



PRODUCT SPECIFICATION

MODELS: V402-IRN AND V402-IRW

PRODUCT CODES: 3255 AND 3256

DESCRIPTION: INFRARED ILLUMINATORS

Vicon's Infrared Illuminators offer an effective approach to nighttime surveillance for security installations where sufficient illumination is not available or where illumination must not be exposed to view. These low-voltage illuminators project the greatest possible light energy over a maximum distance and have an operating life of up to 10,000 hours.

The units feature an extremely effective, coated, infrared security filter that transmits only 0.01 percent of visible light. Automatic On/Off operation is provided by a photocell switch.

The illuminators are available in both narrow-beam and wide-beam versions. The narrow-beam model is used when maximum projection distance is required. The units are equipped with 200-watt high-intensity lamps.

Use of a V402 Illuminator in conjunction with one of Vicon's infrared-sensitive cameras provides effective after-dark surveillance at a fraction of the cost of a SIT or ISIT camera. Vicon cameras suitable for this application include the VC200, VC250, and VC100 with Ultricon*III tubes or the VC265 CCD camera without the IR cutoff filter.

The spectral range of light emitted by the Infrared Illuminators is shown in Figure 1.

TECHNICAL INFORMATION

OPERATIONAL

Tilt Adjustment:	±15 degrees (mounted on V18A Bracket).
Beam Spread:	Narrow Beam; 12 degrees horizontal, 13 degrees vertical. Use with 50mm to 75mm focal-length lenses. Wide Beam; 50 degrees horizontal, 13 degrees vertical. Use with 12.5mm to 25mm focal-length lenses.
Size:	Height; 8.31 in. (21.2 cm). Width; 7.63 in. (19.4 cm). Length; 10.25 in. (26.0 cm).
Weight:	13.75 lb (6.2 kg).

NOTES	SPEC NO.	REV.	SEC.
SUPERSEDES PRODUCT SPECIFICATION 301-586	301	387	16



V402 SERIES INFRARED ILLUMINATOR

Shipping Dimensions Height; 11.0 in. (27.9 cm).
 Width; 10.0 in. (25.4 cm).
 Depth; 16.0 in. (40.6 cm).

Shipping Weight: 16.2 lb (7.3 kg).

Shipping Volume: 1.02 ft³ (.03 m³).

Mounting: Two 1/4-20 tapped holes on mounting bracket spaced 2.50 in. (6.35 cm) apart, plus one centrally located 0.28 inch (0.7 cm) wide slot.

ELECTRICAL

Lamp Data: Narrow Beam; General Electric 4580 (200 W).
 Wide Beam; General Electric 4554 (200 W).

Lamp Voltage: 15.5 V nominal.

Input Voltage: 120 V 50/60 Hz (240 VAC optional).

Input Current: 2.0 A at 120 VAC.

Input Power: Approximately 300 W.

DANGER: To prevent eye damage resulting from exposure to infrared light, do not look directly into light source at distances less than 40 feet (12.2 m).

Product specifications subject to change without notice.
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**TABLE 1
ILLUMINATOR DATA**

Model No.	Effective Range Feet (Meters)*	Type of Beam	Lamp (Watts)	Lens Focal Length (mm)
V402-IRN**	300-400 (90-120)	Narrow	200	50-75 mm
V402-IRW	150-200 (45-60)	Wide	200	12.5-25 mm

* Using a silicon diode array Vidicon and f/1.8 lens.

** For use when maximum range is required.

ASSOCIATED EQUIPMENT AND ACCESSORIES

MOUNTING BRACKET

Model V18A: Used to mount illuminator with camera on Vicon medium- or heavy-duty pan-and-tilt drives or heavy-duty scanners.

CAMERAS

Model VC200 Standard and VC250 High-Performance 2/3-Inch Black-and-White Cameras: Available in various voltages and three tube types. Ultricon III tubes are recommended for use with the Infrared Illuminator.

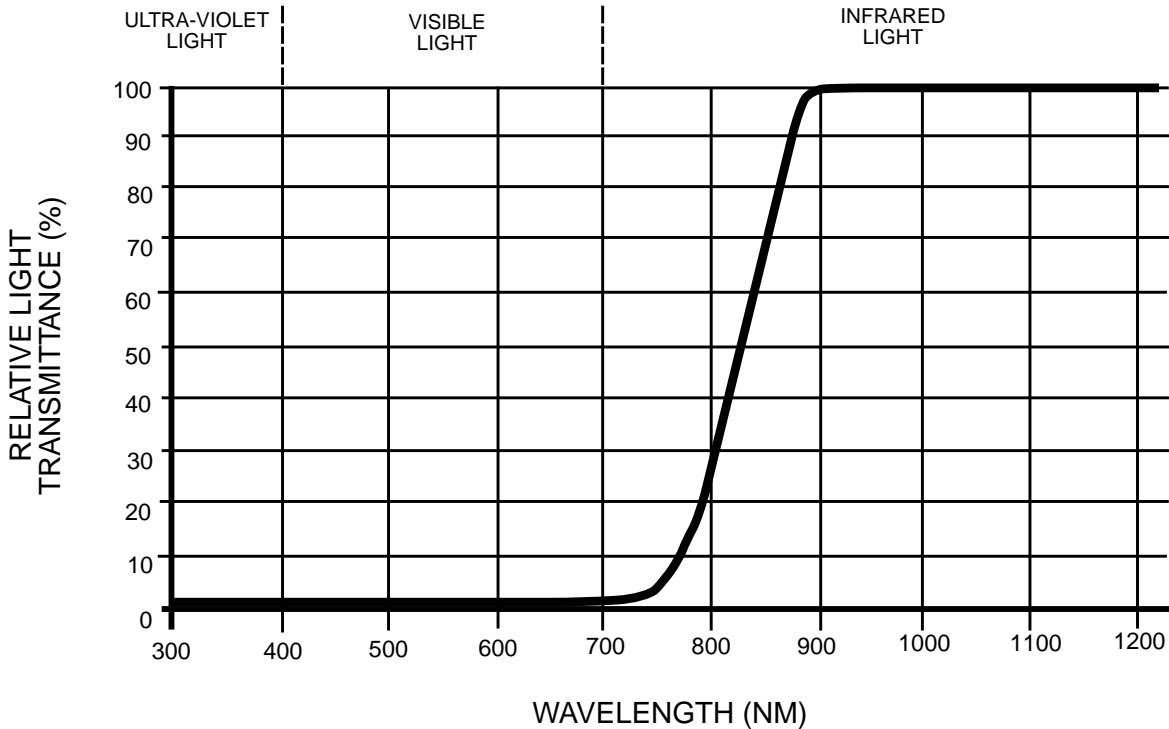
Model VC100 High-Performance One-Inch Black-and-White Camera: Available in multiple voltages and with three tube types. Ultricon III tubes are recommended for use with the Infrared Illuminator.

Model VC265 Solid-State 2/3-Inch CCD Camera: For applications requiring extremely compact size and resistance to magnetic fields and vibration. Models without the IR cutoff filter option are recommended for use with the Infrared Illuminators.

REPLACEMENT LAMPS

Model V401-2: A 200-watt narrow-beam lamp, G.E. No. 4580 (manufacturer's rating 450W).

Model V401-2W: A 200-watt wide-beam lamp, G.E. No. 4554 (manufacturer's rating 450W).



NOTE: .14% or less at 700 nm
.007% or less at 400 - 625 nm

**Figure 1
Spectral Range of V402 Series Illuminators**