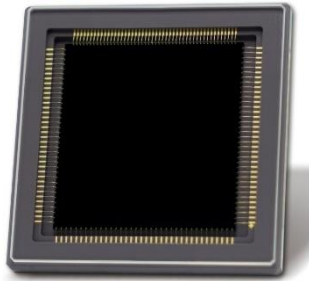
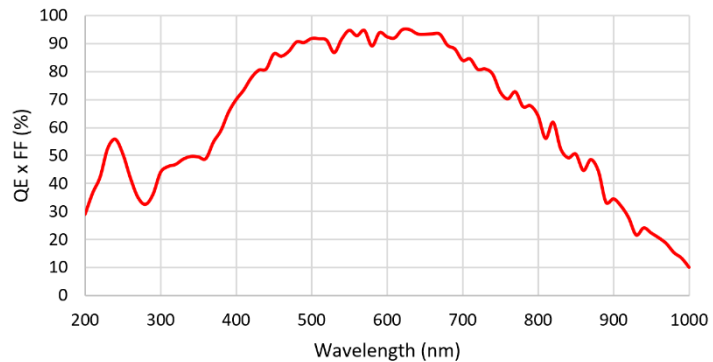


Backside Illuminated Scientific CMOS Image Sensor



Spectral Response



SENSOR DESCRIPTIONS

As the first backside illuminated scientific CMOS image sensor in the world, GSENSE400BSI features low readout noise of $1.6e^-$, high dynamic range of 93dB, and low dark current of $0.2e^-/s/pix$ at deep cooling of $-50^{\circ}C$. With special ARC, the sensor provides peak of 95% @ 570nm. In addition, GSENSE400BSI sensors can output 24fps at HDR mode and 48fps in STD mode. These features make GSENSE400BSI ideal for high-end scientific imaging, corona detection, astronomy, spectroscopic, and forensic imaging applications.

GSENSE400BSI SPECIFICATIONS

Photo-sensitive area	22.5mm(H) x 22.5mm(V)	SNR Max	49.5dB
Pixel size	11 μ m x 11 μ m	Dark noise	1.6 e^-
Resolution	2048x2048	Dark current	<0.2 $e^-/s/pix$ @ $-50^{\circ}C$
Shutter type	Rolling shutter	Dynamic range (HDR mode)	94 dB
ADC	12bit	Full well capacity	91ke $^-$
Max frame rate	48fps	Data rate	2.4Gbit/s @ 25MHz
Supply voltage	3.3V / 1.8V	Quantum efficiency	95% @ 570nm
Max power	<650mW	Package	115-pin PGA

