

Lambert Intensifier I187



Low Light Level TV Camera Attachment

The Lambert Intensifier I187 is an intensifying unit that has been designed to be coupled to a standard monochrome video camera with 1/2 inch image sensor (CCD). The unit increases the sensitivity of the camera about 75x and enables the detection of images at a light level of 10⁻⁴ lux (using an f/1.4 lens).

The Lambert Intensifier I187 is equipped with a Generation I Image Intensifier that features bright, high definition images with low noise characteristics, a constant gain over a wide dynamic range and no danger for burn in.

The high quality relay lens transfers the intensified image to the attached camera very efficiently and without losses in resolution.

On both sides of the attachment, a C-mount is provided which enables universal use.



Applications

The Lambert Intensifier I187, combined with a videocamera, forms a monochrome camera for low light levels, that can be used in several applications such as:

- fluorescence microscopy
- astronomy (in combination with telescope)
- surveillance camera

The constant gain over a wide range of light levels offers the possibility of intensity measurements.

Technical data

Magnification: 0,38x
Intensification: 75x
Resolution: 95 lp/mm at output image plane
Input Voltage: 12 VDC
Lens-mount: C-mount, adjustable
Camera-mount: C-mount, adjustable

Image Intensifier Tube

Type: Generation 1
Input diameter: 18 mm
Input window: fiber optics
Photocathode: S25
Cathode sensitivity: 275 $\mu\text{A}/\text{lm}$
Gain: 350 $\text{cd}/\text{m}^2.\text{lx}$
Output diameter: 7 mm
Resolution: 95 lp/mm at output
Magnification: 0,38x
Phosphor: P20
Decay time: ≈ 1 ms (to 10 %)

Relay optics

High quality optical system consisting of 14 elements.
Speed, f-number: f/1.0
Magnification: 1.0x

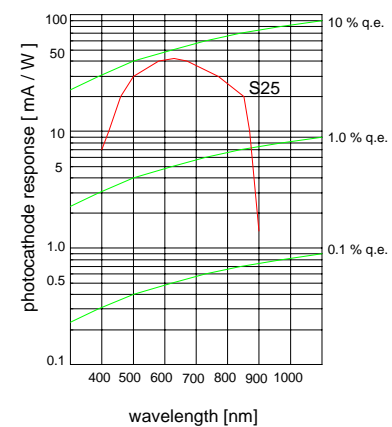
Field of view

The field of view is determined by the 18 mm input diameter of the image intensifier and the selected optical lens.

Dimensions and weight

Weight: 650 g

Typical photocathode spectral sensitivity



Phosphor emission characteristic

