

## 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



## 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 <sup>2</sup>	0.4mJ
Vertical beam spread (3)	8°	25°
Horizontal beam spread (3)	75°	75°
Spectral bandwidth (4)	780 – 1100 mm	780 - > 1100 mm
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	<3A
Flashlamp voltage (6)	600 – 1000 VDC	600 – 1000 VDC
Remote intensity control	4 – 6.7 VDC (Vlamp = 150 x Vref)	4 – 6.7 VDC (Vlamp = 150 x Vref)
Trigger input	+5V / 25mA, 10 – 100 usec pulse into 4N36 opto-isolator with internal	+5V / 25mA. 10 – 100 usec pulse into 4N36 opto-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.

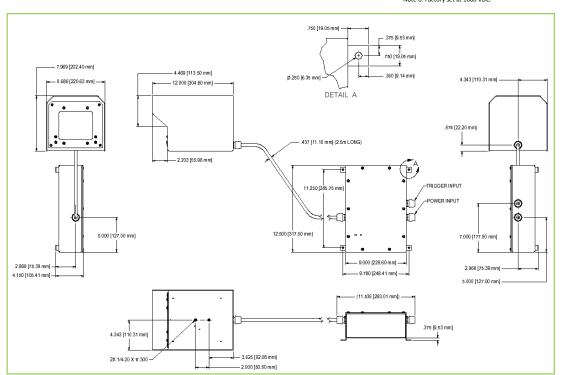
Note 2: Higher flash rates are available at lower flash energies.

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.

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