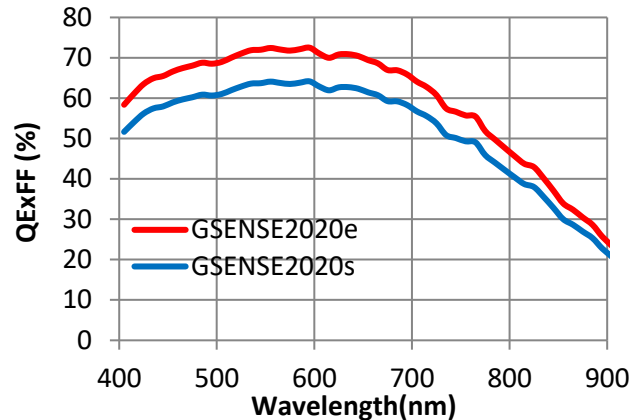


4MP Scientific Image Sensor for High Speed Imaging



SENSOR DESCRIPTIONS

Housed in a 153-pin μ PGA package, GSENSE2020s and GSENSE2020e features $2e^-$ readout noise, 87dB intra-scene dynamic range, and frame rate up to 376fps. With optimized microlens array, GSENSE2020e has an outstanding quantum efficiency of 72% at 595nm. These features make both sensors ideal for low light imaging, high-end security and surveillance, 3D laser scan, scientific and medical applications.

SENSOR SPECIFICATIONS

Optical format	1.2"	Resolution	2048 × 2048
Pixel size	6.5 μ m × 6.5 μ m	Shutter type	Rolling & Global shutter
ADC	10 / 12bit	Dark current	7 e ⁻ /s/pix @ 30°C
Full well charge	45ke ⁻ @ rolling HDR	SNR Max	46dB @ rolling HDR
	19ke ⁻ @ global HDR		41.5dB @ global HDR
Frame rate (rolling)	47fps @ rolling HDR	Frame rate (global)	370fps @ 10bit DDS
			94fps @ HDR with external CDS
Dynamic range	>87dB (rolling HDR)	Quantum efficiency	GSENSE2020s : 64% @ 595nm
	>70dB (global HDR)		GSENSE2020e : 72% @ 595nm
Output interface	32 LVDS @ global	Dark noise	<2e ⁻ @ rolling
	8 LVDS @ rolling		<6.2e ⁻ @ global
PRNU	<1%	Operating	-55°C~+85°C
Supply voltage	3.3V /1.8V	Power consumption	<0.85W@rolling,<1.5W@global

