



HIGH-INTENSITY VISIBLE SPECTRUM LED LIGHTING SYSTEMS



LIGHT IT UP. BRIGHTER THAN EVER.

HADLAND[®]
IMAGING

CAMERAS • SYSTEMS • ACCESSORIES

1-888-43HADLAND (1-888-434-2352) | www.hadlandimaging.com



High-Intensity Visible Spectrum LED Lighting Systems

Version 2

November 03, 2021

© REL, Inc.

REL, Inc. manufactures World Class equipment. REL's extensive background in advanced materials and mechanical design have allowed a unique specialization in process equipment for REL branded equipment in Fluorescent Penetrant Inspection Process (FPI) for Non-Destructive Testing, servo driven material handling equipment, and High Strain Rate Material Testing.

REL, Inc.

57640 North Eleventh Street

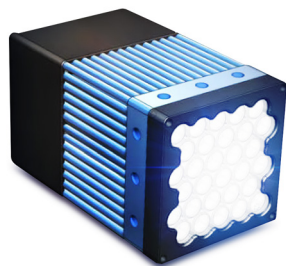
Calumet, MI 49913

USA

phone: 906-337-3018 x302

email: rel@relinc.com

www.relinc.com



**BETTER GEAR.
BETTER RESULTS.**
We've got the gear you need to get the job done right

HADLAND[®]
IMAGING

West Coast

1414 Soquel Ave, Suite 200

Santa Cruz, CA 95062

USA

phone: 1-408-203-2727

www.hadlandimaging.com

East Coast

10 Park Place, Suite 507

Butler, NJ 07405

USA

phone: 1-862-228-2185



Better Gear. Better Results. We've got the gear you need to get the job done right.



High-Intensity Visible Spectrum LED Lighting Systems

REL's High-Intensity Visible Spectrum LED lights are designed and built specifically for ultra high-speed scientific research video cameras featuring frame rates greater than five million frames per second.

REL has a decades-long tradition of manufacturing High Strain Rate Testing equipment for advanced materials research and understands the challenge of providing enough light to capture events on the microsecond time scale.

CONTENTS

Profusion X	4
FLC-1600	6
Ring Light	8
Universal Tripod Mount System	10
Profusion X Purchasing Options & Power Supplies	12
FLC-1600 Purchasing Options & Power Supplies	14
Ring Light Purchasing Options & Power Supplies	16
LED Visible Spectrum Lighting	18

Profusion X

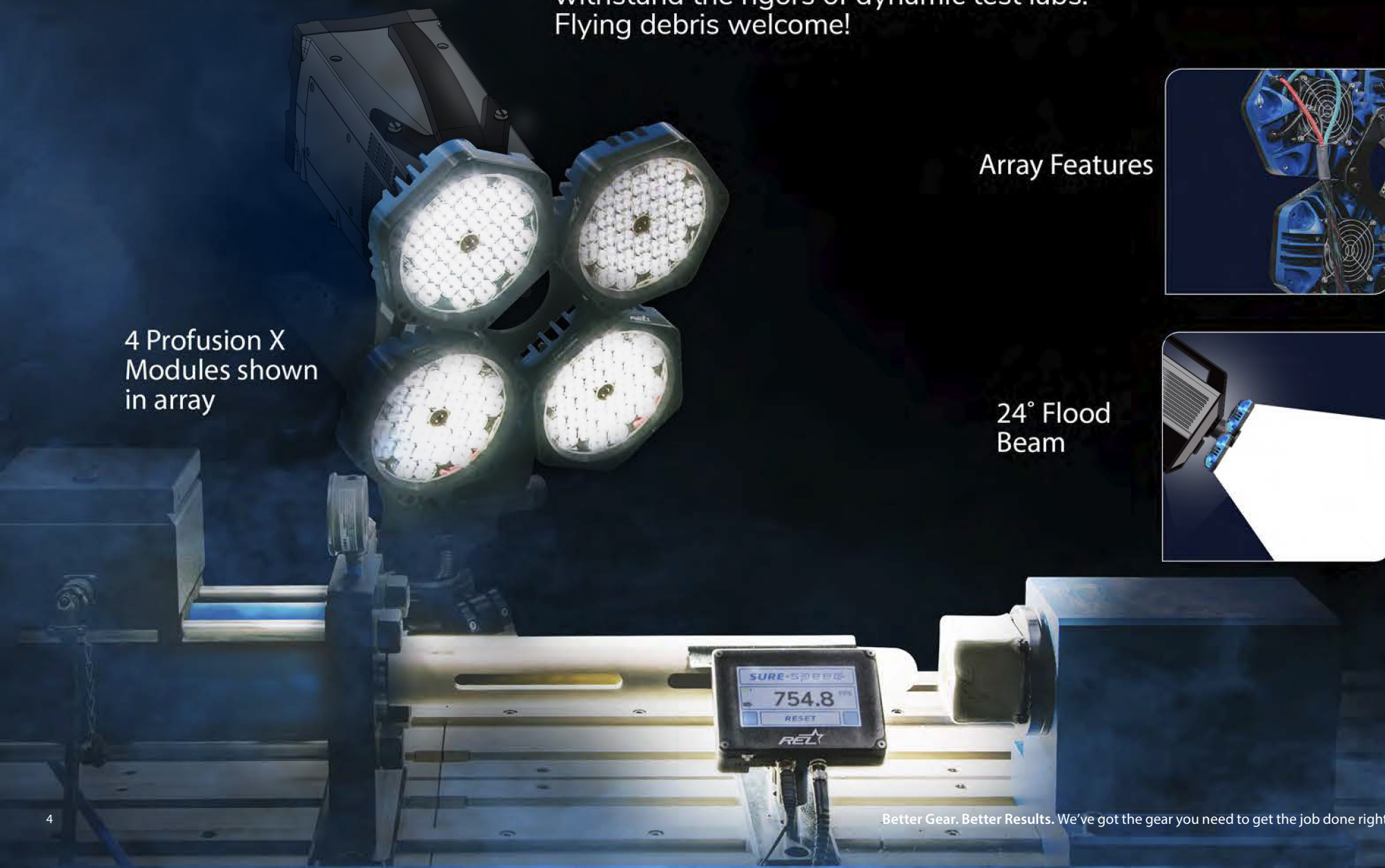
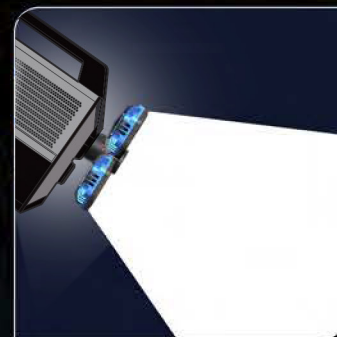
Our Profusion X light module is the core of REL's Visible Spectrum LED floodlighting solutions. This unit packs an extraordinary amount of power and versatility into a compact, durable, machined, military-grade aluminum housing unit that can withstand the rigors of dynamic test labs. Flying debris welcome!

4 Profusion X
Modules shown
in array

Array Features



24° Flood
Beam



Better Gear. Better Results. We've got the gear you need to get the job done right.

Features

- 13k lux (72k lumens) at 4m peak continuous capacity using the PS1 power supply
- Includes Laser Alignment Tool for quick and accurate light beam focus
- Thermal shut off protection
- Tripod ready and featuring 1/4-20 machined holes for a variety of mounting options
- 65" FWHM spot at 4m
- Up to 50' cord length
- 24 Deg Beam
- Dimensions: 7.25"W x 8"H
- Weight: 5.8 lbs.

Manual Controller



Profusion X form factor



Power your module(s) with custom REL power supplies



Profusion X Module shown with Laser Alignment Tool



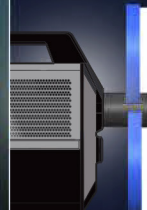
FLC-1600

Our FLC-1600 was purpose-built for capturing energetic events, at millions of frames per second, from up to 100 feet away. This Four Leaf Clover (FLC) of Fresnel lens adjustable focusing brilliance allows the user to focus light on the dynamic event from a safe distance.

Integration Features



Focus Long Range 2'-100'



Features

- High Intensity, up to 240,000 lumens at 10 million candela
- Long range, up to 100' for safe recording of high energy events
- Runs at 2 kilowatts on a standard 120V circuit
- FLC-MOD also sold individually with tripod
- REL designed Tripod Head included with every FLC-1600



FLC-MOD with Laser Alignment Tool

Manual Controller



Power your module(s) with custom REL power supplies



Four FLC-MODS with PS3 Power Supply



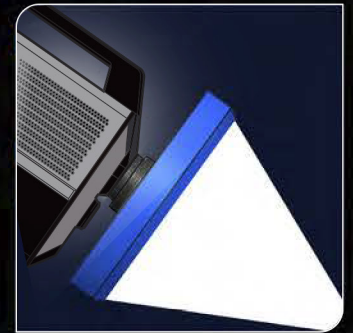
Tripod head



Ring Light

Finally, a reliable LED light for a 5 million fps camera. The visible spectrum Ring Light allows the user to turn on and leave on during the test to avoid 'retesting due to triggering' that all experimentalists have experienced. This light focuses hundreds of watts of light power on an area of 1 in² at a fixed focal distance of 1 foot.

Focus Spot Beam



Ring Light shown on Mounting Carriage

Features

- High intensity fixed focal point light source (10 Mlux peak intensity)
- Illumination for up to 5M frames per second in many configurations
- 100% Duty Cycle at Maximum Output
- Low IR with minimal sample heating
- Precise dimming output control using hand held remote
- Tripod mounted and can work with any camera
- Durable and portable
- Dimensions: 16" OD x 6" ID x 2" Thick Ring
- Weight: 15 lb.

Intense Light
for your high speed
event



Manual Controller

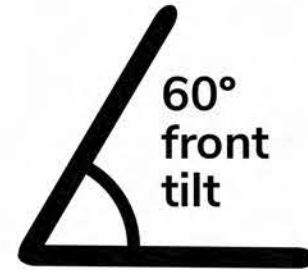
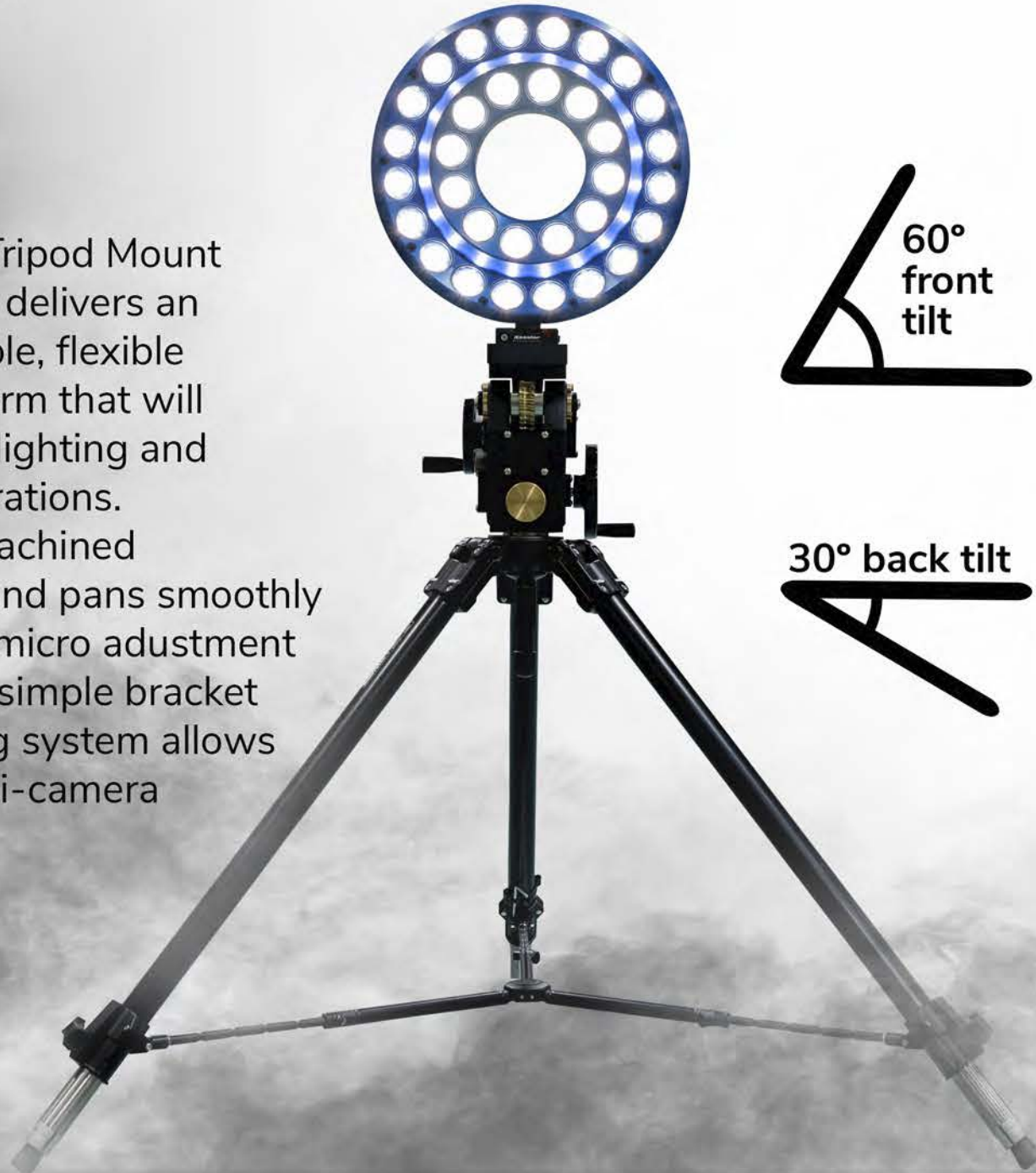


Power your light
with a custom REL
power supply



Universal Tripod Mount System

REL's Universal Tripod Mount System (UTMS) delivers an extremely durable, flexible mounting platform that will accommodate all lighting and camera configurations. The precisely machined gear head tilts and pans smoothly with the use of micro adjustment handles. UTMS simple bracket based, centering system allows integrating multi-camera setups.



Features

- Support 250 pounds of lighting and camera gear
- 90 degrees of tilt control
- 360 degrees of pan
- Geared drive to control the tilt and pan of your camera and lighting system simultaneously
- Integrates REL Visible Spectrum Lighting solutions with a camera on a common platform

Ergonomic
adjustments

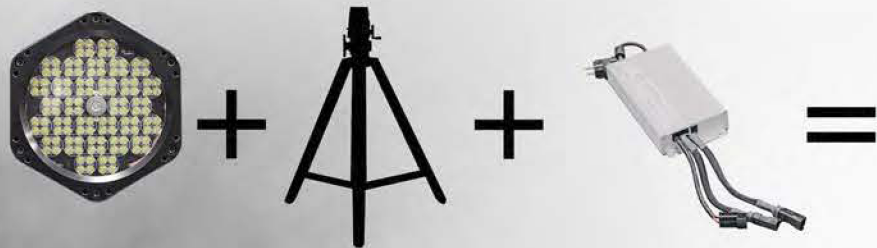


Versatile
Mounting
Platform

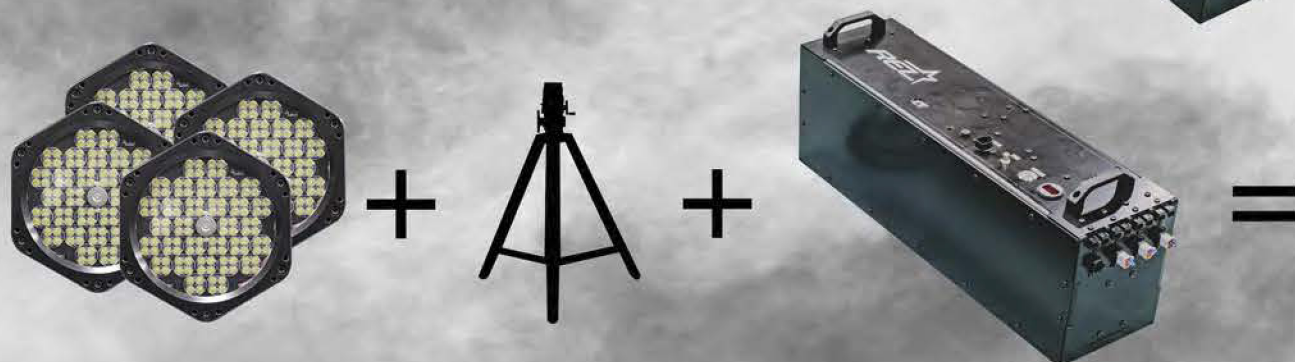
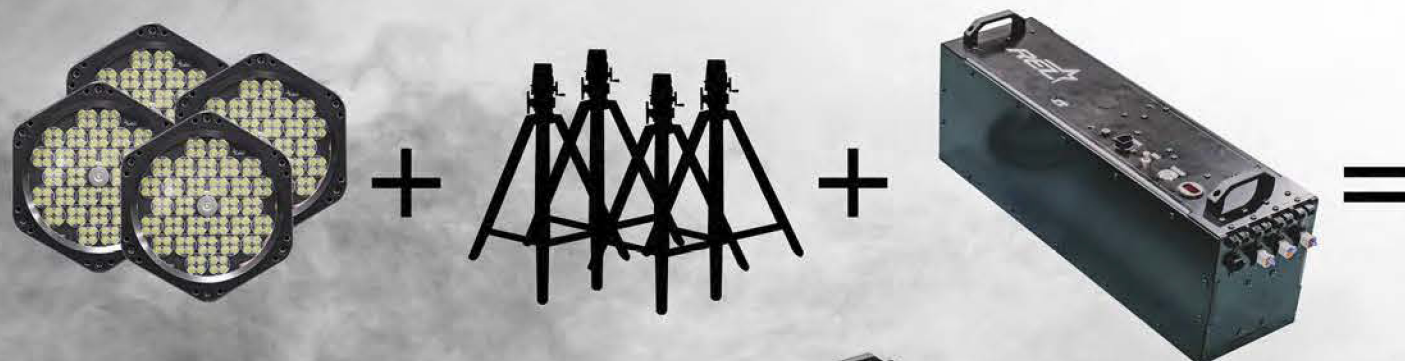
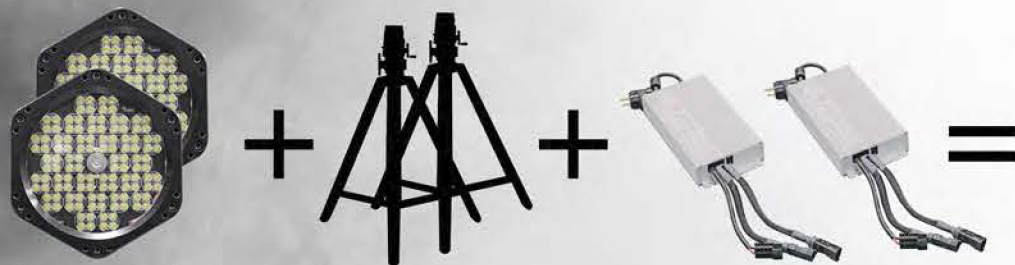


Use with
any REL light





Profusion X
options
to buy



Power Supplies

- All power supplies work with all REL Visible Spectrum Lighting
- Long range, up to 100' for safe recording of high energy events
- Run on a standard 120V circuit
- Undetectable flicker in light intensity at max output



PS1-LITE:

- Compact 7" x 6" x 2"
- 600 watt output
- On/Off control
- Powers one Profusion X module



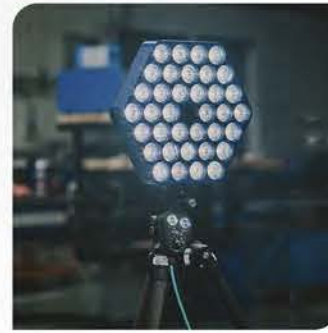
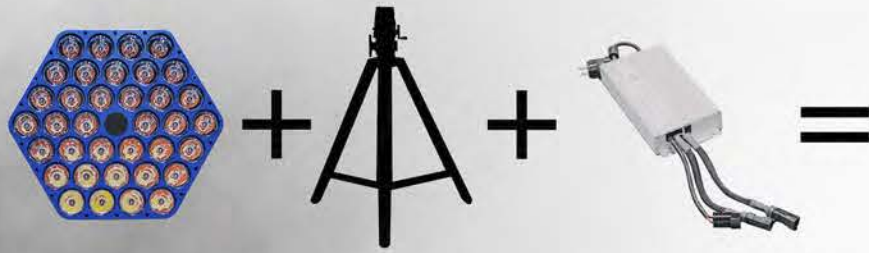
PS1 - PS3:

- 15" x 7" x 10"
- 600-2400 watt output
- BNC trigger port
- 10-20 second burst output 4X Power (PS3)

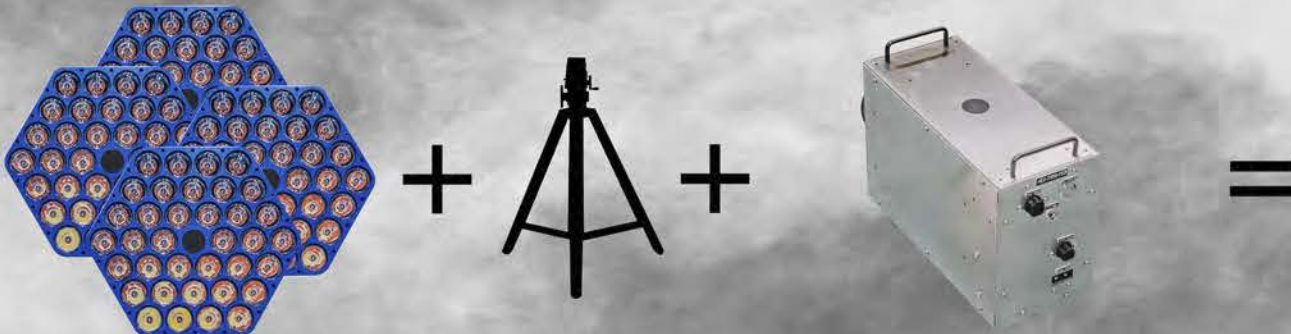
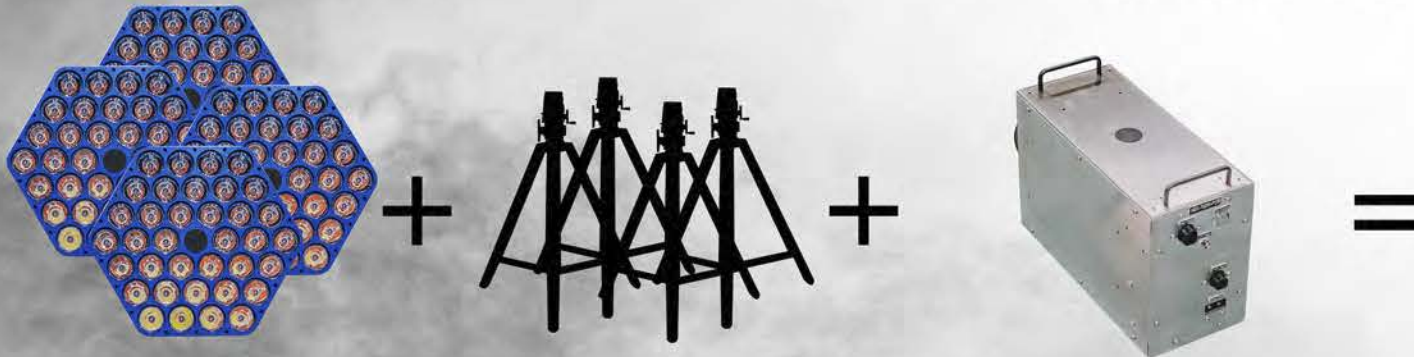
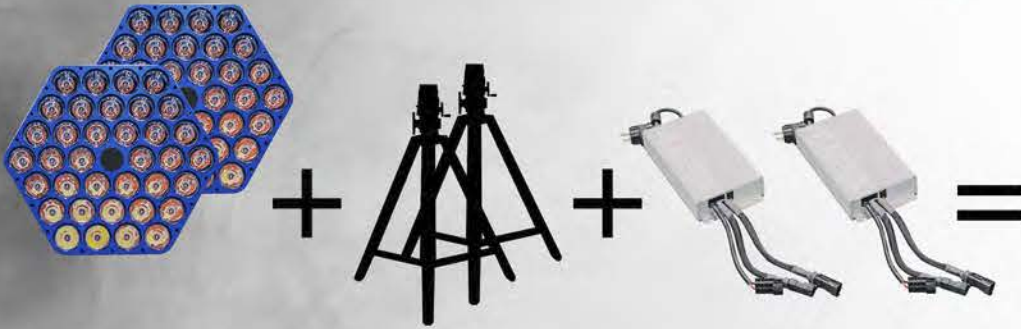


PS4:

- 28" x 10" x 7.75"
- 17kw Capacitive power
- Powers up to 4 Light Modules
- 5V TTL triggerable



FLC-Mod
options
to buy



Power Supplies

- All power supplies work with all REL Visible Spectrum Lighting
- Long range, up to 100' for safe recording of high energy events
- Run on a standard 120V circuit
- Undetectable flicker in light intensity at max output



PS1-LITE:

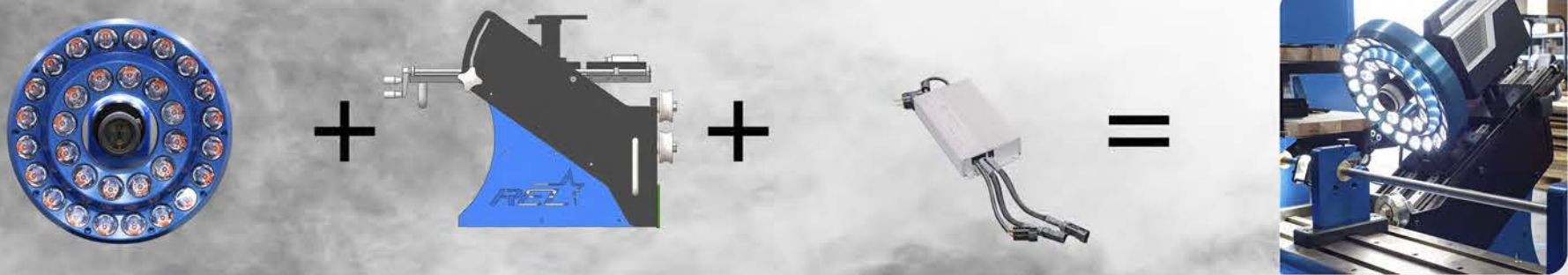
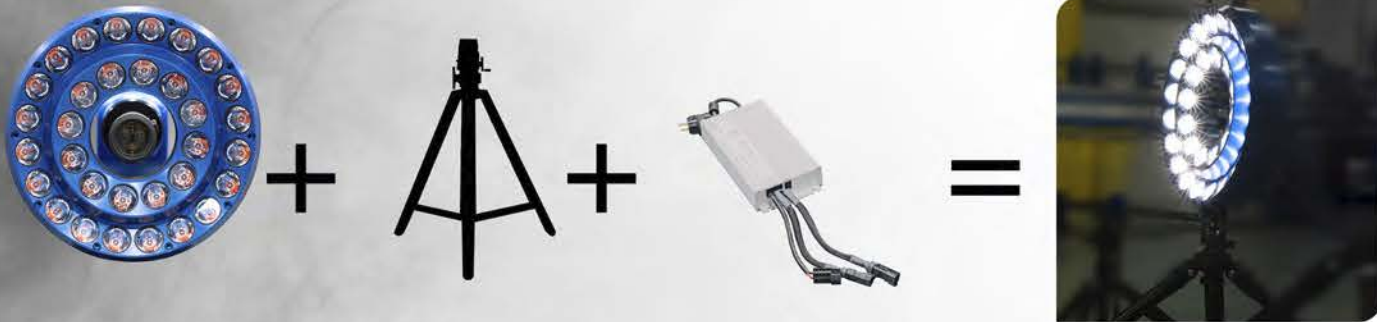
- Compact 7" x 6" x 2"
- 600 watt output
- On/Off control
- Powers one light module



PS1 - PS3:

- 15" x 7" x 10"
- 600-2400 watt output
- BNC trigger port
- 10-20 second burst output 4X Power (PS3)

Ring Light options to buy



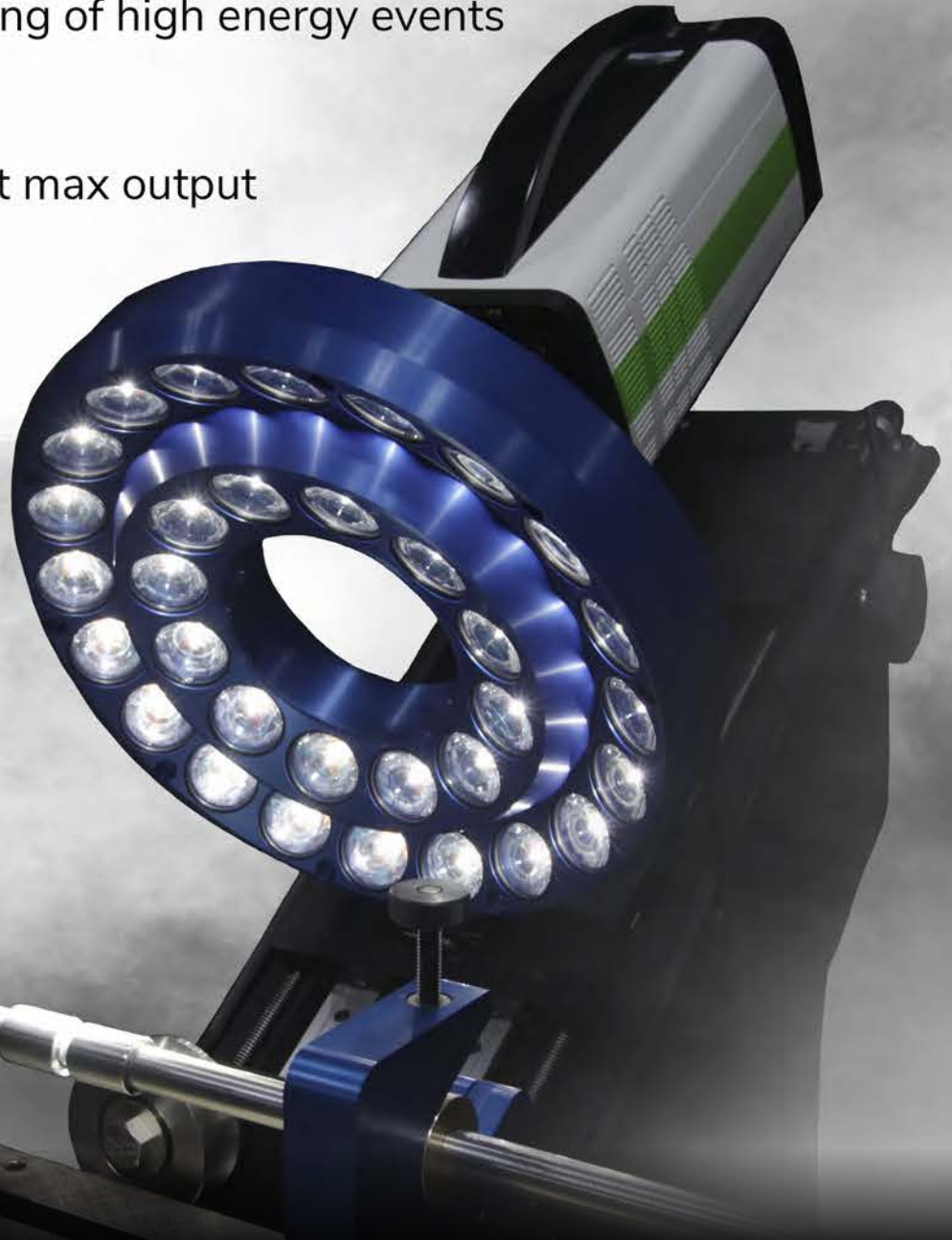
Power Supplies

- All power supplies work with all REL Visible Spectrum Lighting
- Long range, up to 100' for safe recording of high energy events
- Run on a standard 120V circuit
- Undetectable flicker in light intensity at max output



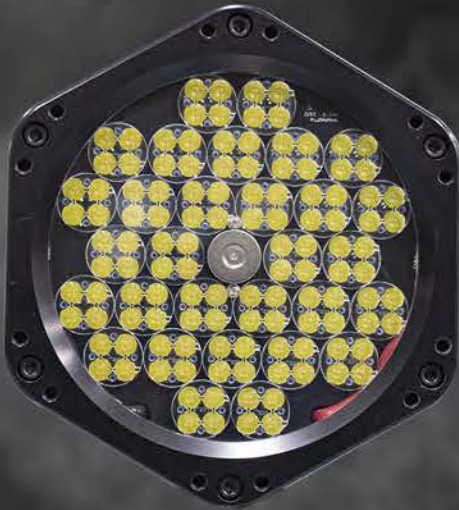
PS1-LITE:

- Compact 7" x 6" x 2"
- 600 watt output
- On/Off control
- Powers one light module



LED Visible Spectrum Lighting

Profusion X



Ring Light



FLC-MOD





LIGHT IT UP. BRIGHTER THAN EVER.



**BETTER GEAR.
BETTER RESULTS.**
We've got the gear you need to get the job done right.

HADLAND
IMAGING

West Coast

1414 Soquel Ave, Suite 200
Santa Cruz, CA 95062
USA
phone: 1-408-203-2727
www.hadlandimaging.com

East Coast

10 Park Place, Suite 507
Butler, NJ 07405
USA
phone: 1-862-228-2185



For more information

Call 1-888-43HADLAND (1-888-434-2352) or email sales@hadlandimaging.com
about ultra high-speed visible, infrared & Flash X-ray imaging solutions.
REL on the web: www.relinc.com