

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 integral menu driven LCD 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.





The novel. custom designed 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 mount (18mm diagonal image) 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 (25mm) or faster shuttering speeds are also available.

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Specification	UVi	Model 1850-10-S20
Intensifier Input Window	Full Custom, integral MCP design.	
Photocathode		to Visible). 50 mA/W - see response curve below. 9 between 100 to 150µA/lumen.
Output Window Phosphor Luminous Gain	Fibre-optic.	typically 10µs. Others i.e. P46 available.
Output Diameter Gating	18mm (Alternative 25mm fo 10ns Minimum (faster units	
Resolution	27 lp/mm.	
Optics Input	F – mount.	
Internal External	Integral f/1.4 lens system. Mated f/1.4 lens.	
Output Image Format		17.5mm. (25mm format also available).
<u>System</u>	All electronics/controls inclu Manu driven LCD control n	
	Menu driven LCD control p USB port and graphical use	er interface s/w.
Exposures	Crystal controlled timing ac 10ns to > 1ms in 10ns step	
Delava	5ns and faster units availab	
Delays Burst mode / Multiple Exposure	30ns > 10ms in 10ns steps Up to 100 programmed del	ays/exposures per input trigger.

User programmable 0 to 100% (12 bits).

Comp. video frame / field synchronization.

User Programmable TTL shutter monitor. User Programmable TTL 'strobe' output.

Automatic over-brightness (user controlled).

TTL Positive, TTL Negative.

Make / Break (self powered).

Burst mode / Multiple Exposure Gain Control Triggering

Outputs

Protection

Environmental

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

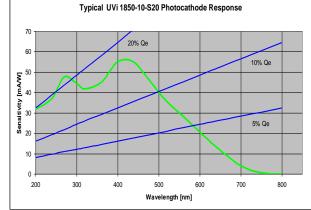
CE and RoHS (Pb free)

Invisible Vision reserves the right to modify specifications without notice.

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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.



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