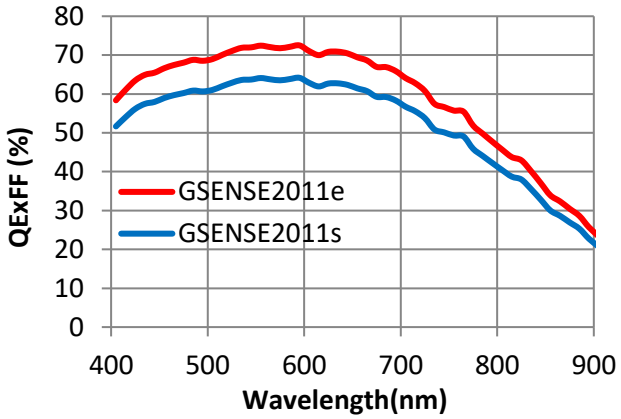
2MP Scientific Image Sensor for High Speed Imaging



SENSOR DESCRIPTIONS

Housed in a 153-pin µPGA package, GSENSE2011s and GSENSE2011e features 2e⁻ readout noise, 87.5dB intra-scene dynamic range, and frame rate up to 668fps. With optimized microlens array, GSENSE2011e 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”	Resolution	2048×1152
Pixel size	6.5µm×6.5µm	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
Frame rate (rolling)	83fps @ HDR mode	Frame rate (global)	653fps @ 10bit
Dynamic range	>87dB (HDR in rolling)	Quantum efficiency	GSENSE2011e: 72% @ 595nm
Output interface	4×2 LVDS @ rolling 16×2 LVDS @ global	Dark noise	<2e⁻ @ rolling
PRNU	<1%	Operating	-55°C~+85°C
Supply voltage	3.3V /1.8V	Power consumption	<0.85W@rolling,<1.5W@global