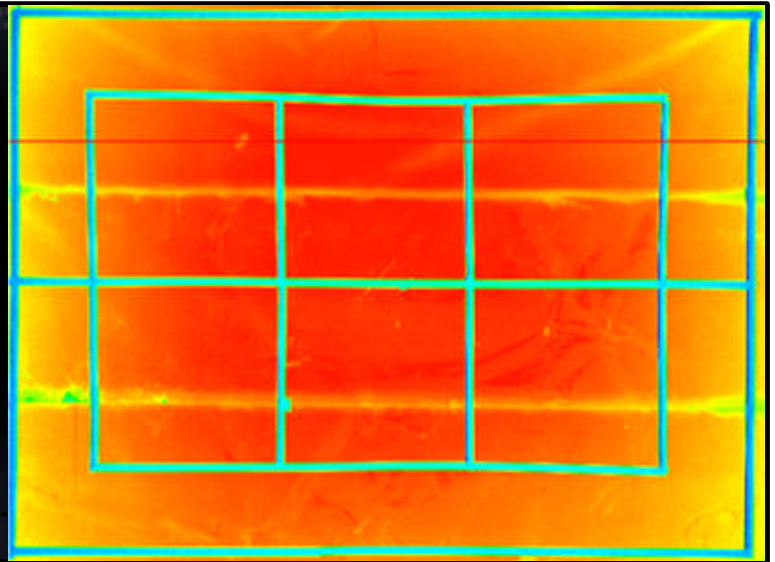




Damascus

Camera Housing with Integrated High Intensity
LED Strobe Light
Produces 3000 lumens



Illumination Profile of 7 x 9 foot retroreflective screen at 42 feet

The **Damascus** camera housing and high intensity LED strobe illuminator is designed to provide on-retro illumination for vehicle identification systems. The strobe is synchronized to a video source or external trigger. The unit can be mounted on various support structures from either the top or bottom. The entire internal assembly is slide mounted so that the removal of 4 captive screws allows installation and maintenance crews to rapidly install and repair all internal functions while keeping lane closure time to a minimum. A multi-protocol serial communication connection is available for programming video synchronization parameters as well as environmental control and monitoring. Over 1200 units have been fielded across hundreds of lanes across the US and Canada.

Key Features:

- Light synchronization to input video allows the strobe to be on only during “open shutter”
- Output light power can be automatically adjusted to ambient light conditions according to up to 64 user defined levels.
- Light output timing and general device operation is fully programmable over remote link via RS-422, RS-232, or RS-485
- Each unit can be assigned an address for individual control on a multi-drop RS-485 network
- All non-power inputs are isolated from device ground
- White LED version emits 4,000 lumens, while IR version emits 12 Watts
- Narrow, Medium, and Wide Versions available for both visible and IR operation
- Duo-Strobe operation with 30 Hz video rates allows flicker free operation - minimizing driver annoyance
- Remotely monitor temperature and power consumption to detect possible failures
- Designed to meet IP65 environmental rating (Unit will undergo certification testing in March 2010)
- Uses 24VAC power for all functions - 12 VDC generated internally for powering cameras (separate 12 VDC power supply can be used for powering camera and controlling video ground level if desired)
- “IP” cameras supported via an external trigger mode - multiple rear RJ45 connectors available (contact Opsci for details)
- Two Internal Heaters keep window from fogging (operate off 24VAC supply - 38 Watts each)
- Top or Bottom mounting with ¼-20 bolts (4.125" x 2.86" spacing)
- Made in the United States of America

Damascus Operational Data

Absolute Maximum Ratings

Operating temperature	-40 C to 70 C
Storage temperature	-40 C to 80 C
Input pulse duration	1 ms at 60 Hz or .5ms at 120 Hz
Input power supply voltage	25 VAC
Max external trigger peak voltage	5 V

Electrical Parameters

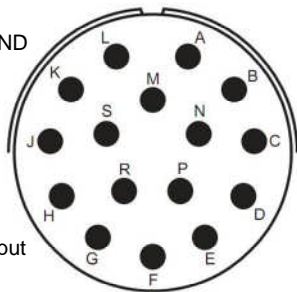
LED and control electronics power	24 VAC at 50/60 Hz (10W) (optional 12VDC input for camera power)
External Trigger input resistance	800 Ω
External Trigger input threshold	4 V
Heater Voltage Supply	24 VAC (38 W for front heater and 38 Watts for rear heater)
Analog Video transmission mode	single ended (75 Ω Termination DC reference to supplied ground)

Misc

Video input formats supported	NTSC, RS-170, PAL, CCIR, IP (via direct trigger)
External Trigger modes	TTL input or serial communication command
LED type	Luxeon Rebel 100 lumen White or OSRAM IR Dragon (850nm)
Optic beamwidth (FWHM)	Narrow=9 deg. Medium=19 degrees Wide=24 degrees
Pulse duration and delay increments	1 μ s
LED current adjustment range	100 mA to 2 A
Ambient light sensor range	1 lux to 1023 lux
Serial Protocol	RS422 and RS232 - 115,00 baud N81 RS485 - 9600 baud N81
Dimensions	22" L x 8.5" H x 7.5" W (558mm x 216mm x 191mm)
Weight	22 lbs. (10 kg)

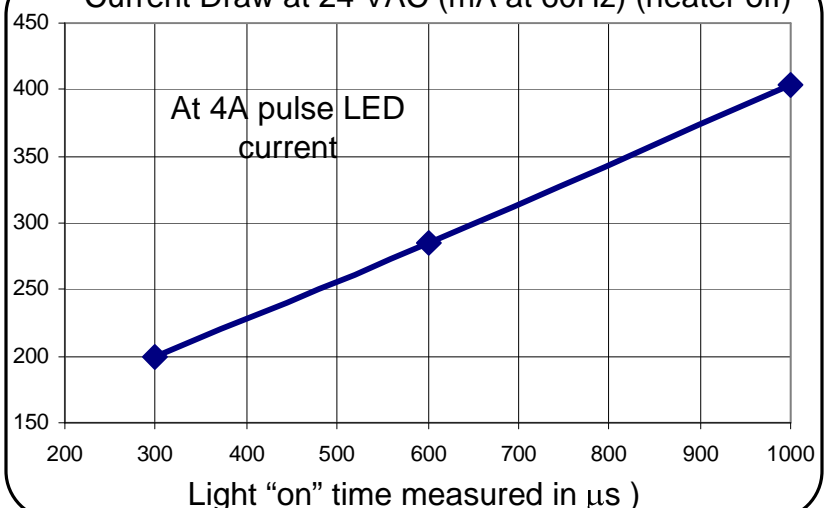
Rear Power Connector

A	Analog Video output
B	Analog Video output GND
E	24VAC for heater
F	24VAC rtn for heater
G	Chassis GND
H	RS422 Tx-
J	RS422/RS232 Tx+
K	RS422 Rx -
L	RS422/RS232 Rx+
M	+12 VDC aux power input
N	aux power GND
R	External TRIG input
S	External TRIG GND



- Connector on back panel is Amphenol PT02A-2016P or equivalent
- Mating Cable should be Amphenol PT06A-2016P

Current Draw at 24 VAC (mA at 60Hz) (heater off)



Internal Configuration Data:

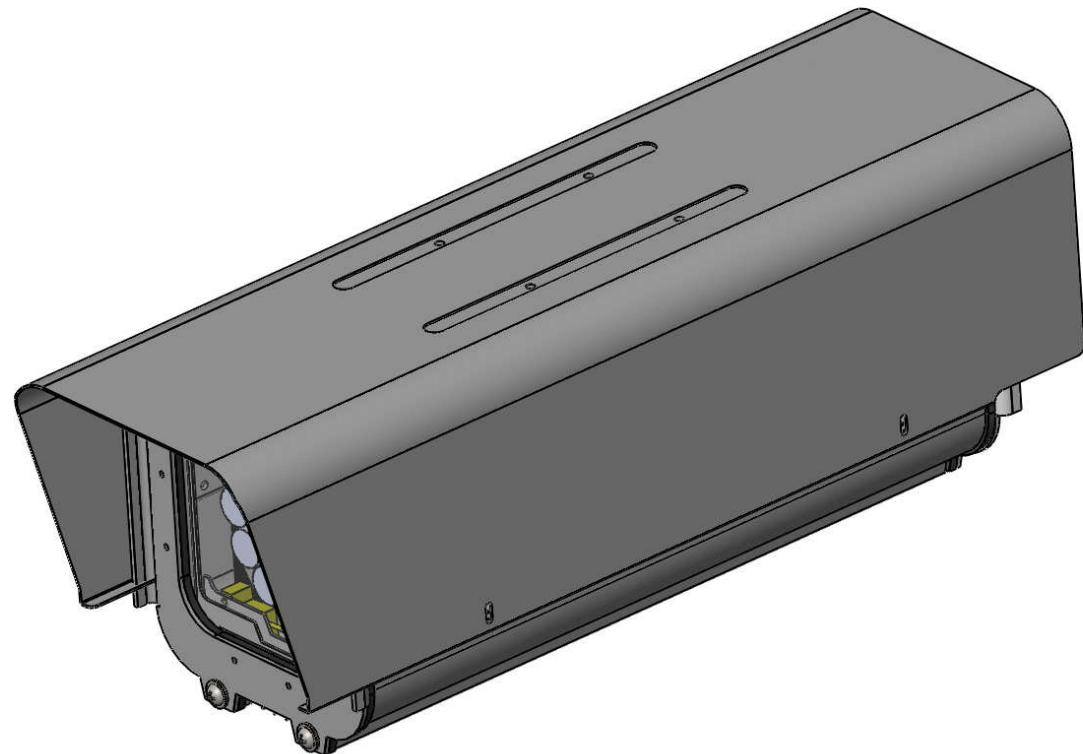
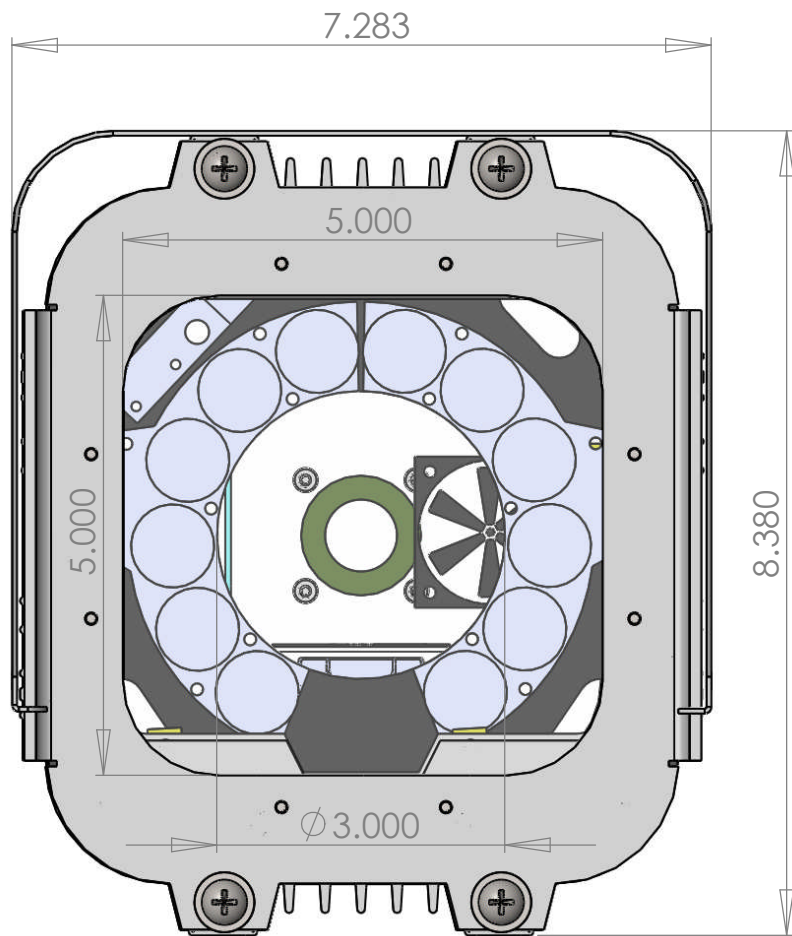
Maximum Lens diameter:	75mm
Internal Video connector:	BNC or RJ45
Camera mount:	1/4 - 20 slot
Max Camera/Lens length:	300mm

Nominal illumination is 102 lux, measured on-axis illumination at 42 feet - normal incidence measurement for 500 μ s pulse, 60 Hz rate

Pattern non-uniformity is less than 10% across 12 degree field of view (8 feet at 42 feet)

Ordering Information:

- Standard Part Number: 30-1006-7 using 12 Lumiled Rebel LEDs (Cool White)
 - with narrow optics (9 deg width at 50% maximum): order -N
 - with medium optics (19 deg width at 50% maximum): order -M
 - with medium optics (24 deg width at 50% maximum): order -W
- Can be ordered with 12 Osram "IR Dragon" IR LEDs: Part Number 30-1006-11 (-N, -M, -W optics available)
- Also available as a housing for "IP" type cameras (with RJ-45 Ethernet data connections): Part Number 30-1007-3. Contact OpSci for details about available sealed RJ-45 connectors.



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 Cedar Park, TX 78613

MATERIAL

FINISH

TITLE:

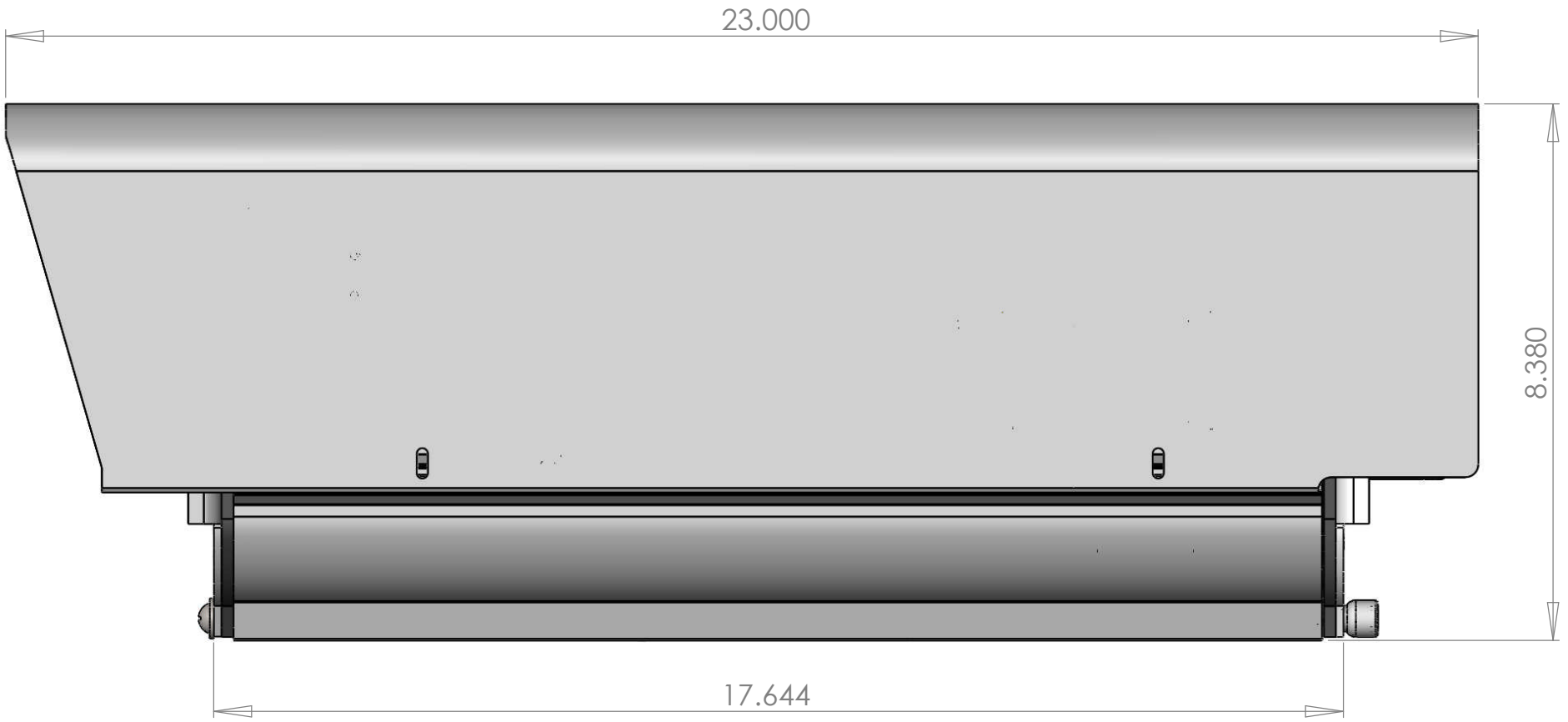
30-1006-7 Damascus

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WEIGHT:

SHEET 1 OF 2



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WEIGHT: SHEET 2 OF 2