



MVS-5770 Series VIGI-Lux® IR Illuminator



Excelitas' VIGI-Lux® Family of IR Illuminators – and its MVS 5770 Series - feature high intensity Xenon strobes, offer long life, and require very low maintenance.

Description

Excelitas' MVS-5770 Series, part of the VIGI-Lux Family, are high intensity, Xenon strobes for direct illumination applications. An infrared longpass 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 flash lamp system is housed in a rugged weatherproof, 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.

One power supply option is available with energies up to 50 J 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.

The spectral output of the Xenon flash lamp covers the full spectrum from ultraviolet (UV) through the visible (VIS) to the infrared. The standard IR filter 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 filter. Additionally, two reflector options are available for narrow beam (8°) or wide beam (25°) configuration.

Key Features

- High intensity
- Long life
- Very low maintenance
- Short pulse width
- Interchangeable filter
- Available in narrow or wide beam
- Easy lamp replacement
- Rugged weatherproof enclosure to protect against harsh environments
- IP-66 certified
- CE-marked

Applications

- License plate recognition (LPR)
- Nighttime surveillance
- Motion detection
- Part inspection

MVS-5770 Series

VIGI-Lux® IR Illuminator

Table 1 Optical Specifications

VIGI-Lux Family, MVS 5770-01	Narrow Beam	Wide Beam
Maximum flash rate (2)	1 Hz	1 Hz
Optical output at 1m	1mJ/cm ²	0.4mJ
Vertical beam spread (3)	8°	25°
Horizontal beam spread (3)	75°	75°
Spectral bandwidth (4)	780 – 1100 nm	780 – > 1100 nm
Pulse duration (5)	200 usec	200 usec
Flash to flash stability	±10%	±10%

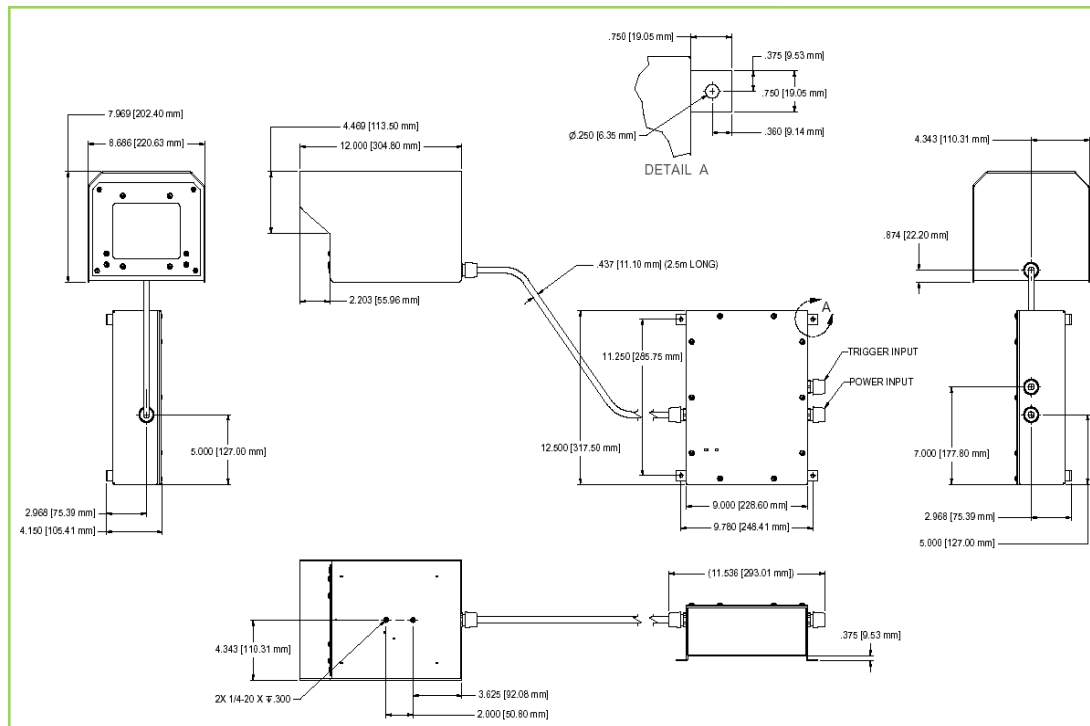
Table 2 Electrical Specifications

VIGI-Lux Family, MVS 5770-01	Wide Beam	Narrow Beam
Input voltage	90 – 230 VAC (+10%), 50/60 Hz	90 – 230 VAC (+10%), 50/60 Hz
Input energy per flash (2)	50 J	50 J
Average power	50 W	50 W
Discharge capacitor	100 uF	100 uF
Input current (rms)	< 3 A	< 3 A
Flashlamp voltage (6)	600 – 1000 VDC	600 – 1000 VDC
Remote intensity control	4 – 6.7 VDC (V _{lamp} = 150 x V _{ref})	4 – 6.7 VDC (V _{lamp} = 150 x V _{ref})
Trigger input	+5V / 25mA, 10 – 100 usec pulse into 4N36 photo-isolator with internal	+5V / 25mA, 10 – 100 usec pulse into 4N36 photo-isolator with internal

Table 3 Environmental Specifications

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

Note 1: All values are nominal and subject to change without notice.
 Note 2: Higher flash rates are available at lower flash energies.
 Note 3: Measured at 50% points of peak intensity.
 Note 4: Bandwidth depends on filter used; typical Xenon spectrum is 250-1100 + nm.
 Note 5: Measured at 1/3 of peak.
 Note 6: Factory set at 1000 VDC.



About Excelitas Technologies

Excelitas Technologies is a global technology leader focused on delivering innovative, customized solutions to meet the lighting, detection and other high-performance technology needs of OEM customers.

From medical lighting to analytical instrumentation, clinical diagnostics, industrial, safety and security, and aerospace and defense applications, Excelitas Technologies is committed to enabling our customers' success in their specialty end-markets. Excelitas Technologies has approximately 3,000 employees in North America, Europe and Asia, serving customers across the world.

Excelitas Technologies
 35 Congress Street
 Salem, Massachusetts
 01970 USA
 Telephone: (+1) 978.745.3200
 Toll free: (+1) 800.950.3441
 Fax: (+1) 978.745.0894

Excelitas Technologies
LED Solutions, Inc.
 160 E. Marquardt Drive
 Wheeling, Illinois
 60090 USA
 Telephone: (+1) 847.537.4277
 Fax: (+1) 847.537.4785

Excelitas Technologies
Illumination, Inc.
 44370 Christy Street
 Fremont, California
 94538-3180 USA
 Telephone: (+1) 510.979.6500
 Toll-free: (+1) 800.775.6786
 Fax: (+1) 510.687.1140

Excelitas Technologies
Elcos GmbH
 Luitpoldstrasse 6
 Pfaffenhofen, 85276
 Germany
 Telephone: (+49) 8441.8917.0
 Fax: (+49) 8441.7191.0

Excelitas Technologies Shenzhen Co., Ltd.
Wearnes Technology Center
 No.10 Kefa Road, Science & Industry Park
 Nanshan District,
 Shenzhen, Guangdong
 P.R. of China 518057
 Telephone: +86 2655 3861
 Fax: +86 755 2661 7311

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

© 2011 Excelitas Technologies Corp. All rights reserved. The Excelitas logo and design are registered trademarks of Excelitas Technologies Corp. All other trademarks not owned by Excelitas Technologies or its subsidiaries that are depicted herein are the property of their respective owners. Excelitas reserves the right to change this document at any time without notice and disclaims liability for editorial, pictorial or typographical errors.

