Libra 536

The Libra 536 is a global-shutter camera designed for high-speed, high-resolution imaging applications, offering broad spectral coverage from visible to near-infrared (NIR). Equipped with a global-shutter sensor and a high-bandwidth 10 GigE interface, the camera delivers 8.1-megapixel full-resolution imaging at up to 152 fps, making it an excellent fit for semiconductor manufacturing workflows such as wafer inspection and advanced packaging.

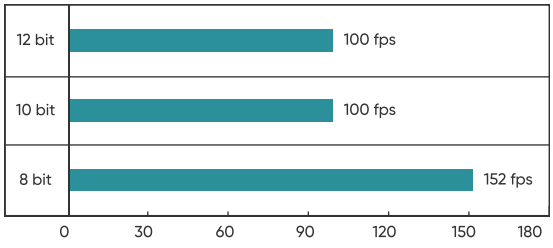
Key Features	Benefits
Visible to NIR Imaging	Supports broadband imaging from 400 nm to 1100 nm, with up to 72% QE at 470 nm.
Global Shutter	High-speed, artifact-free imaging for clear capture of fast-moving targets.
High-speed and high-resolution	At 8.1 MP full resolution, the maximum speed can reach 100 fps@12 bit and 152 fps@8 bit[1]
10 GigE Interface	High-speed, stable transmission without frame loss, flexible for remote and multi-camera setups.
Compact Design	Conducive to the integration of the instrument system.

Typical Applications

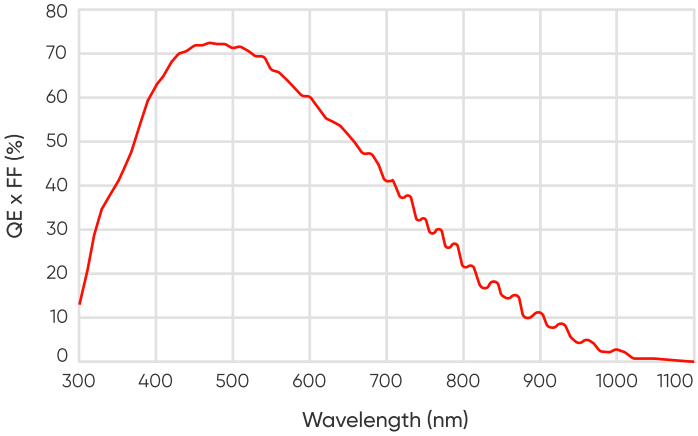
- Semiconductor Inspection
- Material Classification
- Slide Scaning
- Life Sciences

Noted Examples

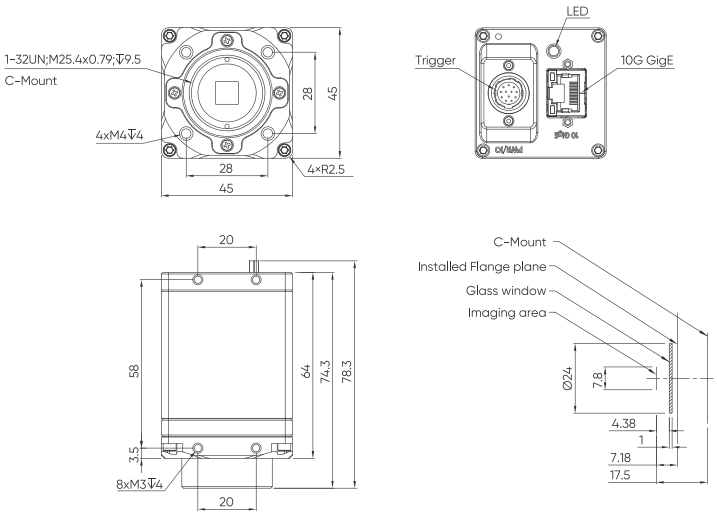
[1] The Libra 536 utilizes Global Shutter technology, and the 10 GigE interface achieves a transfer speed of up to 152 fps at 8.1 million full resolution pixels.



Quantum Efficiency



Dimensions (Unit: mm)



Specifications

Model	Libra 536
Sensor Type	CMOS
Sensor Model	SONY IMX536
Spectrum	Visible
Chrome	Mono
Peak QE	72%@470 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: 3.8 e- (RMS)@gain 1, 2.0 e- (RMS)@gain 15.7; 12 bit: 2.5 e- (RMS)@gain 1, 1.4 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, Bin 2 x 1, Bin 2 x 2
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	12-24 V, 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, Linux
Environment	Working: Temp. 0°C~40°C, HUM 10%~85%, Storage: Temp. -10°C~60°C, HUM 0%~85%

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