

P

roduct Brief

High-speed Camera S Series

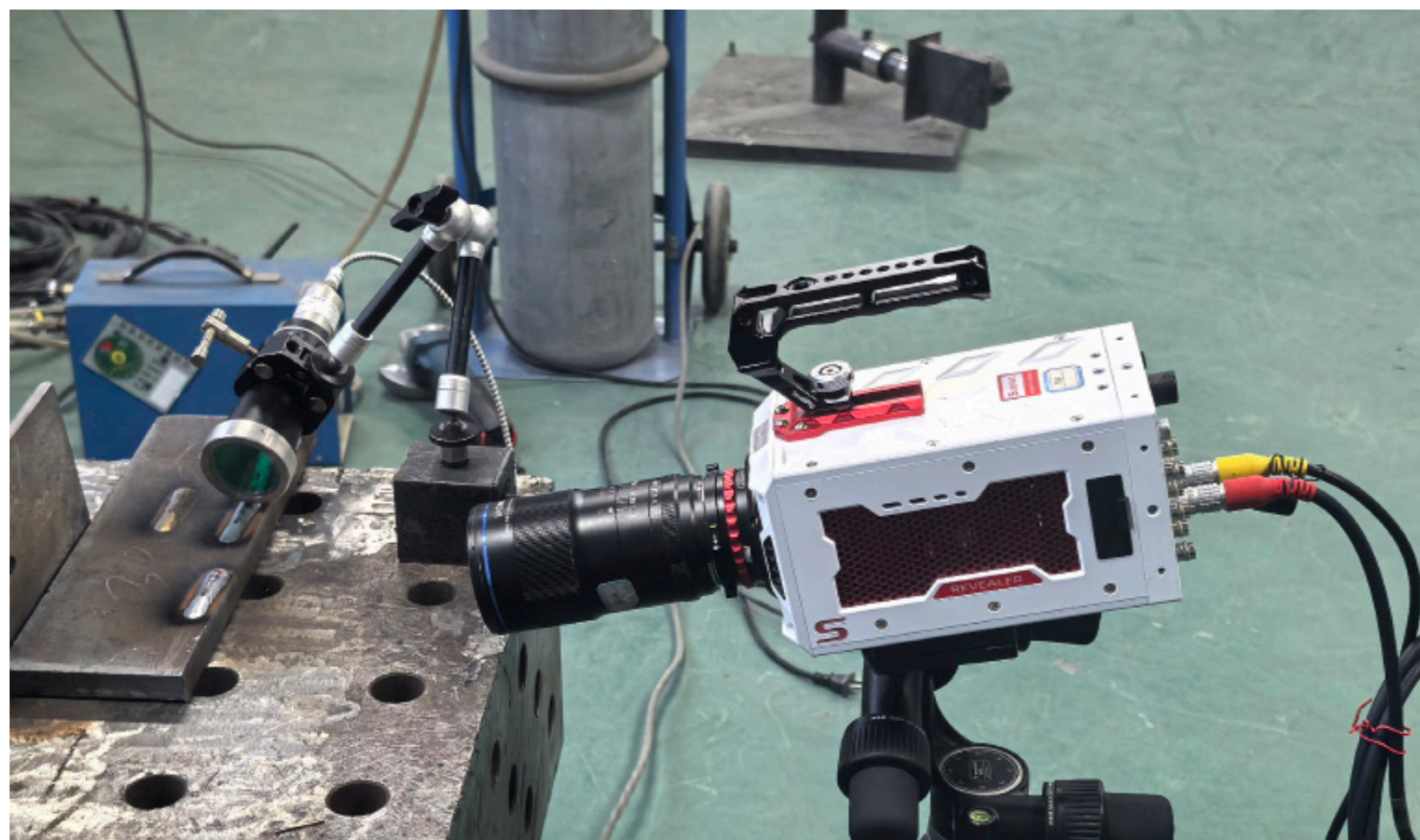
The S-series high-speed cameras adopt a high-bandwidth CMOS chip and high-performance processor architecture. They support a full-resolution frame rate of up to 15,000 fps and a minimum exposure time of 100 ns, featuring global shutter and high dynamic range performance. Built-in high-speed RAM and expandable Flash storage are equipped, and the 10 Gigabit Ethernet interface enables high-speed real-time acquisition and transmission.

S1315M/C 1280×1024 @15000 fps

S1310M/C 1280×1024 @10000 fps

S1307M/C 1280×1024 @7000 fps

S1305M/C 1280×1024 @5000 fps



K

ey Features



1280×1024 @15000 fps

High-Speed RAM
96/192 GB

1,060,000 fps
At 1280×8 @



Built-in mechanical shutter



- 10Gb Ethernet
- SDI/HDMI video interface
- IRIG_B code timing input interface
- Dual power interface 18-28VDC



IP64 protection standard



30Grms @11ms
3-axis 6-direction
60 pulses



30Grms @11ms
3-axis 6-direction
60 pulses



-35° ~ 60 °C
Customizable
wide temperature range

300ns

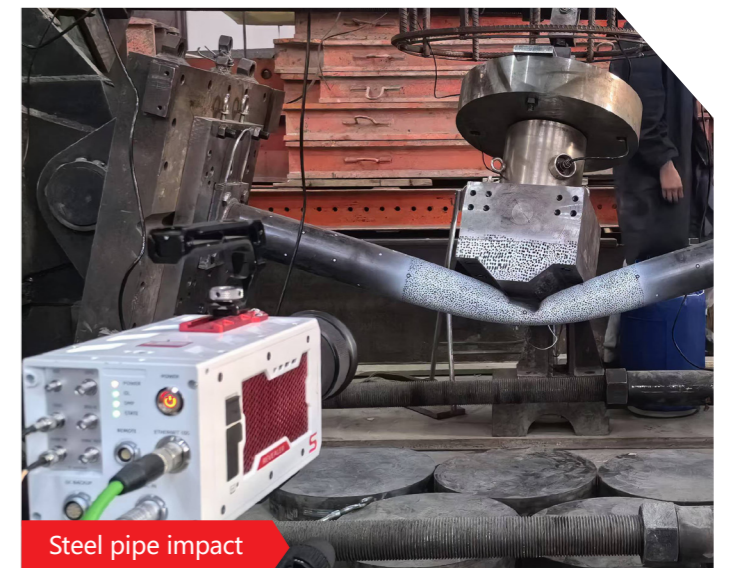
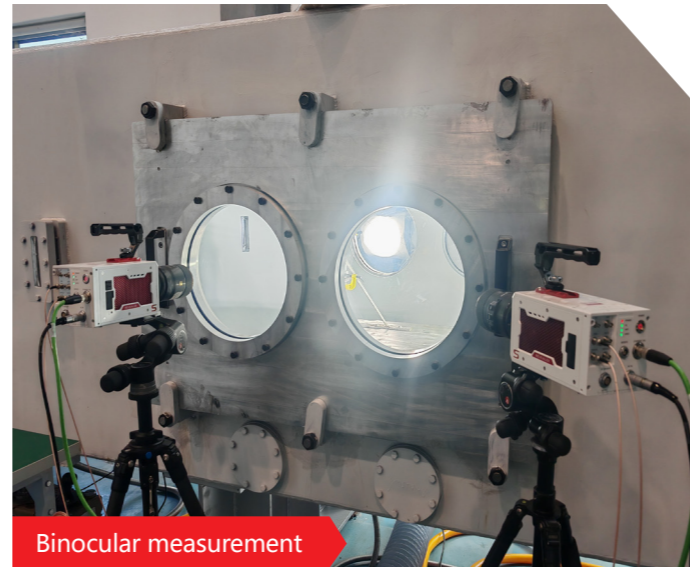
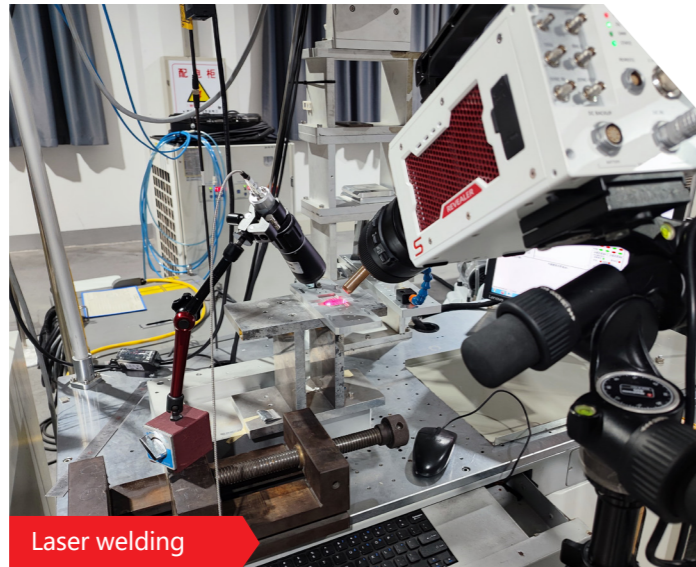
Straddle time for PIV

Intelligent Trigger
Capture

EMC

EMC protection

Typical Cases



High-speed Camera S Series

Product Brief

Key parameters

SKU	S1315M/C	S1310M/C	S1307M/C	S1305M/C
Sensor	CMOS	CMOS	CMOS	CMOS
Resolution	1280×1024	1280×1024	1280×1024	1280×1024
Frame	15000 fps	10000 fps	7000 fps	5000 fps
Shutter	Global shutter	Global shutter	Global shutter	Global shutter
Min. exposure time	100 ns	100 ns	100 ns	100 ns
PIV	300 ns	300 ns	300 ns	300 ns
AE	Available	Available	Available	Available
EDR	Available	Available	Available	Available

Resolution-Frame- Recording time

SKU	S1315M/C (Based on 96GB)		S1310M/C (Based on 96GB)		S1307M/C (Based on 96GB)		S1305M/C (Based on 96GB)	
	Frame rate	Recording Time	Frame rate	Recording Time	Frame rate	Recording Time	Frame rate	Recording Time
1280×1024	15000	3.08	10000	5.25	7000	7.68	5000	11.44
1280×896	17600	3.08	11600	5.18	8100	7.69	5900	11.12
1280×720	21600	3.12	14500	5.14	10400	7.52	7500	10.79
1280×256	60000	3.15	40000	4.91	31700	7.10	23600	9.64
1280×8	1060000	6.25	800000	8.66	600000	11.88	470000	15.90

Connectivity & Signaling

SKU	S1315M/C	S1310M/C	S1307M/C	S1305M/C
Record button	Available	Available	Available	Available
Data interface	10 Gb/ Gb Ethernet	10 Gb/ Gb Ethernet	10 Gb/ Gb Ethernet	10 Gb/ Gb Ethernet
Video interface	SDI	SDI	SDI	SDI
Sync Input Interface	3.3/5V TTL	3.3/5V TTL	3.3/5V TTL	3.3/5V TTL
Sync Output Interface	5V TTL	5V TTL	5V TTL	5V TTL
Timing	DC IRIG_B in	DC IRIG_B in	DC IRIG_B in	DC IRIG_B in
Control interface	Reserve RS422	Reserve RS422	Reserve RS422	Reserve RS422
Trigger Input	Pulse trigger signal	Pulse trigger signal	Pulse trigger signal	Pulse trigger signal
I/O	1 output reserved for customization	1 output reserved for customization	1 output reserved for customization	1 output reserved for customization

Memory

SKU	S1315M/C	S1310M/C	S1307M/C	S1305M/C
High-Speed RAM	96/192 GB	96/192 GB	96/192 GB	96/192 GB

Mechanical Specifications

SKU	S1315M/C	S1310M/C	S1307M/C	S1305M/C
Lens	EF standard,F optional, C optional	EF standard,F optional, C optional	EF standard,F optional, C optional	EF standard,F optional, C optional
Size W×H×D	≤ 110×110×205 mm	≤ 110×110×205 mm	≤ 110×110×205 mm	≤ 110×110×205 mm
Weight	≤ 3800 g	≤ 3800 g	≤ 3800 g	≤ 3800 g
Mounting hole	Top Bottom Left and right sides with 1/4 threaded mounting holes	Top Bottom Left and right sides with 1/4 threaded mounting holes	Top Bottom Left and right sides with 1/4 threaded mounting holes	Top Bottom Left and right sides with 1/4 threaded mounting holes
Cooling	Fans	Fans	Fans	Fans

Electrical Specifications

SKU	S1315M/C	S1310M/C	S1307M/C	S1305M/C
Electricity supply	24VDC	24VDC	24VDC	24VDC
Power wastage	≤ 160 W	≤ 160 W	≤ 160 W	≤ 160 W

Environmental Specifications

SKU	S1315M/C	S1310M/C	S1307M/C	S1305M/C
Operating temperature	-10 ~ 50 °C	-10 ~ 50 °C	-10 ~ 50 °C	-10 ~ 50 °C
Operating temperature optional	-35 ~ 60 °C	-35 ~ 60 °C	-35 ~ 60 °C	-35 ~ 60 °C
Operating humidity	0~95%	0~95%	0~95%	0~95%
Protection level	IP64	IP64	IP64	IP64
Shock	30Grms @11mSec 3 axes 60 pulses	30Grms @11mSec 3 axes 60 pulses	30Grms @11mSec 3 axes 60 pulses	30Grms @11mSec 3 axes 60 pulses
Vibration	Resistant to transportation vibration	Resistant to transportation vibration	Resistant to transportation vibration	Resistant to transportation vibration
EMC	Available	Available	Available	Available

Dimension Drawing

S1315M/C/S1310M/C/S1307M/C/S1305M/C

