DATASHEET

VIGI-Lux™ IR Illuminator
by Excelitas
MVS 5760 Series

Overview

The VIGI-Lux™ MVS 5760 Series IR Illuminators by Excelitas are high intensity, low flash rate, Xenon strobes for direct illumination applications. An IR bandpass filter eliminates all the visible light from the Xenon spectrum. The system is ideal as a high intensity, invisible IR source for applications such as license plate illumination on moving vehicles or nighttime surveillance. The flashlamp system is housed in a NEMA type 3R enclosure to provide protection against harsh environments. This strobe can also be used without the filter for any application that requires a large area of intense illumination.

The spectral output of the Xenon flashlamp in the VIGI-Lux MVS 5760 covers the full spectrum from ultraviolet (UV) through the visible (VIS) to the near infrared (NIR). The standard IR filter supplied removes all the wavelengths under 780 nm, making the strobe invisible to the human eye. The spectral output can be changed to match your application by simply changing the bandpass filter. Additionally, two reflector options are available for narrow beam (8°) or a wide beam (25°) configuration.

The power supply of the VIGI-Lux MVS 5760 produces up to 50 Joules per flash. The intensity can be controlled with an external reference signal, and a trigger input allows you to synchronize the flash with your camera.

Features and Benefits

- Long life Xenon flashlamp: > 10^8 flashes
- High intensity
- Low maintenance
- Short pulse width
- Interchangeable filter
- Available in narrow or wide beam
- Easy lamp replacement

Applications

- License plate recognition
- Night or low light surveillance
- Quality assurance
- Motion detection

VIGI-Lux™ MVS 5760 TECHNICAL SPECIFICATIONS

Optical Specifications

	MVS 5760-01	MVS 5760-02
	Wide Beam	Narrow Beam
Maximum flash rate[1]	1 Hz	1 Hz
Input energy per flash[1]	50 J	50 J
Optical output at 1 m	0.4 mJ/cm^2	0.85 mJ/cm^2
Vertical beam spread[2]	25°	8°
Horizontal beam spread[2]	75°	75°
Spectral bandwidth[3]	780 - 1100 nm	780 - 1100 nm
Pulse duration[4]	200 µs	200 µs
Flash to flash stability	±10%	±10%

Environmental Specifications

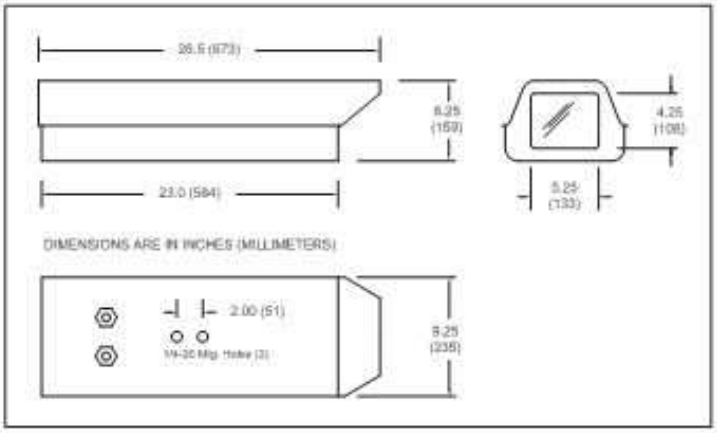
Operating temperature[7]	-10 to +110°F (-23 to +43°C)
Storage temperature	-40 to +194°F (-40 to +90°C)

1 Higher flash rates are available at lower flash energies.
2 Measured at 50% points of peak intensity.
3 Bandwidth depends on filter used; typical Xenon spectrum is 250 - 1100 + nm.
4 Measured at 1/3 of peak.
5 Contact the factory for DC power supply options.
6 Factory set at 1000 VDC.
7 Contact the factory for thermostat controlled heaters and blower options.

Electrical Specifications

	MVS 5760-01	MVS 5760-02
	Wide Beam	Narrow Beam
Input voltage[5]	90 - 230 VAC ±10%, 50/60 Hz	90 - 230 VAC ±10%, 50/60 Hz
Average power	60 W	60 W
Discharge capacitor	100 µF	100 µF
Input current (RMS)	< 3 A	< 3 A
Flashlamp voltage[6]	600 - 1000 VDC	600 - 1000 VDC
Remote intensity control	4 - 7 VDC (VLAMP = 150 x VREF)	4-7 VDC (VLAMP = 150 x VREF)
Trigger input	+5 V TTL, 10 - 100 µs pulse into 4N36 opto-isolator with internal 150 Ω resistor	+5 V TTL, 10 - 100 µs pulse into 4N36 opto-isolator with internal 150 Ω resistor

MECHANICAL SPECIFICATIONS



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

Excelitas Technologies
35 Congress Street
Salem, MA 01970
Telephone: 978-745-3200
Toll free: (800) 950-3441 (USA)
Fax: 978-745-0894
generalinquiries@excelitas.com
www.excelitas.com

European Headquarters
Excelitas Technologies
Wenzel-Jaksch-Str. 31
65199 Wiesbaden, Germany
Telephone: (+49) 611-492-247
Fax: (+49) 611-492-170

Asia Headquarters
Excelitas Technologies
47 Ayer Rajah Crescent #06-12
Singapore 139947
Telephone: (+65) 6775-2022
Fax: (+65) 6775-1008

Vision Light Tech
NL-5405 NE UDEN
The Netherlands
Telephone: +31 (0)413 260067
Fax: +31 (0)413 260938

For a complete listing of our global offices, visit www.excelitas.com

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