DATASHEET

MVS-2600 Series
Machine Vision Strobes

Description

The Excelitas MVS 2600 Series Machine Vision Strobe systems produce high intensity pulsed light for industrial vision applications. The light output of the strobe may be coupled directly to a fiber optic bundle, a slit projector, or an optical assembly to project light to an area remote from the instrument. When used with a CCD/CID camera system, the MVS 2600 Series strobes freeze motion, thereby eliminating blur and enhancing camera image quality.

The MVS 2600 Series strobes consist of a power supply, a diode pac, a discharge board, and a Lite-Pac® containing a flashlamp. A nose piece and an adapter are used to interface fiber optic bundles to the flashlamp. A heat sink is used to secure the nose piece or a structured light assembly to the flashlamp.

MVS 2600 Series strobe systems are available in configurations to satisfy various user requirements. The standard MVS 2601 operates up to 60 Hz. An MVS 2612 (400 Hz maximum) or MVS 2613 (1000 Hz maximum) are available at lower light output energies. The MVS 2611 produces 1 µ sec pulses at 1 kHz maximum.

Features

- Remote illumination via fiber bundles from flashlamp
- Flash rates of 60, 400, and 1000 Hz •

Microsecond flash durations

- Long lamp life
- Remote intensity control capability

EXCELITAS TECHNOLOGIES

MVS-2600 Series

Optical Specifications

	MVS-2600 Series
Spectral bandwidth (1)	300 to 1100+ nm
Flashlamp arc length	0.06 in (1.5mm)
Flash rate (2)	60 Hz maximum
Flashlamp life (4)	10^8 flashes
Flash duration (2) (3)	6 microseconds typical
Flash to flash variation	<5%
Light output (2)	Photometric: 2.5 lumen-sec Radiometric: 20 mJ

Note 1: Spectral bandwidth may be extended into the ultraviolet by using other flashlamp envelope materials.

Note 2: Measured at light output port, 600 VDC and 4µf. Lower energy discharge levels providing higher flash rates and lower outputs are available. Note 3: Measured at 1/3 of peak current.

Note 4: While maintaining >70% of initial intensity

Environmental Specifications

Operating temperature	-10 to +110°C (-23 to +43°F)
Storage temperature	-40 to +194°C (-40 to +90°F)
Shock and vibration	1.5 g. 5 to 20 Hz per MIL-STD 810C

Electrical Specifications

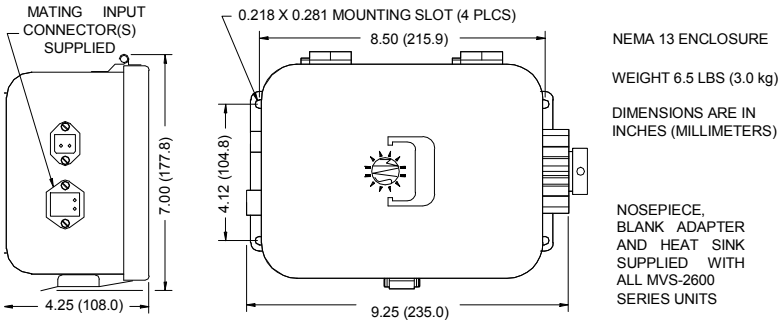
Type	**MVS-2601**	**MVS-2602**
Line input voltage	115/230 ±10% VAC 50/60 Hz (115 factory set)	15 to 28 VDC
Input current	1.2 amps maximum (115 VAC)	4 amps peak at 24 VDC
Output voltage (1)	225 to 750 volts	200 to 750 volts
Output power (2)	43 watts maximum	43 watts maximum
Reference voltage (3)	3 to 10VDC	2 to 10 VDC
Tirgger input: (4)		
Trigger	+5 volt pulse into opto-isolator with 150 ohm nominal series resistor	
Pulse duration	10 to 100 microseconds	

Note 1: Output measured @ front face of bulb.

Note 2: Up to 20 watts with heat sink and natural convection cooling. Above 20 watts forced air cooling is required.

Note 3: Output voltage may be adjusted using an external voltage reference source. MVS 2601, 75 volts per volt of reference. MVS 2602, 100 volts per volt of reference. Note 4: Delay between flash command and light output is 8 microseconds typical.

Mechanical Specifications



For more information e-mail us at generalinquiries@excelitas.com or visit our web site at www.excelitas.com

All values are nominal; specifications subject to change without notice.

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