HC6CS

Ultra-High-Speed Series

The fastest domestic million-pixel high-speed camera



Ultra-High-Speed Series

The HC6CS ultra-high-speed series is a versatile high-speed camera developed by HEVOX for high-end applications in scientific research, defense, aerospace, and high-speed industrial sectors, inheriting the stringent quality control standards of the brand's product family. Through meticulous refinement, the camera delivers exceptional appearance, structure, and performance—featuring an 180 Gbps data bandwidth and support for up to 24 TB of optional memory, ensuring reliable long-term recording capabilities.

Core Features







15800fps

1280x1024 resolution

24TB

Supports custom ultra-large non-volatile storage

210ns

PIV frame-to-frame interval

TheEntireSeriesComes StandardWith10Gigabit Ethernet

Compatible with 2.
5G and gigabit network tran smission

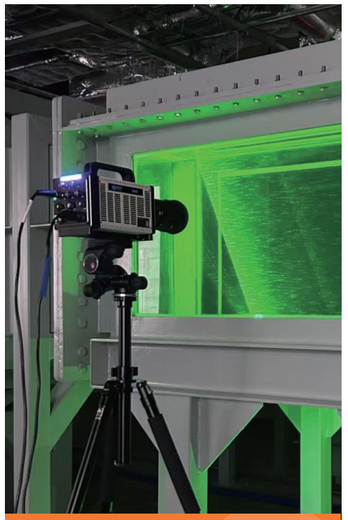
100ns

Minimum exposure time

Superior Stability

The product has obtained multiple military standard certifications.

ApplicationCases



PIV flow field testing



Crack propagation



Weapon Experiment



Microfluidics



jet-flow

Core Function

- 10GigE
- PIV Double Exposure
- IRIG B
- Military Standard Wide Temperature
- Auto Exposure & Double Exposure
- Image Trigger
- 3G-SDI
- 24T Non-Volatile Storage

Performance Parameter

Model	HC6CS-116	HC6CS-113	HC6CS-109
Full-frame resolution	1280x1024	1280x1024	1280x1024
Full-frame frame rate	15800fps	13800fps	9500fps
Pixel size	14.6μm	14.6μm	14.6μm
Minimum exposure time	100ns		
Dynamic range	60dB		
Simulation Gain	x2、x4、x8		
Bit depth	8bit/10bit/12bit		
Colour	Monochrome (M)/Color (C)		
Incoming signal	Trigger signal, synchronization signal, Ready signal, IRIG-B signal		
Output signal	Trigger signal, synchronization signal, Ready signal		
Video Interface	3G-SDI		

For detailed specifications, refer to the product leaflet.

FrameRateTable

Model	HC6CS-116(320G)		HC6CS-113(320G)		HC6CS-109(320G)	
Resolution ratio	Frame rate （fps）	Recording time (s)	Frame rate （fps）	Recording time (s)	Frame rate （fps）	Recording time (s)
1280x1024	15800	16	13800	18.99	9500	27
1280x808	20000	16	18300	18.15	13700	24
1280x512	31500	16	27400	19	20600	24
1280x256	62500	16	54000	19	40700	25.76
1280x8	1150000	28	1000000	32	750000	44

※The 320GB version offers twice the recording duration of the 160GB versio n; accordingly, the recording durations for 80GB and 40GB are calculated accordingly.

※The time values in the table above are calculated based on an 8-bit image bit depth.

Storage Configuration

Model	HC6CS-109/113/116
RAM	40GB/80GB/160GB/320GB
Real-time storage	4TB/12TB/24TB

Mechanical Specifications

Camera size	217D×110W×110H	Installation hole position	Top/Bottom: 6 × 1/4 "mounting holes, 3 × 3/8" mounting holes
Camera weight	3.8kg	Power	55W
Power supply mode	DC24V, dual power supply	Lens Interface	The E m o u n t can be converted to F, C, or EF mount.

EnvironmentalSuitability

Working temperature	temperature range: -10~50°C; wide-temperature version available upon customization: -40~65°C	EMC	Support
Working humidity	Less than 95% (no condensation)	Anti-vibration	Resistant to transportation vibrations
Storage Temperature	-40~70°C	Heat dissipation method	Active heat dissipation, air cooling

Machine Drawing

