InGaAs	M	Area array	640 × 512	NIR, SWIR, VIS	Camera Link	—	300 Hz
RDI Technologies/Fastec Imaging Corp San Diego, CA, USA; 858-592-2342; www.fastecimaging.com ; sales.fastec@rditechnologies.com								
HS7 High-Speed Camera	CMOS	C+M	Area array	1920 × 1080	VIS	Digital I/O, Ethernet, 2.5GigE, USB 3.2, USB4, TB4	2500 (10 bits)	6180 MHz
HS5 High-Speed Camera	CMOS	C+M	Area array	2560 × 2048	VIS	Digital I/O, Ethernet, 2.5GigE, USB 3.2, USB4, TB5	253 (12 bits)	1898 MHz

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
RDI Technologies/Fastec Imaging Corp San Diego, CA, USA; 858-592-2342; www.fastecimaging.com; sales.fastec@rditechnologies.com								
TS5 Handheld High-Speed Camera	CMOS	C+M	Area array	2560 × 2048	VIS	Digital I/O, Ethernet, GigE, USB 1.0/2.0	253	1325 MHz
Fastec IL5	CMOS	C+M	Area array	2560 × 2048	VIS	Digital I/O, Ethernet, GigE, USB 1.0/2.0	253	1325 MHz
Saber1 Technologies LLC Lowell, MA, USA; 978-244-0490; www.saber1.com; shaun@saber1.com								
BVS-CA-GT1	IR	M	Area array	2856 × 2848	SWIR	10 GigE	127–194 dependent on bit depth	—
IP67-C5311	CMOS	C+M	Area array	5328 × 3040	VIS	GigE	7.4	—
CB500MG-CM	CMOS	C+M	Area array	7920 × 6004	VIS	PCIe	30	—
ORX-10G-310S9C	CMOS	C+M	Area array	6464 × 4852	VIS	10 GigE, CoaXPress	26	—
Iron 661	CMOS	C+M	Area array	13,400 × 9528	VIS	GigE	22	—
Schäfter+Kirchhoff GmbH Hamburg, Germany; 49-40-853-997-0; www.sukhamburg.com; info@sukhamburg.de								
SK4k-U3DR7C	CMOS	C	Line scan	4096 × 2 Bayer Pattern	VIS	USB3	—	43.4 kHz
SK8k-U3DR4	CMOS	M	Line scan	8192 × 1	VIS	USB3	—	43.4 kHz
SK2048_HA	CCD	M	Line scan	2048 × 1	VIS	USB3, GigE Vision, Camera Link	—	52.63 kHz
SK2048U3HU	CMOS	M	Line scan	2048 × 1	VIS	USB3	—	7.14 kHz
SK4096U3HW	CMOS	M	Line scan	4096 × 1	VIS	USB3	—	2.38 kHz
SK2048U3JR	CCD	M	Line scan	2048 × 1	VIS	USB3	—	4.69 kHz
SK1024_SH	CCD	M	Line scan	1024 × 1	VIS	USB3, GigE Vision, Camera Link	—	27 kHz
SK2048_SH	CCD	M	Line scan	2048 × 1	VIS	USB3, GigE Vision, Camera Link	—	14 kHz
SK22368GTFC-4L	CCD	C	Line scan	5400 × 3 RGB	VIS	GigE	—	5.1 kHz
Shenzhen SinceVision Technology Co., Ltd. Shenzhen, Guangdong, China; 86-1894-8315943; www.sincevision.com; pujan@cnszn.com								
SH6-2101 High-Speed Camera	CMOS	C+M	Area array	3508 × 2480	VIS	10 GigE	1000	—
SH6-116 High-Speed Camera	CMOS	C+M	Area array	3508 × 2480	VIS	10 GigE	15,800	—
SH3-502 High-Speed Camera	CMOS	C+M	Area array	3508 × 2480	VIS	10 GigE	2000	—
SH3-108 High-Speed Camera	CMOS	C+M	Area array	3508 × 2480	VIS	10 GigE	8000	—
SH2-203 High-Speed Camera	CMOS	C+M	Area array	2048 × 2048	VIS	10 GigE	3200	—
SICK Inc Bloomington, MN, USA; 952-941-6780; www.sickusa.com; info@sick.com								
InspectorP61x	2D	M	Area array	1.2 MPixels	NIR, VIS	Serial, Ethernet, Fieldbus	≤70	—
InspectorP62x	2D	M	Area array	1.3 MPixels	NIR, VIS	Serial, Ethernet, Fieldbus	≤70	—
InspectorP63x	2D	M	Area array	1.3–1.9 MPixels	NIR, VIS	Serial, Ethernet, Fieldbus	≤70	—
Inspector83x	2D	C	Area array	1.3–5.1 MPixels	NIR, VIS	Serial, Ethernet, Fieldbus	≤70	—
Inspector85x	2D	M	Area array	5–12 MPixels	NIR, VIS	Serial, Ethernet, Fieldbus	≤70	—
picoCam2	2D	C	Streaming	1.58–5.01 Mpixels	NIR, VIS	Ethernet, GigEvision	≤70	—
midiCam2	2D	C	Streaming	1.58–12.29 MPixels	NIR, VIS	Ethernet, GigEvision	≤70	—
TriSpector1000	3D	M	Line scan	1536 datapoint/profile	—	Serial, Ethernet	—	—

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
SICK Inc Bloomington, MN, USA; 952-941-6780; www.sickusa.com; info@sick.com								
Ranger3	3D	M	Line scan	3202, 560 x 832 px 0 datapoint/profile	—	Ethernet, GigEvision	—	—
Ruler3000	3D	M	Line scan	3202, 560 x 832 px 0 datapoint/profile	—	Ethernet, GigEvision	—	—
Visionary-S	3D	M	Line scan	640 x 512	—	Ethernet	≤30	—
Visionary-T Mini	3D	C	Line scan	512 x 424	—	Ethernet	≤30	—
Visionary-B Two	3D	C	Line scan	1024 x 576	—	Ethernet, GigEvision	≤30	—
Sony Europe, Image Sensing Solutions Weybridge, Surrey, UK; 44-1932-817-494; www.image-sensing-solutions.eu; matthew.swinney@eu.sony.com								
XCG-CP510	CMOS	M	Area array	2448 x 2048	VIS	GigE	23	—
XCU-CG160	CMOS	C+M	Area array	1456 x 1088	VIS	USB3	100	—
XCL-CG510	CMOS	C+M	Area array	2448 x 2048	VIS	Camera Link, Camera Link Extended-Full, Camera Link Extended, Camera Link Full	35	—
XCG-CG160	CMOS	C+M	Area array	1456 x 1088	VIS	GigE	70	—
FCB-ER8550	CMOS	C	Area array	2688 x 1512	VIS	HDMI 1.4b	≤60	—
FCB-EV9520L	CMOS	C	Area array	1920 x 1080	VIS	LVDS	60	—
FCB-EW9500H	CMOS	C	Area array	2688 x 1512	VIS	HDMI	60	—
FCB-EV9500L	CMOS	C	Area array	1920 x 1080	VIS	LVDS	60	—
FCB-EV9500M	CMOS	C	Area array	1920 x 1080	VIS	MIPI	60	—
FCB-ER9500	CMOS	C	Area array	2688 x 1512	VIS	HDMI 1.4b	60	—
SPECIM Spectral Imaging Ltd Oulu, Finland; 358-10-4244-400; www.specim.com; info@specim.com								
Specim FX10	CMOS	M	Line scan	1024 x 224	Hyperspectral, NIR, VIS	Camera Link, GigE	330 (full), 9900 (1 band)	—
Specim FX17	InGaAs	M	Line scan	640 x 224	Hyperspectral, NIR	Camera Link, GigE	670 (full), 15,000 (4 bands)	—
Specim FX50	InSb	M	Line scan	640 x 154	MWIR	GigE	377	—
SWIR	MCT	M	Line scan	384 x 288	Hyperspectral, SWIR	Camera Link	450	—
Specim GX17	InGaAs	M	Line scan	480 x 164	Hyperspectral, NIR	Camera Link	800 (full)	—
SVS-Vistek GmbH Gilching, Germany; 49-8105-3987-60; www.svs-vistek.com; info@svs-vistek.com								
EXO Series	CMOS	C+M	Area array	≤6464 x 4852	VIS	Camera Link, GigE, USB3	≤105/79/160	—
EXO TRACER Series	CMOS	C+M	Area array	≤5496 x 3672	VIS	GigE, USB3	≤10/22	—
EXO Polarized Series	CMOS	M	Area array	≤4096 x 3000	—	GigE, USB3	≤24.5/75	—
EXO SWIR Series	CMOS	M	Area array	≤1280 x 1024	SWIR	GigE, USB3	≤260/125.4	—
FXO Series	CMOS	C+M	Area array	≤5328 x 4608	VIS	CoaXPress-12, 10GigE, 25GigE	≤671/124/671	—
FXO SWIR Series	CMOS	M	Area array	2560 x 2048	SWIR	CoaXPress-12, 10GigE	134/173.4	—
fxo487 (UV)	CMOS	M	Area array	2848 x 2848	UV	CoaXPress-12, 10GigE	≤195/87	—
HR Series	CMOS	C+M	Area array	13,272 x 9176	VIS	Camera Link, CoaXPress-6, CoaXPress-12, 10GigE	≤31.8/81/ 71/56.4	—
SHR Series	CMOS	C+M	Area array	≤19,200 x 12,800	VIS	CoaXPress-6, CoaXPress-12, 10GigE	≤8.7/20.3/8.7	—

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SWIR Vision Systems Inc Durham, NC, USA; 919-248-0032; www.swirvisionsystems.com ; sales@swirvisionsystems.com								
Acuros CQD 1280 eSWIR Camera	CQD	M	Area array	1280 × 1024	IR, Multispectral, NIR, SWIR, VIS	GigE, USB3	90	—
Acuros CQD 1920 eSWIR Camera	CQD	M	Area array	1920 × 1080	IR, Multispectral, NIR, SWIR, VIS	GigE, USB3	60	—
Acuros CQD 640 SWIR Camera	CQD	M	Area array	640 × 512	IR, Multispectral, NIR, SWIR, VIS	GigE, USB3	280	—
Acuros CQD 1280 SWIR Camera	CQD	M	Area array	1280 × 1024	IR, Multispectral, NIR, SWIR, VIS	GigE, USB3	90	—
Acuros CQD 1920 SWIR Camera	CQD	M	Area array	1920 × 1080	IR, Multispectral, NIR, SWIR, VIS	GigE, USB3	60	—
Systematic Vision Corp Ashland, MA, USA; 508-532-1116; www.systematicvision.com ; bill@systematicvision.com								
SVS-Vistek FXO Series	CMOS	C+M	Area array	5–24 MPixels	NIR, VIS	CoaXPress 2.0, 10 GigE	259	—
Princeton Infrared 1280MVCam	InGaAs	M	Area array	1280 × 1024	NIR, SWIR, VIS	Camera Link	100	—
Photonfocus MV8-D8424-G01-GT	CMOS	C+M	Area array	8424 × 6032	VIS	10GigE	24	—
Photonfocus MV4 Series	CMOS	C+M	Area array	1.3–65 MPixels	NIR, UV, VIS	GigE, 10GigE	80,000	—
Photonfocus MV3 Series	CMOS	C+M	Area array	0.1–0.3 MPixels	NIR, UV, VIS	Camera Link, GigE	344	—
Photonfocus MV2 Series	CMOS	C+M	Area array	1.3–5 MPixels	Multispectral, NIR, VIS	GigE	18,540	—
Mikrotron EoSens 2.0CXP2	CMOS	C+M	Area array	1920 × 1080	VIS	CoaXPress 2.0	2220	—
Mikrotron EoSens 1.1CXP2	CMOS	C+M	Area array	1280 × 864	VIS	CoaXPress 2.0	3660	—
JAI FSFE-3200D-10GE Flex-Eye	CMOS	C+M	Area array	2048 × 1536	Multispectral, NIR, VIS	10GigE	123	—
JAI FSFE-1600T-10GE Flex-Eye	CMOS	C+M	Area array	1440 × 1080	Multispectral, NIR, VIS	10GigE	213	—
JAI SP-45000-CXP4	CMOS	C+M	Area array	8192 × 5460	NIR, VIS	CoaXPress	51	—
JAI GO-X Series	CMOS	C+M	Area array	3.2–45 MPixels	NIR, VIS	CoaXPress, GigE, USB3	162	—
IOI Victorem CX Series	CMOS	C+M	Area array	0.4–26.2 MPixels	VIS	CoaXPress	523	—
Emergent Vision HZ-100-G	CMOS	C+M	Area array	11,276 × 9200	VIS	100GigE	30	—
Emergent Vision HZ-65000-G	CMOS	C+M	Area array	9344 × 7000	VIS	100GigE	71	—
Emergent Vision HB-25000-SB	CMOS	C+M	Area array	5320 × 4600	VIS	25GigE	98	—
Allied Vision Goldeye G/CL-034 TEC1	InGaAs	M	Area array	636 × 508	SWIR	Camera Link, GigE	303	—
Allied Vision Goldeye G/CL-030 TEC1	InGaAs	M	Area array	1280 × 1024	NIR, SWIR, VIS	Camera Link, GigE	100	—
Allied Vision Alvium 1800 U/C-130 VSWIR	InGaAs	M	Area array	1296 × 1032	NIR, SWIR, VIS	USB3, MIPI CSI-2	130	—
Allied Vision Alvium G5-130 VSWIR	InGaAs	M	Area array	1296 × 1032	NIR, SWIR, VIS	5GigE	130	—

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CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
Teledyne DALSA Billerica, MA, USA; 978-670-2002; www.teledynedalsa.com ; tdi_sales.americas@teledyne.com								
BOA2 XA Series	CMOS	M	Area array	1664 × 1216, 1920 × 1440, 2560 × 2048	VIS	Digital I/O, Ethernet, RS-232	80, 60, 40	—
BOA Spot Series	CMOS	C+M	Area array	640 × 480, 1280 × 960	VIS	Digital I/O, Ethernet, RS-232	45, 30	—
BOA3	CMOS	M	Area array	1280 × 960, 2560 × 1936, 4096 × 3072	—	Digital I/O, Ethernet, RS-232	50, 35, 13	—
Teledyne DALSA Waterloo, ON, Canada; 519-886-6000; www.teledynevisionsolutions.com ; tdi_sales.americas@teledyne.com								
Calibr GX	Microbolometer	M	Area array	640 × 480	LWIR	GigE	30, 60	—
MicroCalibr	Microbolometer	M	Area array	640 × 480	LWIR	USB2	60	—
Falcon4-CLHS	CMOS	M	Area array	2240 × 1248, 4480 × 2496, 6144 × 6144, 8192 × 8192	VIS	Camera Link HS	1200, 609, 330, 120, 90	—
Genie Nano-CL	CMOS	C+M	Area array	2448 × 2048, 2464 × 2056, 4112 × 2176, 4096 × 4096, 5112 × 5112	NIR, VIS	Camera Link, Camera Link Full	35,141, 88, 64, 45, 30	—
Genie Nano-CXP	CMOS	C+M	Area array	4096 × 4096, 5120 × 5120, 6144 × 6144, 8192 × 8192	NIR, VIS	CoaXPress	120, 80, 40, 30	—
Genie Nano-1GigE Polarized	CMOS	M	Area array	2448 × 2048	VIS	GigE	57	—
Genie Nano-1GigE	CMOS	C+M	Area array	640 × 480, 728 × 544, 800 × 600, 816 × 624, 1280 × 1024, 1456 × 1088, 1608 × 1104, 1632 × 1248, 1936 × 1216, 2048 × 1536, 2448 × 2048, 2592 × 2048, 4112 × 2176, 4112 × 3012, 4912 × 3684, 4096 × 4096, 5120 × 5120	NIR, VIS	GigE	862, 311, 566, 160, 83, 213, 90, 85, 39, 84, 116, 151, 55, 140, 35, 51, 56, 40, 30, 20, 13, 31, 34.4	—
Genie Nano-5GigE	CMOS	C+M	Area array	2064 × 1544, 2464 × 2056, 4112 × 3008, 4112 × 2176, 4500 × 4500, 5420 × 5420, 8192 × 5420	VIS	5GigE	190, 141, 64, 88, 64, 30, 19	—
Genie Nano-10GigE	CMOS	C+M	Area array	6144 × 6144, 8192 × 8192	VIS	10GigE	18, 13	—
Linea	CMOS	M	Line scan	2048 × 1, 4096 × 1, 8192 × 1, 16,384 × 1	VIS	Camera Link, Camera Link HS, GigE	—	80, 71, 52
Linea Color	CMOS	C	Line scan	2048 × 2, 4096 × 2, 8192 × 2	VIS	Camera Link, GigE	—	48 × 3, 26 × 3
Linea 2	CMOS	C	Line scan	4096 × 3, 4096 × 4	NIR, VIS	5GigE	—	40 × 3, 32 × 4

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Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
Teledyne DALSA Waterloo, ON, Canada; 519-886-6000; www.teledynevisionsolutions.com; tdi_sales.americas@teledyne.com								
Linea HS	CMOS	M	TDI	4096 × 192, 8192 × 192, 13,056 × 192, 16,384 × 128, 16,384 × 192, 32,768 × 64	NIR, VIS	Camera Link HS	—	400
Linea HS2	CMOS	M	TDI	16,384 × 288	NIR, VIS	CameraLink HS	—	1000
Linea HS Color	CMOS	C	TDI	16,384 × 256	NIR, VIS	Camera Link HS	—	100 × 3
Linea HS Multifield	CMOS	C	TDI	16,384 × 256	NIR, VIS	Camera Link HS	—	133 × 3
Linea ML	CMOS	M	Line scan	8192 × 4, 16,384 × 4	NIR, VIS	Camera Link HS	—	300
Linea ML Color	CMOS	C	Line scan	8192 × 3, 16,384 × 3	VIS	Camera Link HS	—	100 × 3
Linea ML Multispectral	CMOS	C	Line scan	8192 × 4	NIR, VIS	Camera Link HS	—	75 × 4
Linea SWIR	InGaAs	M	Line scan	1024 × 1, 512 × 1	SWIR	GigE	—	40
Linea Lite	CMOS	M	Line scan	2048 × 2, 4096 × 2, 8192 × 2	VIS	Camera Link, GigE	—	120, 50
Linea Lite Color	CMOS	C	Line scan	2048 × 2, 4096 × 2	VIS	Camera Link, GigE	—	40 × 3, 25 × 3
Piranha4 Series	CMOS	M	Line scan	2048 × 2, 4096 × 2, 8192 × 2	VIS	Camera Link	—	200
Piranha4 Color	CMOS	C	Line scan	2048 × 3, 4096 × 3, 8192 × 3	VIS	Camera Link	—	70 × 3
AxCIS	CMOS	M	Line scan	14,304 × 2, 28,608 × 2	NIR, VIS	Camera Link HS	—	120
AxCIS Color	CMOS	C	Line scan	14,304 × 3, 28,608 × 3	NIR, VIS	Camera Link HS	—	150, 180
Teledyne e2v , a business unit of Teledyne Digital Imaging US Inc Chestnut Ridge, NJ, USA; 845-425-2000; imaging.teledyne-e2v.com; e2v-imaging.us@teledyne.com								
OctoPlus OCT	CMOS	M	Line scan	2048 × 1	NIR	Camera Link, USB3	—	20, 80, 130, 250 kHz
Teledyne FLIR Richmond, BC, Canada; 604-242-9937; www.flir.com/mv; mv-sales@flir.com								
Blackfly S USB	CMOS	C+M	Area array	0.4–24.5 MPixels	VIS	USB3	15–522	—
Blackfly S GigE	CMOS	C+M	Area array	0.4–24.5 MPixels	VIS	GigE	5–291	—
Blackfly S Board Level	CMOS	C+M	Area array	1.6–20 MPixels	VIS	USB3, GigE	10–226	—
Forge 5GigE	CMOS	C+M	Area array	5–24.5 MPixels	VIS	5GigE	25–122	—
Forge 1GigE SWIR	InGaAs	—	Area array	1.3 MPixels	SWIR, VIS	GigE	1–93	—
Bumblebee X 5GigE	CMOS	C	Stereo	3 MP	VIS	5GigE	5–38.5	—
Dragonfly S	CMOS	C+M	Area array	5 MP	VIS	USB3	1.7–49	—
Forge 1GigE IP67	CMOS	C+M	Area array	1.2–12 MPixels	VIS	GigE	—	—
Oryx 10GigE	CMOS	C+M	Area array	3.2–31 MPixels	VIS	10GigE	26–216	—
Ladybug6	CMOS	C	Spherical	72 MPixels	VIS	USB3	15	—
Ladybug5+	CMOS	C	Spherical	30 MPixels	VIS	USB3	30	—
Firefly S	CMOS	C+M	Area array	0.4–1.6 MPixels	VIS	USB3	60–121	—
Teledyne FLIR LLC Wilsonville, OR, USA; 877-773-3547; www.flir.com; sales@flir.com								
FLIR A6260 SWIR	InGaAs	C+M	Area array	640 × 512	SWIR	GigE, SDI	0.0015–125 Hz (180 Hz burst)	125 Hz (full), 25,614 Hz (max)
FLIR A6750 Series	InSb or Strained-Layer Superlattice	C+M	Area array	640 × 512	LWIR, MWIR	GigE, SDI	0.0015–125 Hz	125 Hz (full), 4175 Hz (max)
FLIR A8580 Series	InSb or Strained-Layer Superlattice	C+M	Area array	1280 × 1024	LWIR, MWIR	GigE, CoaXPress, SDI	0.0015–45 Hz (GigE), 60 Hz (CXP)	60 Hz (full), 3709 Hz (max)

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
Teledyne FLIR LLC Wilsonville, OR, USA; 877-773-3547; www.flir.com ; sales@flir.com								
FLIR X6980 Series	InSb or Strained-Layer Superlattice	C+M	Area array	640 × 512	LWIR, MWIR	GigE, CoaXPress, Camera Link, SDI, HDMI	0.0015–1004 Hz	1004 Hz (full), 29,133 Hz (max)
FLIR X8580 Series	InSb or Strained-Layer Superlattice	C+M	Area array	1280 × 1024	LWIR, MWIR	GigE, CoaXPress, Camera Link, SDI, HDMI	~0.5–181 Hz	181 Hz (full), 6026 Hz (max)
FLIR Ax8	Microbolometer	C+M	Area array	80 × 60	LWIR	Ethernet	9 Hz	9 Hz
FLIR A400 Smart Sensor	Microbolometer	C+M	Area array	320 × 240	LWIR	Ethernet, Wi-Fi	30	30 Hz
FLIR A400 Image Streaming	Microbolometer	C+M	Area array	320 × 240	LWIR	GigE, Wi-Fi	30	30 Hz
FLIR A500 Smart Sensor	Microbolometer	C+M	Area array	464 × 348	LWIR	Ethernet, Wi-Fi	30	30 Hz
FLIR A500 Image Streaming	Microbolometer	C+M	Area array	464 × 348	LWIR	GigE, Wi-Fi	30	30 Hz
FLIR A700 Smart Sensor	Microbolometer	C+M	Area array	640 × 480	LWIR	Ethernet, Wi-Fi	30	30 Hz
FLIR A700 Image Streaming	Microbolometer	C+M	Area array	640 × 480	LWIR	GigE, Wi-Fi	30	30 Hz
FLIR Boson+	Microbolometer	M	Area array	640 × 512, 320 × 256	LWIR	USB, CMOS	60, 30	60, 30
FLIR Boson	Microbolometer	M	Area array	640 × 512, 320 × 256	LWIR	USB, CMOS	60, 30, 9	60, 30, 9
FLIR Lepton	Microbolometer	M	Area array	160 × 120, 80 × 60	LWIR	SPI	9	9
Teledyne Lumenera Ottawa, ON, Canada; 613-736-4077; www.teledynelumenera.com ; lumenera.info@teledyne.com								
Teledyne Lumenera Lt1610 / Lt1610B	CMOS	C+M	Area array	1608 × 1104	VIS	USB3	96	—
Teledyne Lumenera Lt1630 / Lt1630B	CMOS	C+M	Area array	1632 × 1248	VIS	USB3	86	—
Teledyne Lumenera Lt1900 / Lt1900B	CMOS	C	Area array	1944 × 1096	VIS	USB3	60	—
Teledyne Lumenera Lt1950 / Lt1950B	CMOS	C+M	Area array	1936 × 1216	VIS	USB3	162	—
Teledyne Lumenera Lt2020 / Lt2020B	CMOS	C+M	Area array	2064 × 1544	VIS	USB3	55	—
Teledyne Lumenera Lt2420 / Lt2420B	CMOS	C+M	Area array	2464 × 2056	VIS	USB3	35	—
Teledyne Lumenera Lt3200 / Lt3200B	CMOS	C+M	Area array	3216 × 2208	VIS	USB3	50	—
Teledyne Lumenera Lt3840 / Lt3840B	CMOS	C+M	Area array	3840 × 2160	VIS	USB3	44	—
Teledyne Lumenera Lt4030 / Lt4030B	CMOS	C+M	Area array	4112 × 2176	VIS	USB3	31	—
Teledyne Lumenera Lt4020 / Lt4020B	CMOS	C+M	Area array	4112 × 3008	VIS	USB3	22	—
Teledyne Lumenera Lt5470	CMOS	C+M	Area array	5472 × 3084	VIS	USB3	32	—
Teledyne Lumenera Lt4430	CMOS	C+M	Area array	4432 × 4436	VIS	USB3	28	—
Teledyne Lumenera Lt5500	CMOS	C+M	Area array	5472 × 3648	VIS	USB3	19	—
Teledyne Lumenera Lt4510	CMOS	M	Area array	4152 × 4152	VIS	USB3	26	—
Teledyne Lumenera Lt6480	CMOS	C+M	Area array	6480 × 4860	VIS	USB3	17	—
The Imaging Source LLC Charlotte, NC, USA; 704-370-0110; www.theimagingsource.com ; info@theimagingsource.com								
38 Series	CMOS	C+M	Area array	4096 × 2160–5320 × 4600	NIR, VIS	GigE, USB3, Digital I/O	≤42	—
37 Series (housed & board-level)	CMOS	C+M	Area array	720 × 540–4000 × 3000	NIR, VIS	USB3, Digital I/O	≤539	—
33 Series	CMOS	C+M	Area array	720 × 540–5472 × 3648	NIR, VIS	GigE, USB3, Digital I/O	≤539	—

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
The Imaging Source LLC Charlotte, NC, USA; 704-370-0110; www.theimagingsource.com ; info@theimagingsource.com								
36 Series (Embedded)	CMOS	C+M	Area array	720 × 540– 4000 × 1944	NIR, VIS	MIPI, FPD-Link III	≤120	—
DxK 39GX265-Z20	CMOS	C+M	Area array	2048 × 1536	NIR, VIS	GigE	≤36	—
Thermo Fisher Scientific Liverpool, NY, USA; 315-451-9410; www.thermofisher.com/cidtec ; sales.cidtec@thermofisher.com								
MegaRAD3	CID	C+M	Area array	730 × 512	UV, VIS	USB 1.0/2.0	30	—
SpectraCAM XDR	CID	M	Area array	2048 × 2048	UV, VIS	GigE	0.5	—
Toshiba Teli Corp Tokyo, Japan; 81-42-589-8771; www.toshiba-teli.co.jp/en/ ; teli-global@toshiba-teli.co.jp								
EX670AM Series EX370BMG-X	CMOS	C+M	Area array	8192 × 8192, 6144 × 6144	VIS	CoaXPress2 (CXP-12 Quad)	64.5, 120	4329, 4530 MB/s
DDU2607M series DDU1607M Series DDU1207M series	CMOS	C+M	Area array	5120 × 5120, 4000 × 4000, 4096 × 3000	VIS	Dual USB3	28.3, 47, 62	742, 752, 750 MB/s
DU1207M Series DU657M Series	CMOS	C+M	Area array	4096 × 3000, 2560 × 2560	VIS	USB3	32, 55	393, 360 MB/s
BU2409M Series BU1206M Series BU805M Series BU502M Series	CMOS	C+M	Area array	5320 × 4600, 4096 × 3000, 2840 × 2840, 2448 × 2048	VIS	USB3	15, 31, 46, 75	367, 393, 371, 376 MB/s
BU1207M Series BU505M Series BU302M Series	CMOS	C+M	Area array	4096 × 3000, 2448 × 2048, 2048 × 1536	VIS	USB3	31, 75, 120	393, 376, 377 MB/s
BU406M Series BU205M	CMOS	C+M	Area array	2048 × 2048, 2048 × 1088	NIR, VIS	USB3	90, 170	377, 379 MB/s
BU238M Series	CMOS	C+M	Area array	1920 × 1200	VIS	USB3	165	380 MB/s
BU160M Series BU040M Series	CMOS	C+M	Area array	1440 × 1080, 720 × 540	VIS	USB3	240, 523	373, 203 MB/s
BU132M CSCS60BM18	CMOS	M	Area array	1280 × 1024	VIS	USB3, PoCL (Base)	61	80 MB/s
BU2006M Series BU1203MC Series BU602M Series	CMOS	C+M	Area array	5472 × 3648, 4000 × 3000, 3072 × 2048	VIS	USB3	19, 30, 60	379, 360, 384 MB/s
BG505LM Series BG302LM Series	CMOS	C+M	Area array	2448 × 2048, 2048 × 1536	VIS	GigE	22, 36	110, 113 MB/s
BG160M Series BG040M Series	CMOS	C+M	Area array	1440 × 1080, 720 × 540	VIS	GigE	72, 291	112, 113 MB/s
BC505LM Series BC302LM Series	CMOS	C+M	Area array	2448 × 2048, 2048 × 1536	VIS	Camera Link, PoCL (Base 3taps)	36, 56	180, 177 MB/s
BC160M Series BC040M Series	CMOS	C+M	Area array	1440 × 1080, 720 × 540	VIS	PoCL (Base 3taps)	148, 523	230, 203 MB/s
CSC6M100CMP11 CSC6M100BMP11	CMOS	C+M	Area array	2560 × 2560	VIS	Camera Link, PoCL (Full)	99.2	650 MB/s
Videology Industrial-Grade Cameras Mansfield, MA, USA; 401-949-5332; www.videologyinc.com ; sales@videologyinc.com								
SCAiLX 10-40X ZoomBlock Camera	CMOS	C+M	Area array	1920 × 1080	VIS	Ethernet	60, 50, 30, 25	—
25Z2.4-36X Global Shutter 23x Autofocus Zoom Block Camera	CMOS	C+M	Area array	1936 × 1226	VIS	EX-SDI, LVDS, CVBS	60, 50, 30, 25	—
24C46X-2 Board Camera	CMOS	C+M	Area array	1920 × 1080	—	CoaXPress, Twisted Pair	30, 25	—
24M8.29NIP Board Camera	CMOS	C+M	Area array	3840 × 1260	VIS	Ethernet	—	30
24M2.17IP IP Camera Board	CMOS	C+M	Area array	1920 × 1080	VIS	Ethernet	30	—
Vieworks Co Ltd Anyang-si, Gyeonggi-do, South Korea; 82-70-7011-6161; www.vieworks.com ; vision@vieworks.com								
VC Series	CMOS	C+M	Area array	2048 × 1088– 14,192 × 10,640	VIS	Camera Link, CoaXPress, CoaXPress 2.0, 10GigE, CoaXPress-over-Fiber	454	—

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
Vieworks Co Ltd Anyang-si, Gyeonggi-do, South Korea; 82-70-7011-6161; www.vieworks.com ; vision@vieworks.com								
VP Series	CMOS	C+M	Area array	5120 × 5120– 24,000 × 12,000	VIS	Camera Link, CoaXPress, CoaXPress 2.0	35.4	—
VN Series	CMOS	C+M	Area array	15,360 × 15,360– 23,760 × 18,012	VIS	CoaXPress	72	—
VNP Series	CMOS	C+M	Area array	23,760 × 18,012– 48,000 × 24,000	VIS	CoaXPress, CoaXPress 2.0	30	—
VX Series	CMOS	M	Area array	5120 × 5120	VIS	GigE	4.7	—
VQ Series	CMOS	C+M	Area array	728 × 544– 5472 × 3648	VIS	GigE	291	—
VZ Series	CMOS	C+M	Area array	720 × 540– 5496 × 3672	VIS	GigE, 2.5GigE, USB	528	—
VT Series	—	M	TDI	3200 × 32– 23,360 × 256	VIS	Camera Link, CoaXPress, CoaXPress 2.0, GigE	—	300 kHz
VT Sense Series	—	M	TDI	4640 × 256– 16,384 × 256	VIS	CoaXPress, CoaXPress 2.0, CoaXPress-over-Fiber	—	543 kHz
VTC Series	—	C	TDI	2160 × 80	VIS	Camera Link, CoaXPress, GigE	—	140 kHz
VL Series	—	C+M	Line scan	2048 × 2– 16,384 × 2	VIS	Camera Link, CoaXPress 2.0, 5GigE, 10GigE,	—	200 kHz
Vision Components GmbH Ettlingen, Germany; 603-598-2588; www.vision-components.com ; sales@vision-components.com								
MIPI Camera Modules	CMOS	C+M	Area array	≤5496 × 3672	NIR, VIS	MIPI CSI-2 + trigger	≤530	6 Gbit
VCSBC Nano Z 00xx	CMOS	C+M	Area array	1600 × 1200	NIR, VIS	Digital I/O, Ethernet, GigE, RS-232	60–230	—
VC nano Z-LED Series	CMOS	C+M	Area array	≤1920 × 1200	NIR, VIS	Digital I/O, Ethernet, RS-422/LVDS	≤174	—
VC pro Z Series SoC Based Smart Camera Family	CMOS	C+M	Area array	≤1920 × 1200	NIR, VIS	Digital I/O, Ethernet, RS-232	≤174	—
Vision Research Wayne, NJ, USA; 973-692-4041; www.phantomhighspeed.com ; phantom.marketing@ametek.com								
Phantom TMX 7510 UV	CMOS	C+M	Area array	1280 × 800	NIR, UV, VIS	Digital I/O, Ethernet, 10 GigE	76,000	—
Phantom S711	CMOS	C+M	Area array	1280 × 800	NIR, VIS	CoaXPress 2.0, Digital I/O	7360	—
Phantom Miro C321	CMOS	C+M	Area array	1920 × 1080	NIR, VIS	Digital I/O, Ethernet, 16GB RAM	1480	—
Xenics nv Leuven, Belgium; 32-16-38-99-00; www.exosens.com/brands/xenics ; advancedimaging@exosens.com								
Manx series	InGaAs	M	Line scan	2048 × 1	SWIR	CoaXPress	256	—
Cheetah+ series	InGaAs	M	Area array	640 × 512	SWIR	CoaXPress	1700	—
Wildcat+ series	InGaAs	M	Area array	640 × 512	SWIR	Camera Link, USB3	220	—
Dione series	Microbolometer	M	Area array	320 × 240, 640 × 480, 1024 × 786, 1280 × 1024	LWIR	16bit DV/MIPI CSI-2/USB/UVC	60	—
Crius series	Microbolometer	M	Area array	640 × 480, 1280 × 1024	LWIR	CL/SDI/ DF40/MIPI CSI-2	60	—
XIMEA Münster, NRW, Germany; 49-251-202-408-0; www.ximea.com ; info@ximea.com								
High-Speed Cameras with up to 3600 Fps	CMOS	C+M	Area array	1280 × 864	VIS	Digital I/O, Fiberoptic, PCIe, Proprietary	3500+	64 Gbps
Multiple Camera Platform	CMOS	C+M	Area array	1936 × 1216, 2064 × 1544, 2464 × 2056, 4112 × 2176, 4112 × 3008	NIR, VIS	PCIe, Proprietary, USB3	340	—

CAMERA MANUFACTURERS

Product	Sensor type	Color/ Mono	Scan type	Image format	Spectrum digitized	Interface	Frame/s	Data rate
XIMEA Münster, NRW, Germany; 49-251-202-408-0; www.ximea.com ; info@ximea.com								
Embedded Vision Cameras	CMOS	C+M	Area array	1936 × 1216, 2064 × 1544, 2464 × 2056, 4112 × 2176, 4112 × 3008	Multispectral, NIR, VIS	Digital I/O, PCIe, Proprietary, USB3	166, 218, 165, 95, 69	20 Gbps
xiMU, MU196 - Micro 19.6 Mpix, 5k Camera - USB 3.1 CMOS	CMOS	C+M	Area array	5120 × 3840	NIR, VIS	Digital I/O, USB3	30	5 Gbps
xiMU, MU050 - Micro 5.0 Mpix, 2k Camera - USB 3.1 CMOS	CMOS	C+M	Area array	2608 × 1964	NIR, VIS	Digital I/O, USB3	14.5	5 Gbps
xiMU, MU051 - Micro 5.1 Mpix, 2k Camera - USB 3.1 CMOS	CMOS	C+M	Area array	2472 × 2064	NIR, VIS	Digital I/O, USB3	49.5	5 Gbps
xiC, 2.3-24.5 Mpix Camera - USB 3.1 CMOS	CMOS	C+M	Area array	1936 × 1216, 2064 × 1544, 2464 × 2056, 4112 × 2176, 4112 × 3008	NIR, VIS	Digital I/O, USB3	165, 122, 76, 43, 31	5 Gbps
xiX, small 2.3-24.5 Mpix Camera - PCIe	CMOS	C+M	Area array	1936 × 1216, 2064 × 1544, 2464 × 2056, 4112 × 2176, 4112 × 3008	Multispectral, NIR, VIS	Digital I/O, PCIe, Proprietary, USB3	166, 218, 165, 95, 69	20 Gbps
xiX, large with detached sensor heads, 16-151Mpix Camera - PCIe	CMOS	C+M	Area array	1936 × 1216, 2064 × 1544, 2464 × 2056, 4112 × 2176, 4112 × 3008	Multispectral, NIR, VIS	Digital I/O, PCIe, Proprietary, USB3	166, 218, 165, 95, 69	20 Gbps
xiJ/xiRAY, Scientific sCMOS Cameras for (soft-) Xray, XUV, UV, VIS - cooled, high resolution	CMOS	C+M	Area array	2048 × 2048, 3296 × 2472, 4864 × 3232, 6576 × 4384	UV, VIS, X-ray	PCIe, Proprietary, USB3, Digital I/O, FireWire	<82	<20 Gbps
xiSPEC, Hyperspectral USB3 Camera	Multispectral	C	Line scan/ Area array	2048 × 8, 2048 × 5, 512 × 272, 409 × 217	Hyperspectral, NIR, VIS	USB3	170 hypercubes	5 Gbps
Zebra Technologies Lincolnshire, IL, USA; www.zebra.com ; laurie.partington@zebra.com								
CV60	CMOS	C+M	Area array	≤4096 × 3000	NIR, VIS	Ethernet, RS-232, USB3, GigE	≤50	—
VS70	CMOS	M	Area array	≤2592 × 1952	—	Ethernet, RS-232, USB3	≤60	—
VS40	CMOS	M	Area array	≤2592 × 1952	—	Ethernet, RS-232	≤60	—
VS20	CMOS	M	Area array	≤1280 × 800	—	Ethernet, GigE	≤60	—
Iris GTX	CMOS	C+M	Area array	≤4000 × 4000	—	—	≤70	—
Zivid Oslo, Norway; 47-21022472; www.zivid.com ; info@zivid.com								
Zivid One Plus	3D	C+M	Area array	1920 × 1200	VIS	USB3	10	—
Zivid 2	3D	C+M	Area array	1944 × 1200	VIS	10GigE	10	—
Zivid 2+	3D	C+M	Area array	2448 × 2048	VIS	10GigE	10	—

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