

Ultra High-Speed Series

HIGH-SPEED CAMERA



SH8-120

1280×1024 20000fps

1280×16 80000fps

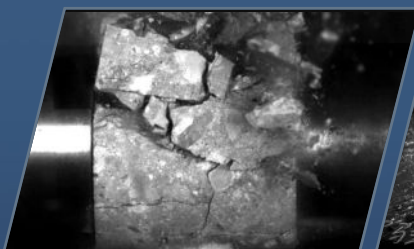
BSI image sensor
Peak quantum efficiency $\geq 85\%$

Supports pixel binning (Binning) to
increase the frame rate fourfold

Support up to 24TB
non-volatile storage

20 μm ultra-large pixel

SH8 series is a star product of SinceVision. It is equipped with a back-illuminated (BSI) image sensor, with a large pixel size of 20 μm , extremely high photosensitive sensitivity and a peak quantum efficiency of 85%. This series of products adopts excellent hardware circuit design and has excellent EMC anti-interference performance. Its built-in super-large non-volatile storage, with a capacity of 8TB, ensures that data will not be lost after power failure. At the same time, the camera integrates an efficient data management system, which can flexibly manage the image data in sections. These characteristics enable SH8 series to bring remarkable technical promotion and support to users in scientific research, aerospace and technology research.



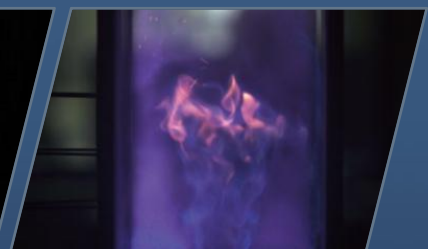
Hopkinson bar impact



Crack extension



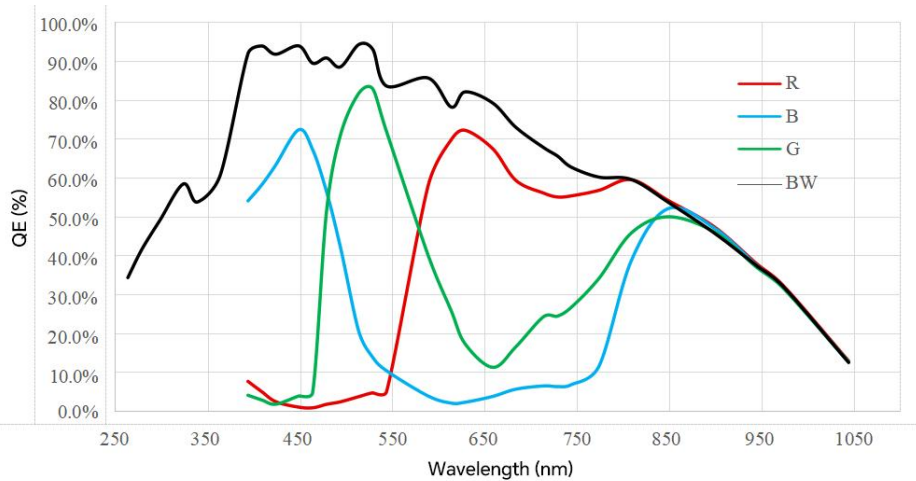
Electric arc motion



Methane combustion

SH8 Hardware I/O Interfaces

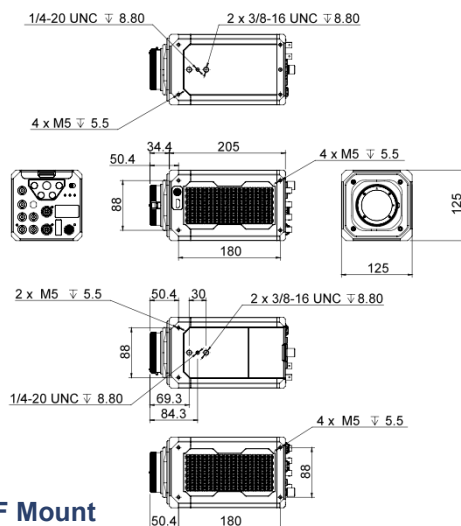
PRIMARY INPUT	Main power input. DC 20~32V
BACKUP INPUT	Backup power/battery input. DC 20~32V. (Note: Primary power is prioritized; backup activates only upon primary failure or disconnection)
ETHERNET	10G Ethernet interface
SDI OUTPUT	SDI video stream output. BNC connector, 75Ω output impedance
AUX	Auxiliary interface
BNC	General-purpose I/O. BNC connector
VF PWR	Viewfinder/Monitor power supply
HDMI OUTPUT	HDMI video stream output (HDMI 1.4 compliant)



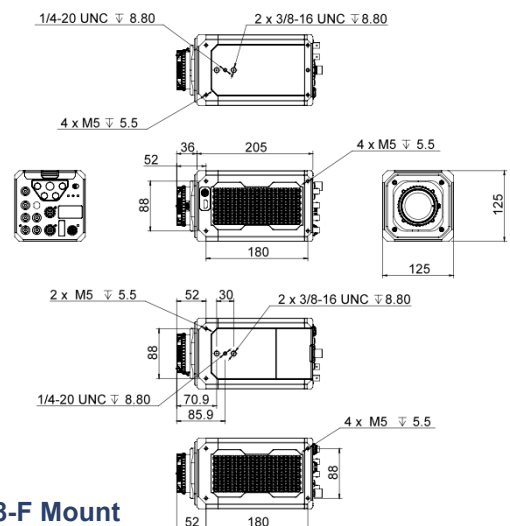
Camera interface



SH8 High-Speed Camera



SH8-EF Mount



SH8-F Mount

Standard mode		Recording time (s)		
Resolution (H×V)	Frame rate (FPS)	512GB	1TB	4TB
1280×1024	20000	16.4	128	256
1280×512	40000	16.4	128	256
1280×256	80000	16.4	128	256
1280×128	130000	20.3	157.5	315
1280×16	700000	30	234.1	468

Binning mode		Recording time (s)		
Resolution (H×V)	Frame rate (FPS)	512GB	1TB	4TB
640×512	80000	16.4	32	128
640×256	160000	16.4	32	128
640×128	320000	16.4	32	128

※ The recording time in the above table is calculated based on the bit depth of 10bit image;
 ※ All storage versions can support full-resolution and full-frame real-time writing;
 ※ The recording time of the 8TB storage version is twice that of the 4TB version.

Max. Resolution:	1280×1024
Full Frame Rate:	20000FPS
Max. Frame Rate:	700000FPS
Min. Exposure Time:	150ns
Pixel Binning:	Support
PIV cross-frame time:	≥250ns
Bit Depth:	8bit/10bit/12bit
Color:	Monochrome (M)
Sensitivity:	ISO125000(M)
Pixel Size:	20μm
Shutter:	Global shutter
Dynamic Range:	60dB
Analog Gain:	×2, ×4
Standard RAM:	1TB / 4TB / 8TB
Pluggable HDD:	Support
Window Acquisition (ROI):	Support
Recording Mode:	Start, End, Center, Manual, Random
Dimensions:	210D×125W×125H, (excluding protrusion parts)
Camera Weight:	Approximately 4kg
Lens Mount:	F Port [Adapt to E /EF (E-control) /C port]
Electrical parameters:	DC 20-32V, peak power consumption ≤200W, dual power supply.
Operating Temperature:	Standard -10~50°C, customizable large-range temperature version.
Heat dissipation:	Air cooling with fan, which can be turned on and off, and can adapt the rotation speed according to the temperature.

Connection & Signal

Time code:	BNC, supporting IRIG-B DC/AC signal input.
Buttons:	Camera trigger button, playback button, etc.
Data interface:	10 Gigabit Ethernet, compatible with 2.5Gbps, 1Gbps
Video output signal:	SDI/HDMI, support 1080P@60FPS
External trigger signal:	BNC, support input/output
External sync signal:	BNC, support output/output
Serial port control:	BNC, RS422/RS232

7 X 24 hours Technical Support | E-mail: info@sincevision.com

Service covering:

South Korea, Vietnam, Thailand, Malaysia, Singapore, United Kingdom, France, Italy, Spain, Germany



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