

Making the invisible visible

UVi Camera Intensifier

The Invisible[®] Vision UVi series of camera accessory intensifiers are designed to add low light, extended spectral range (from UV to NIR) and fast gating in a compact and all inclusive, easy to use lens coupled package. Typical applications are in combustion, electric discharge, biomedical and ultra high speed stroboscopic or shuttering techniques with high speed or conventional video cameras.

The UVi is easily programmed by its menu driven LCD integral display/control panel or via its USB interface and software to synchronize to an external TTL or video signal: offering multiple. digitally programmed gain, delays and exposures (> 10ns in 10ns steps) at input trigger rates to > 100,000 per second and up to 20,000,000 per second in burst mode.





designed The novel, custom intensifier is optimized for use with modern high speed video cameras offering high gain and a proprietary phosphor with fast decay (including a small 'tail') and efficient green output. The intensifier output image is collected by the high performance internal relay optics matching into either an externally adjustable F or C (18mm diagonal image) mount supplied lens on the coupled camera system. The user may easily select alternative image formats by an alternative choice of objective lens.

Advanced features such as a fully user programmable output shutter monitor and an independent output strobe complement the system.

Alternative UVi models, optimized for specific spectral responses, phosphors, intensifier formats or faster shuttering speeds are also available.

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Specification	UVi	Model 1850-100-S20
Intensifier Input Window	Full Custom, integral M Quartz.	ICP design.
Photocathode		mA/W - see response curve below.
Output Window Phosphor	Fibre-optic. Proprietary green, decay – ty	petween 100 to 150µA/lumen.
Luminous Gain Output Diameter	Maximum > 150,000 18mm.	
Gating Resolution	100ns Minimum (faster units a 27 lp/mm.	available upon request).
<u>Optics</u>		
Input	F – mount.	
Internal External	Integral f/1.4 lens system. Mated f/1.4 lens.	
Output Image Format	Maximum usable diameter 17	7.5mm.
<u>System</u>	All electronics/controls includ	
	Menu driven LCD control pan USB port and graphical user	
	Crystal controlled timing accu	
Exposures	100ns to > 1ms in 10ns steps	S.
Delays	50ns > 10ms in 10ns steps.	
Burst mode / Multiple Exposure Gain Control	Up to 100 programmed delay User programmable 0 to 100°	rs/exposures per input trigger. % (12 bits).

Outputs

Triggering

Protection

Environmental

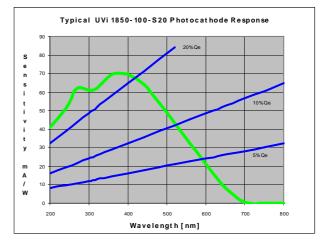
Dimensions (approximate) Weight Power Temperature Construction Mounting Documentation and Software Packaging

CE and RoHS (Pb free)

Invisible Vision reserves the right to modify specifications without notice.

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TTL Positive, TTL Negative. Make / Break (self powered). Comp. video frame / field synchronization. User Programmable TTL shutter monitor. User Programmable TTL 'strobe' output. Automatic over-brightness (user controlled).

105 x 85 x 180mm - including output lens. < 1.5 Kg. 16W (16V DC @ 1A max.) via supplied adapter (90-264VAC). 0°C to 40°C, non-condensing humidity. Aluminium housing. 1/4-20 UNC thread on base. Supplied on CD. Flight box.