

LN130FSI

High-sensitivity CMOS Image Sensor

The MinVision Series CMOS image sensor excels in ultra low-light imaging with low read-out noise and high dynamic range. It is ideal for a diverse range of applications, including:

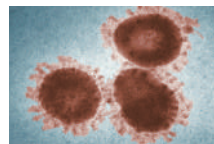
- Advanced Surveillance and Security
- Intelligent Traffic Systems
- Industrial Inspection and Automation
- Scientific and Biomedical Imaging
- Semiconductor / Wafer Inspection
- Astronomy and Deep Space Imaging

This 1" sensor features 1.3M 9.5 μ m pixels with proprietary HDR technology at a 1280 x 1024 resolution. The LN130FSI achieves over 55% Quantum Efficiency at 560nm, delivering clear images in extreme low-light conditions down to 0.00066 lx. Supporting both rolling and global shutter modes, it offers unparalleled versatility. It delivers an impressive dynamic range of over 95dB in rolling shutter mode.

KEY FEATURES

- Low Read-out Noise
- High Dynamic Range
- Rolling Shutter and Global Shutter

APPLICATIONS



Scientific and Biomedical Imaging



Semiconductor / Wafer Inspection



Advanced Surveillance and Security



Intelligent Traffic Systems






Astronomy and Deep Space Imaging

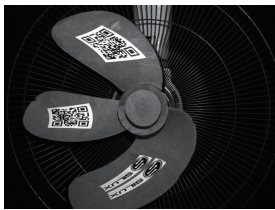
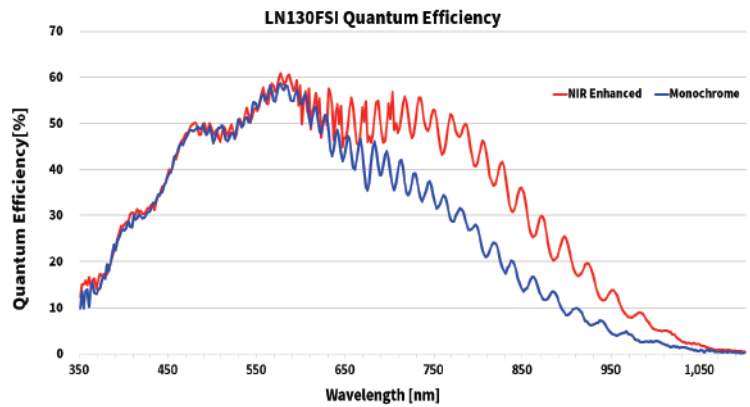


Industrial Inspection and Automation

SPECIFICATIONS

LN130FSI	Rolling Shutter	Global Shutter
Resolution [H×V]	1280 (H)×1024 (V)	
Pixel Size [H×V]	9.5 μm×9.5 μm	
Optical Format	1" (12.2mm * 10.3mm)	
Max Frame Rate	37 fps	18 fps
Quantum Efficiency	> 55%@560nm	
Read Noise	< 2.1 e ⁻	< 5.5 e ⁻
Full Well Capacity	> 130k e ⁻	> 130k e ⁻
Dynamic Range	> 95 dB	> 87 dB
Dark Current	< 10 e ⁻ /pixel/sec @Room Temperature	
ADC Resolution	14 bit	
Output	4-lane LVDS	

-  Dynamic Range > 95dB
-  Read Noise < 2.1e⁻
-  Rolling & Global Shutter

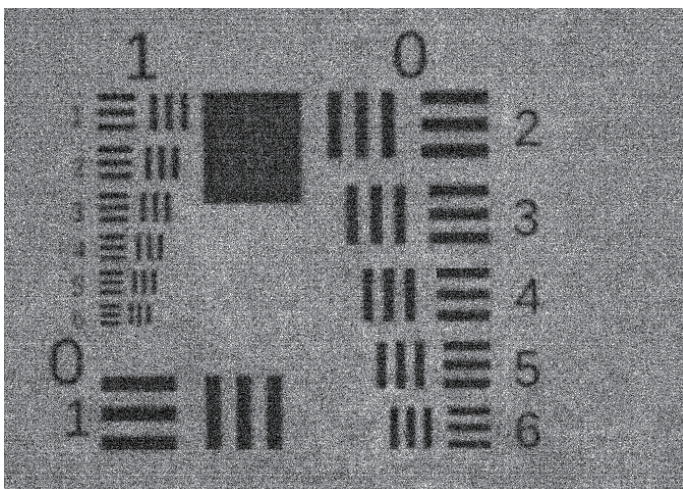


Rolling Shutter

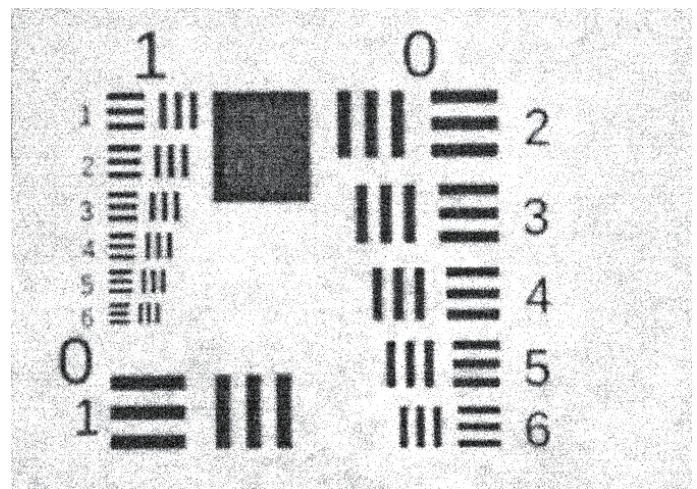


Global Shutter

LOW-LIGHT IMAGING



0.00066 lx, 1/20s (50ms) f/2.8



0.002 lx, 1/20s (50ms) f/2.8