

Libra UV

The Libra UV is a UV global shutter CMOS camera for high-speed, high-resolution semiconductor inspection. It's proven in processes like patterned wafer inspection, mask alignment, and wafer bonding. With strong UV sensitivity, it's also promising for biospectral analysis, medical, and electronics testing.



Key Features

Benefits

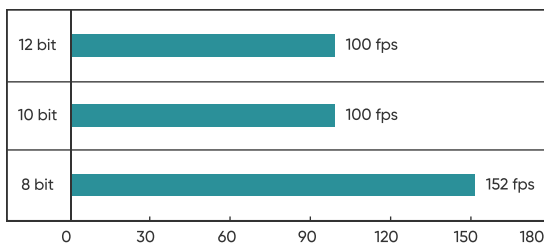
UV Enhancement	Covers 200 nm to 1000 nm, with quantum efficiency up to 48% at 365 nm.
Global Shutter	Enables clear capture of fast-moving samples.
High-Speed & High-Resolution	Up to 100 fps@12 bit and 152 fps@8 bit at full 8.1 Megapixel resolution. ^[1]
10 GigE Interface	High-speed and stable transmission, uncompressed data, flexible wiring.
Compact Design	Facilitates seamless integration into instrument systems.

Typical Applications

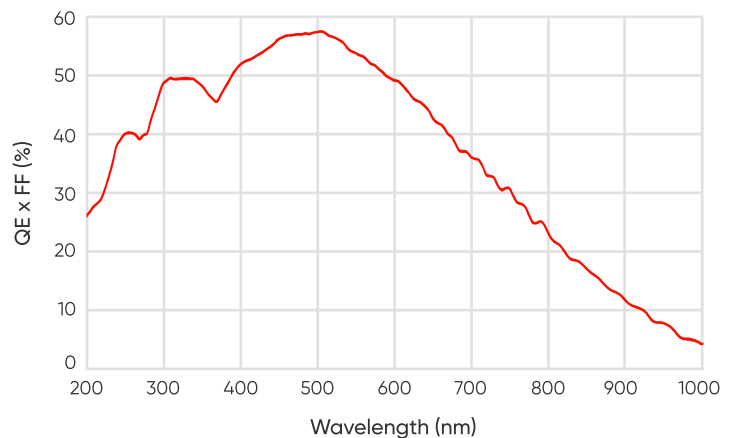
- Semiconductor Inspection
- Material Classification
- Infrastructure Testing

Noted Examples

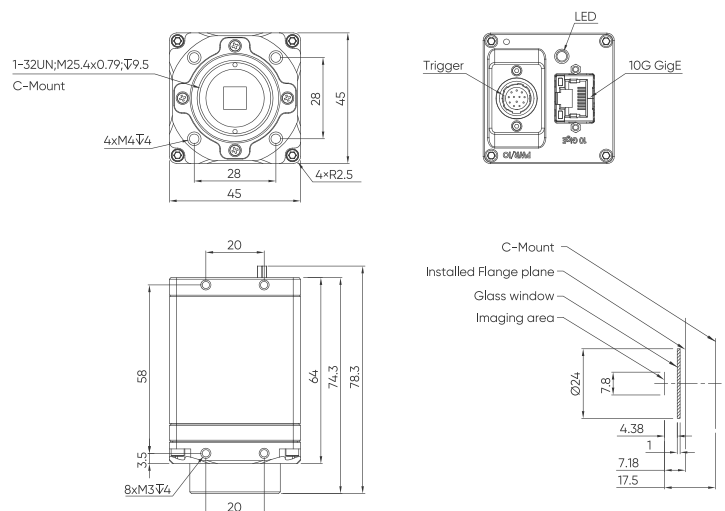
[1] The Libra UV utilizes Global Shutter technology and a 10 GigE interface to achieve transfer speeds of up to 100 fps@12 bit and 152 fps@8 bit at full 8.1 megapixel resolution, demonstrating a significant advantage in high-speed performance.



Quantum Efficiency



Dimensions (Unit: mm)



Specifications

Product Name	Libra UV
Sensor Type	CMOS
Sensor Model	SONY IMX487
Spectrum	Visible/UV
Chrome	Mono
Peak QE	56%@500 nm, 48%@365 nm
Array Diagonal	11 mm (2/3")
Effective Area	7.8 mm x 7.8 mm
Resolution	2856 (H) x 2848 (V)
Pixel Size	2.74 μm x 2.74 μm
Gain	Supports analog gain (1 ~15.7) and digital gain (15.8 ~ 126)
Frame Rate	152 fps@8 bit, 100 fps@10 bit, 100 fps@12 bit
Full Well Capacity	10 bit: 9000 e-@gain 1, 580 e-@gain 15.7; 12 bit: 9250 e-@gain 1, 555 e-@gain 15.7
Readout Noise	10 bit: 3.9 e- (RMS)@gain 1, 2.1 e- (RMS)@gain 15.7; 12 bit: 2.4 e- (RMS)@gain 1, 1.5 e- (RMS)@gain 15.7
Dynamic Range	10 bit: 65 dB@gain 1, 49.1 dB@gain 15.7; 12 bit: 72 dB@gain 1, 52 dB@gain 15.7
Shutter Mode	Global
Exposure Time	8 bit: 2 μs ~10 s; 10, 12 bit: 3 μs ~10 s
DSNU	0.38 e-
PRNU	0.52%
Image Correction	DPC
ROI	Support
Binning	Bin 1 x 2 (Avg and Sum), Bin 2 x 1 (Avg and Sum), Bin 2 x 2 (Sum)
Timestamp Acc.	1 μs
Trigger Mode	Hardware, Software
Trigger Output	High, Low, Trigger Ready, Readout, Exposure Out
Trigger Interface	Hirose-12-Pin
Data Interface	10 GigE
Bit Depth	8 bit, 10 bit, 12 bit
Optical Interface	C Mount
Power Supply	12 V / 2 A, PoE support
Power Cons.	≤ 12 W
Dimensions	45 mm (H) x 45 mm (W) x 74.3 mm (L)
Software	Sample Pro
SDK	C / C++ / C# / Python
Operating System	Windows, OpenEuler
Environment	Working: Temp. 0°C~40°C, HUM 10%~85%, Storage: Temp. -10°C~60°C, HUM 0%~85%

*Specifications in this manual are subject to changes without prior notice.

