

Intensified CMOS Camera

High sensitivity, high speed
intensified CMOS camera



Ultimate low light imaging

Photonic Science Intensified CMOS camera provides the ultimate in low light level imaging with gating speeds down to 3 ns.

Featuring an 18 mm image intensifier with either a Gen 2 or Gen 3 photocathode, 1 or 2 MCPs for gains between 10^4 and 10^6 , and fibre coupled to a CMOS sensor with 1:1 distortion free optic.

The CMOS sensor offers high frame rates, up to 90 fps for full frame imaging, combined with high dynamic range.

This flexibility in the photocathode, MCP and phosphor allows the iCMOS_18 to be tailored to the specific experimental requirements across a wide range of applications.

Applications

Astronomy

Low light level surveillance

Confocal microscopy imaging

Single molecule detection / TIRF

Fluorescence lifetime detection

Key Features

- | 18 mm Gen 2 and Gen 3 image intensifiers
- | Intensifier resolution up to 60 lp/mm
- | High dynamic range to 10^9 intrascene
- | Gating down to 3 ns with 300 kHz repetition rate
- | Auto-gating and auto control of intensifier and camera gains to specified light level
- | In camera corrections bright pixel, offset, flatfield
- | Genicam compliance

LiDAR

Analysis of fast optical pulses

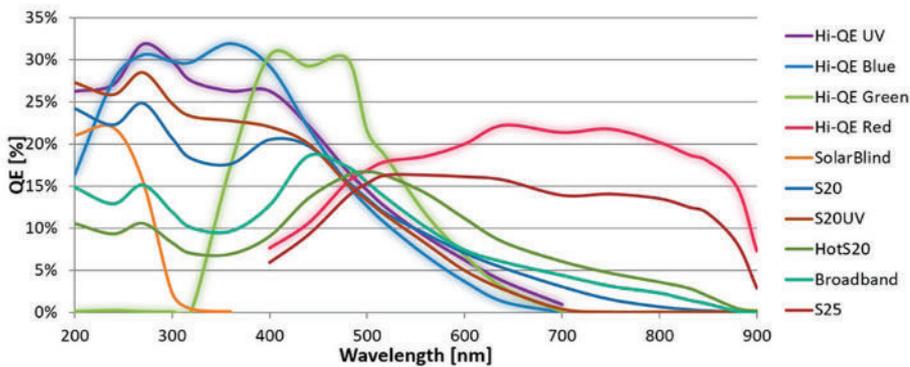
Bio- and Chemi-luminescence

Combustion Diagnostics

Plasma Studies

Intensified CMOS Camera

Characteristics	iCMOS_18
Sensor Resolution	1604 x 1100 @ 9 μm pitch
Frame Rate	90 fps
Dynamic Range	Intrascene 10^8
Intensifier Input Size	18 mm
Intensifier Resolution	Single MCP: 60 lp/mm; Dual MCP: 30 lp/mm
Photocathodes	Bi-alkali, Multi-alkali (Gen 2), and GaAs (Gen 3)
Intensifier Gain	Single MCP: 10^4 ; Dual MCP: 10^6
Phosphor Screen	P43 or P46
Minimum Gate Speed	3 ns
Gate Repetition Rate	300 kHz
In-camera Corrections	Bright pixel, offset, flatfield
Camera Interface	GigE, HD-SDI



QE Curve

