

## UVi High Power Camera Intensifier

Making the invisible visible

The Invisible<sup>®</sup> 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 1850B models are designed for higher power output applications as typically required with high speed video camera frame rates in excess of 50,000 fps. Similar to a conventional 3 stage design in terms of output power and performance but with an improved interstage proprietary fast phosphor and a full custom designed intensifier the 1850B suffers less from interstage concatenating phosphor decays than conventional designs.





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 (> 100ns in 10ns steps) and at framing rates up to 10M fps in burst mode.

The custom designed boosted intensifier is optimized for use with modern high speed video cameras offering high gain and a fast P46 output phosphor. The intensifier output image is collected by the high performance internal relay optics matching onto an externally adjustable 50mm F mount (18mm diagonal image) supplied lens to the coupled camera system. Alternative image formats may be selected by differing coupling lenses.

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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<b>Specification</b>	UVi	Model 1850B-100-S20
Intensifier	Full Custom, integral MCP design with booster.	
Input Window Photocathode		nm (UV to Visible). Ily > 65 mA/W - see response curve below. ponse between 100 to 150µA/lumen.
Output Window	Fibre-optic.	
Phosphor Luminous Gain	Maximum typically 1,0	ermediary stage proprietary. 000,000
Output Diameter Gating Resolution	18mm. 100ns Minimum (faste 27 lp/mm.	er units available upon request).
Ontice		
Optics Input	F – mount.	
Internal External	Integral f/1.4 lens syst Mated f/1.4 lens.	tem.
Output Image Format	Maximum usable dian	neter 17.5mm.
<u>System</u>	All electronics/controls	s included within unit.
	Menu driven LCD con	
	USB port and graphic Crystal controlled timi	
Exposures	100ns to > 1ms in 10r	ns steps.
Delays	50ns > 10ms in 10ns	
Burst mode / Multiple Exposure Gain Control	User programmable 0	ed delays/exposures per input trigger.
Triggering	TTL Positive, TTL Neg	
	Make / Break (self po	wered).
	Comp. video frame / f	
Outputs	User Programmable T User Programmable T	

Automatic over-brightness (user controlled).

130 x 85 x 180mm - including output lens.

0°C to 40°C, non-condensing humidity.

16W (16V DC @ 1A max.) via supplied adapter (90-264VAC).

< 1.5 Kg.

Aluminium housing.

Supplied on CD. Flight box.

1/4-20 UNC thread on base.

Protection

## **Environmental**

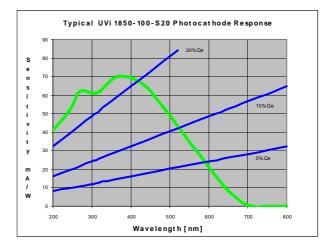
Dimensions (approximate) Weight Power Temperature Construction Mounting Documentation and Software Packaging

## CE and RoHS (Pb free)

Invisible Vision reserves the right to modify specifications without notice.

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