04 SH3 Mini series

Excellent balance between the volume and heat dissipation

World-Class Sensor Manufacturer

01 Ultra high-speed series
02 High-speed HD series
03 Ultra HD series
04 SH3-Mini series
05 SH2-Smart series
06 Real-time Transmission series
07 Aircraft-carried series
Supporting Software

SH3 is another masterpiece of MINI series for high-end scientific research and industry in SinceVision's intelligent high-speed camera family, which has a perfect balance of body size and heat dissipation through its 20-ayer PCB stacking design and 10Gbps Serdes on-board interconnection technology. At the same time, thanks to the self-developed array parallel storage architecture, the maximum storage in the device can be expanded to 4TB.

Core Features

14.6μm	100ns	210ns
Exceeding peers	Minimum Exposure Time	Double exposure time PIV

Clear imaging	Intelligent image trigger	Solid shell
Low noise circuit design, as low as 10e-	Quickly positioning keyframes	Resist 200G impact

Typical Application

Research | Powder combustion

Research | Battery cell explosion

Industry | Cutting
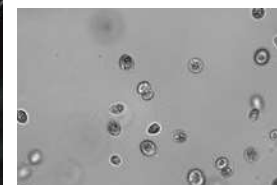
Biomedicine | Cell observation

Military | Bursting test

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Core Features

10GigE	PIV double exposure	IRIG B	Military standard Large Temp. range
Auto exposure Double exposure	Image trigger	Resist 200G impact	4TB Non-volatile storage

Performance / Parameters

Model	SH3-101	SH3-103	SH3-105	SH3-108	SH3-502
Full frame resolution	1280×1024	1280×1024	1280×1024	1280×1024	2560×1920
Full frame rate	1000fps	3000fps	5000fps	8000fps	2000fps
Pixel size	14.6µm	14.6µm	14.6µm	14.6µm	7.8µm
Minimum Exposure Time	100ns				
Dynamic Range	64dB				
Analog Gain	x2, x4, x8				
Bit depth	8bit/10bit				
Color	Monochrome (M) / Color (C)				
Input signal	Trigger signal, synchronization signal, Ready signal, Exposure signal, IRIG-B signal				
Output signal	Trigger signal, synchronization signal, Ready signal				

※ Detailed parameters can be found on the product leaflet.

Frame Rate

8bit - Record time - Frame rate					
Model	SH3-502(128G)		Model	SH3-108(128G)	
Resolution	Frame rate (fps)	Record time (s)	Resolution	Frame rate (fps)	Record time (s)
2560×1920	2000	13	1280×1024	8000	13
2560×1440	2700	13	1280×768	10700	13
2560×960	4000	13	1280×512	16000	13
2560×512	7500	13	1280×256	31700	13
2560×256	15000	13	1280×128	61500	13
2560×8	365000	18	1280×8	585000	22

※ The 128GB version has twice the recording time as 64GB of memory.

10bit - Record time - Frame rate					
Model	SH3-502(128G)		Model	SH3-108(128G)	
Resolution	Frame rate (fps)	Record time (s)	Resolution	Frame rate (fps)	Record time (s)
2560×1920	1600	13	1280×1024	6400	13
2560×1440	2100	14	1280×768	8300	13
2560×960	3000	14	1280×512	12770	13
2560×512	6000	13	1280×256	25000	13
2560×256	12000	13	1280×128	49000	13
2560×8	295000	18	1280×8	463000	23

※ The 128GB version has twice the recording time as 64GB of memory.

Storage Configuration

Model	SH3-101/103/105/108	SH3-502
RAM	16G/32G/64G/128G	16G/32G/64G/128G
Real-time storage	2T/4T	2T/4T

※ SH3-105/108/502, Real time parameter writing needs to be restricted.

Mechanical & Environmental Parameter

Camera dimension	90D×110W×110H	Working temperature / humidit	-10~50℃. Customized large temperature version (-35~65℃)
Camera weight	1.6kg	Shock resistance	200G, 3-axis
Electrical parameter	DC24V, 30W	Vibration resistance	Anti vibration, safe transportation
Lens mount	E mount, adapt to F mount, C mount and EF mount	EMC	Support
Heat dissipation	Air cooling		

Mechanical Drawings