PHOTONIC SCIENCE

Intensified CCD & CMOS Camera

Ultimate low light level imaging

Photonic Science Intensified CCD 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 & Gen 3 photocathode, 1 or 2 MCP's for gains between 10^4 and 10^6, and fibre coupled to a CCD or CMOS sensor with a 1:1 distortion free optic, the ICCD provides resolution to 60 lp/mm.

The ICCD can be supplied with many high performance features, such as enhanced dynamic range, gating down to 3 ns, the ability to automatically control the intensifier gate period and gain to accommodate 10^8 range of scene light levels, and in-camera corrections to provide the cleanest possible image from an ICCD. With a GigE interface compliant with Gigabit Ethernet Vision (GEV) standard the ICCD can be used on multiple platforms.

Key Features

- 18 mm Gen 2 and Gen 3 image intensifiers
- 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, flatfied
- Genicam compliance

Applications

Astronomy

Low light level surveillance

Confocal microscopy imaging

Single molecule detection / TIRF

Fluorescence lifetime detection

LIDAR

Analysis of fast optical pulses

Bio and Chemi-luminescense

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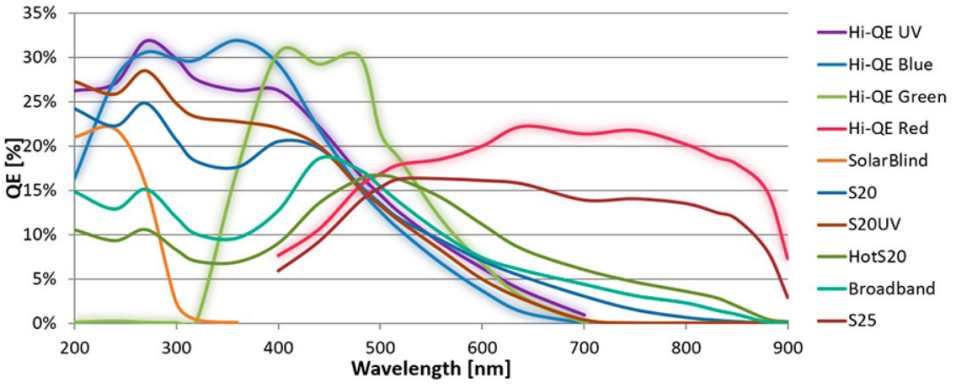
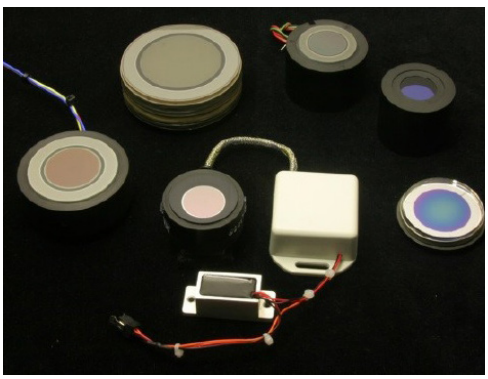
Characteristics	ICCD_18	ICMOS_18
Sensor Resolution	1360 x 1080 @ 6.45µm pitch	1604 x 1100 @ 9µm pitch
Frame rate (fps))	7.5	90
Dynamic range	Intrascene 10^8	Intrascene 10^8
Intensifier input size (mm)	18	
Intensifier resolution (lp/mm)	60 single MCP, 30 dual MCP	
Photocathodes	Bi-alkali, Multi-alkali (Gen 2) and GaAs (Gen 3)	
Intensifier gain (single MCP)	10^4	
Intensifier gain (dual MCP)	10^6	
Phosphor screen	P43 or P46	
Minimum gate speed (ns)	3	
Gate repetition rate (kHz)	300	
In camera corrections	bright pixel, offset, flatfied	
Camera interface	GigE,HD-SDI	



QE curve



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