

FAST-IR CAMERAS.

The FAST-IR Camera line is the fastest infrared camera line available. Ideal to analyze dynamic events, the FAST-IR infrared cameras allow high-speed thermal imaging with an impressive temporal resolution. These high-performance infrared cameras are also extremely sensitive, enabling the detection of challenging targets. They self-adjust to rapid temperature changes and have enhanced identification capabilities using spectral characteristics.

Common Features.

- Real-time data output: RAW, NUC, temperature, radiance
- Camera control: GigE, Camera Link™, RS232
- Data transfer: GigE (frame rate limitations may apply), Camera Link™
- Digital video out: HD-SDI
- Scene temperature range (calibration provided with one lens in the list)
- Customer calibration management tools
- Time stamping: IRIG and GPS
- Advanced triggering functionalities
- Motorized filter wheel (4 positions), user removable 25.4-mm diameter filters (optional), up to 2-mm maximum thickness
- Real-time processing (RTP-NUC)
- Real-Time Temperature Calibration (RTTC)
- Real-Time Radiance Calibration (RTRC)
- Telops Automatic Exposure Control (AEC)
- Telops Enhanced High-Dynamic-Range Imaging (EHDMI)



Environment.

- | | |
|---|---|
| <ul style="list-style-type: none"> - IP67 enclosure - Shocks: transport and operational, IEC 60068-2-27 | <ul style="list-style-type: none"> - CE - Vibrations: transport and operational, IEC 60068-2-64 |
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Deliverables.

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| <ul style="list-style-type: none"> - ReveallR suite control acquisition software and post processing software* - Matlab routines - Optical Head - 24 VDC Power supply | <ul style="list-style-type: none"> - Calibration curves for scene temperature range - Transport case - User guide - 3-m GigE cable |
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* ReveallR will be available starting July 2018

FAST-IR M *hd* Series.

	FAST M80hd	FAST M100hd	FAST Shd**
Internal High-Speed Memory	16 Gb, Expandable to 32 Gb*		
Temperature	Operational: -20 °C to +55 °C Storage: -40 °C to +70 °C		
Standard Calibration	0-150°C	0 °C to 150 °C On request : 0 °C to 350 °C	
Detector type	MCT	InSb	T2SL
Spatial Resolution	1280 x 1024 pixels	1280 x 1024 pixels	2048 x 2048
Pitch	8 µm	15 µm	10 µm
Well Depth	5 Me-	5.8 Me-	5 Me-
Spectral Range	3.7 to 5 µm	3 to 5 µm	3 to 5.1 µm
Optical Aperture	F/2.8	F/3	F/3
Typical NETD	20 mK	25 mK	30 mK
Max Frame Rate @ 2048 x 2048	-	-	60 Hz
Max Frame Rate @ 1280 x 1024	59 Hz	105 Hz	Consult Telops
Max Frame Rate @ 1280 x 720	84 Hz	148 Hz	Consult Telops
Max Frame Rate @ 320 x 256	850 Hz	390 Hz	Consult Telops
Max Frame Rate @ 132 x 8	5 300 Hz	2 900 Hz	Consult Telops
Max Frame Rate @ 136 x 8		2 900 Hz	Consult Telops
Max Frame Rate @ 64 x 4	14 000 Hz	-	Consult Telops
Binning Capability	No	No	Consult Telops
P/N #	IRC-HD-MC-SX	IRC-HD-IN	IRC-HD-Mshd
Exportability	Individual export licence: requires EUS	Individual export licence: requires EUS Not in China and Russia	Individual Exportation licence: requires EUS (outside US)

** For FAST Shd lenses, consult Telops

		Standard F/# detector	pitch μm	Microscope x4 F/4	FL					
					Microscope G1 LWD	13 mm F/2.3	25 mm F/2.3	50 mm F/2.3	100 mm F/2.3	200 mm F/2.3
M Series	3 - 5 μm			<i>Consult Telops</i>						
	FAST M3k	2,5	30		IRC-LENS-G1 MW	IRC-LENS-13 MW	IRC-LENS-25 MW	IRC-LENS-50 MW ³	IRC-LENS-100 MW ³	IRC-LENS-200 MW
	FAST M2k	2,5	30		IRC-LENS-G1 MW	IRC-LENS-13 MW	IRC-LENS-25 MW	IRC-LENS-50 MW ³	IRC-LENS-100 MW ³	IRC-LENS-200 MW
	FAST M2kx	2,8	8		IRC-LENS-G1 MW	IRC-LENS-13 MW	IRC-LENS-25 MW	IRC-LENS-50 MW ³	IRC-LENS-100 MW ³	IRC-LENS-200 MW
	FAST M350	3	15	IRC-LENS-X4-MW	IRC-LENS-G1 MW	IRC-LENS-13 MW	IRC-LENS-25 MW	IRC-LENS-50 MW ³	IRC-LENS-100 MW ³	IRC-LENS-200 MW
	FAST M100k	3 or 4	16	IRC-LENS-X4-MW	IRC-LENS-G1 MW	IRC-LENS-13 MW	IRC-LENS-25 MW	IRC-LENS-50 MW ³	IRC-LENS-100 MW ³	IRC-LENS-200 MW
	FAST M200	3	15	IRC-LENS-X4-MW	IRC-LENS-G1 MW	IRC-LENS-13 MW	IRC-LENS-25 MW	IRC-LENS-50 MW ³	IRC-LENS-100 MW ³	IRC-LENS-200 MW
	FAST M1k	3	25			Consult Telops	Consult Telops	Consult Telops	Consult Telops	Consult Telops
	1.5 - 5 μm									
	FAST M3k	2,5	30			IRC-LENS-12 MWE-B	IRC-LENS-25 MWE-B	IRC-LENS-50 MWE-B	IRC-LENS-100 MWE-B	IRC-LENS-200 MWE-B
	FAST M2k	2,5	30			IRC-LENS-12 MWE-B	IRC-LENS-25 MWE-B	IRC-LENS-50 MWE-B	IRC-LENS-100 MWE-B	IRC-LENS-200 MWE-B
	FAST M350	3	15			IRC-LENS-12 MWE-B	IRC-LENS-25 MWE-B	IRC-LENS-50 MWE-B	IRC-LENS-100 MWE-B	IRC-LENS-200 MWE-B
	FAST M200	3	15			IRC-LENS-12 MWE-B	IRC-LENS-25 MWE-B	IRC-LENS-50 MWE-B	IRC-LENS-100 MWE-B	IRC-LENS-200 MWE-B
	FAST M1k	2,5	25			Consult Telops	Consult Telops	IRC-LENS-50 MWE-C ¹	Consult Telops	Consult Telops
L and VL Series	7.7 - 12 μm									
	FAST L100k	2	16			IRC-LENS-13 LW	IRC-LENS-25 LW	IRC-LENS-50 LW ³	IRC-LENS-100 LW ³	IRC-LENS-200 LW
	FAST L230	2	15			IRC-LENS-13 LW	IRC-LENS-25 LW	IRC-LENS-50 LW ³	IRC-LENS-100 LW ³	IRC-LENS-200 LW
	FAST V1k	2	25			IRC-LENS-13 LW	IRC-LENS-25 LW	IRC-LENS-50 LW ³	IRC-LENS-100 LW ³	IRC-LENS-200 LW
	FAST V300	2	30			IRC-LENS-13 LW	IRC-LENS-25 LW	IRC-LENS-50 LW ³	IRC-LENS-100 LW ³	IRC-LENS-200 LW
	FAST V350	2	30			IRC-LENS-13 LW	IRC-LENS-25 LW	IRC-LENS-50 LW ³	IRC-LENS-100 LW ³	IRC-LENS-200 LW
	FAST V100k	2	16			IRC-LENS-13 LW	IRC-LENS-25 LW	IRC-LENS-50 LW ³	IRC-LENS-100 LW ³	IRC-LENS-200 LW
hd Series	3 - 5 μm									
	FAST M80hd	3	10	IRC-LENS-X4-MW	IRC-LENS-G1 MW	IRC-LENS-13 MW	IRC-LENS-25 MW	IRC-LENS-50 MW ³	IRC-LENS-100 MW ³	IRC-LENS-200 MW
	FAST M100hd (with filter wheel)	3	15	Consult Telops		Consult Telops	Consult Telops	Consult Telops	Consult Telops	IRC-LENS-200 MW-B ¹
	FAST M100hd (NO filter wheel)	3	15	IRC-LENS-X4-MW-HD No Filter wheel		IRC-LENS-13 MW-B ¹	IRC-LENS-25 MW-B ¹	IRC-LENS-50 MW-B ¹	IRC-LENS-100 MW-B ¹	IRC-LENS-200 MW-B
	1.5 - 5 μm									
	FAST M100hd	3	15				Consult Telops	IRC-LENS-50 MWE-D ¹	IRC-LENS-50 MWE-D ¹	Consult Telops
Downgraded performances in corners									Legend.	
									¹ Consult Telops.	
									³ IP-67 option available.	