

NEW

Lambert

Intensifier I125

High-Speed
camera
Attachment



High-Speed Imaging at Low Light Level

The Lambert Intensifier **I125** is designed to increase the sensitivity of a high-speed camera and allow low light level applications. The I125 is connected (F- or C-mount) to the camera for optimal flexibility in high-speed imaging. The dual image intensifier offers a high adjustable gain and high output brightness and a 25mm input diameter for increased sensitivity.

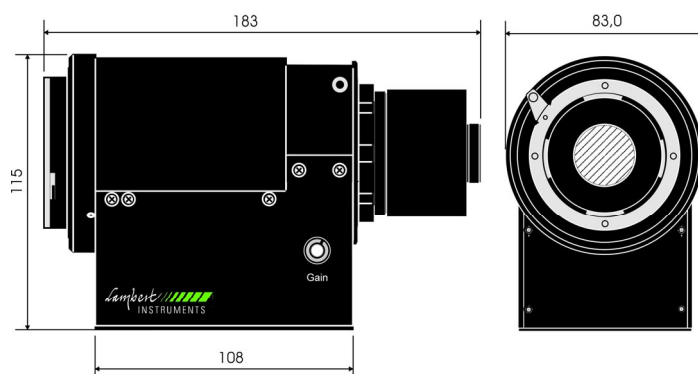
Sharp images of fast moving objects are obtained by shuttering the image intensifier down to 40ns.

An integrated relay lens couples the image intensifier to the camera. Depending on the size of the image sensor different relay lenses are applied.

Quick Reference Data

Intensifier	25mm Hybrid
Number of stages	2
1st stage intensifier	25 mm MCP prox. focused
2 nd stage intensifier	Gen I
Input window	Quartz
Index of refraction	1.47
Input window thickness (mm)	6.0
Input diameter (mm)	25
Photocathode sensitivity	UV / Visible / NIR
Phosphor	P46
decay time to 10% (μ s)	0.2-0.4
Output window	Glass
Photon gain	20,000
Resolution (lp/mm)	30
Output diameter	25
Gate pulse time (ns)	40
Gate pulse frequency (kHz)	100kHz
Frame rate (fps)	100.000
Gate pulse synchronisation	Follow External TTL-signal
Gain control	Manual or optional digital interface
Gate control	Optional pulse generator
Power	12 VDC
Optics	
Lens mount at input	F-mount
Field of View	25 mm diagonal
Relay lens magnification	25/11
Lens mount to camera	C-mount

Dimensions



Camera

The II25 has been designed to be used in combination with a high-speed camera with 2/3"-1" image sensor.

Dynamic Range

The II25 image intensifier widens the dynamic range of the high-speed camera. At the low end single photons can be detected while at high illumination levels the use of very short gate pulses (down to 40ns) brings down the duty cycle of the image intensifier 10,000 times. At the same time these short exposures yield sharp images of fast moving objects.

Lambert 
INSTRUMENTS

PERFECTION IN IMAGE DETECTION

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