



LA VISION

WE COUNT ON PHOTONS

Imager *intense*

most sensitive camera
for PIV systems

Imager Intense is a high sensitivity, high resolution digital camera used in the LaVision **FlowMaster** PIV system. It features an interline transfer chip with progressive scan readout. The camera delivers 12 bit digital images and it features a built in electronic shutter with exposure times as short as 500ns.



General System Specifications

Double Shutter	Two images with 500ns interframing time
Exposure time	500 ns ... 1 ms or 1ms...1000s (software selectable)
A/D-converter	12 bit @ 16 MHz
Serial link	coaxial (≤ 10 m) or fiber optic (≤ 300 m)

CCD Sensor

Number of pixels	1376 x 1040 pixels
Pixel size	6.45 μm x 6.45
Sensor format	2/3"
Full-well capacity	18.000 electrons
Spectral range	290 – 1100 nm
Max. QE	65 % @ 500 nm
Cooling type	2-stage Peltier, forced air (optional liquid)
CCD temperature	-12°C

CCD Control and A/D- Converter

Dynamic range	12 bit
A/D conversion factor	2 e ⁻ /count (high gain), 4 e ⁻ /count (low gain)
Readout (scan) rate	16 MHz
Readout noise	4-5 e ⁻ @ 16 MHz (high gain), 5-6 e ⁻ @ 16 MHz (low gain)

LA VISION UK LTD

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Frame rate 10 frames/s
Dark current < 0.1 e⁻/pixel/s
Electronic shutter down to 500 ns
Binning 1-8 (h) 1-32 (v)

DaVis Software

Operation System Windows 7 (64 bit)
Data acquisition user programmable
Command Language 'C' syntax for system and user functions
Device control laser, stepping motor, Autofocus, Scheimpflug

Accessories (optional)

ICCD upgrade C-mount adapter, F-mount adapter, Autofocus, Scheimpflug, lens coupling to image intensifier, ultra-low light applications gated down to 3 ns
Optics proprietary lenses, telescopes, macrolenses, long distance microscopes

Ordering Information

part number	Description
1101024	Imager intense, coax.
1101025	Imager intense, FOL

Data provided by LaVision is believed to be true.
However, no responsibility is assumed for possible inaccuracies or omissions. All data are subject to change without notice.

Sep-10

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