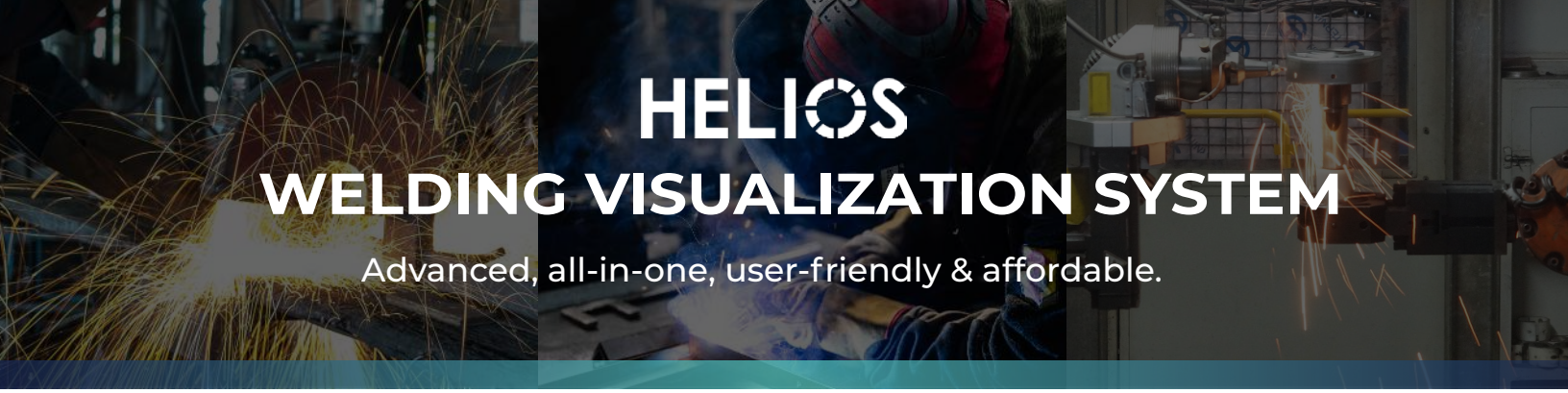


HELIOS

WELDING VISUALIZATION SYSTEM

Advanced, all-in-one, user-friendly & affordable.

UNPARALLELED ILLUMINATION

Capture every intricate detail of your welding process with exceptional clarity. Designed for high-speed cameras, Helios lights minimize shadows, glare, and flickering, guaranteeing pristine slow-motion welding footage.

Whether you're working in a welding lab or a small workshop, this portable setup is easy and quick to set up and operate, allowing you to take it anywhere your projects take you.

INTUITIVE &
EASY TO USE

Touchscreen Display

No PC Setup Required

HIGH
FRAME-RATE

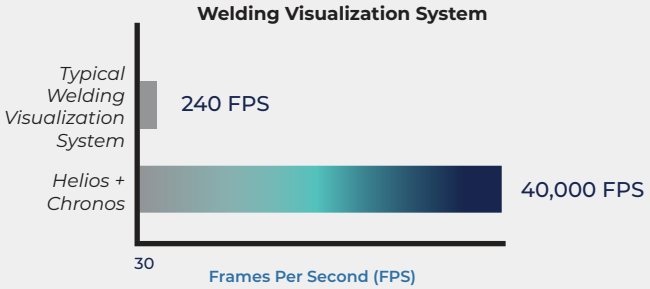
1,000-40,000 FPS

Scales With Resolution

CRYSTAL CLEAR
VISUALIZATIONS

1,000 W Peak Power

Allows For Clear Review And Analysis



WHY HELIOS?

Easily Diagnose Problems: Capture your welding process in high definition, allowing for thorough analysis and precise adjustments.

Optimize Processes: Quickly analyze high-contrast, slow-motion videos on-site to improve automated welding processes.

No Laser Safety Required: Helios is an LED-based solution, removing the need for laser safety training and extra protective equipment.

APPLICATIONS

- Welding & Weld Pool Visualization
- Laser Cutting Analysis
- Additive Manufacturing Analysis
- Welding Education & Training
- Electrical Phenomena Study
- Bright Chemical Reactions Study

TYPES OF WELDING SUPPORTED

Capture intricate details and improve your welding process.

KRON TECHNOLOGIES
HIGH-SPEED IMAGING

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Call us:
+1 (778) 819-1182

Email us:
info@krontech.ca

Address:
8337 Eastlake Dr Unit #113, Burnaby, BC, Canada

SPECIFICATIONS

HELIOS	
Peak Output	1000 W (Pulsed) / 100W Continuous
Wavelength	Pulsed 445nm / Constant 450nm +15nm
Photometrics	12000LUX at 3.28' / 1m
Beam Angle	50°
Power Input	24 Volt DC Power Input / Output
Strobe Input	3.3/5V TTL, Active High
Light Output	Rise time 200ns, Fall time 120ns
Cooling System	Air or Liquid Cooling
Temperature Protection	Built-in overtemperature protection
Glass Lens	User-replaceable disposable glass lens
Mounting	M4 and ¼-20"
Display	Power Limit / Temperature Limit
Controls	3-100% Dimmer (Constant Only), 0-100% (Strobe Only), Mode Switch (Strobe, Off, Constant)
Operating Conditions	-25°C to 45°C (-13°F to 113°F)
Lighting Fixture Dimensions	56mm (Back to lens), 57mm diameter, 71mm w/ watercooling nozzles
Lighting Fixture Weight	0.217 kg (0.48 lbs)

POWER & I/O	
Power Source	24V Power Supply
Inputs	1X 24V Power Input, 1X Sync Input
Outputs	1X 24V Power Output, 1X Sync Output
Input Power	100 to 240 VAC, 50/60 Hz
Included Adapter / Cable	24V DC, 5A
Power Consumption	120W (Maximum)

LIQUID COOLING UNIT	
Cooler Type	Liquid Cooler
Cooler Connector	6mm Tubing Connector Female
Inputs / Outputs	1X Liquid Cooling Input, 1X Liquid Cooling Output
Display	No
Control	No
Environmental Resistance	No
Operating Conditions	0°C to 45°C (32°F to 113°F)
Unit Dimensions	8.2x4x5.5 in / 208x101x139 mm
Unit Weight	1.6kg (3.5lbs)

LIQUID COOLING UNIT - POWER & I/O	
Power Source	12V Power Supply
Input Power	100 to 240 VAC, 50 / 60 Hz
Included Adapter / Cable	12V DC, 6A
Power Consumption	10W (Maximum)

CHRONOS 1.4 CAMERA	
Imaging	1280x1024 @ 1069FPS
Memory	32GB
Record Time	11 seconds (32GB)
Lens Mount	CS/C mount
Display	5" 800x480 capacitive touchscreen, 1000 nit daylight visible
Dimensions	155mm x 96mm x 67.3mm (6.11" x 3.78" x 2.65") w/o lens
Weight	1.06 kg (2.34 lbs) without lens

VIDEO FORMATS	
H.264	mp4 (MPEG-4) files at bitrates up to 60Mbps
Cinema DNG Raw	Standard Adobe CinemaDNG raw files
TIFF	TIFF raw files with timestamps
Storage Devices	SD, USB, SSD, or SMB/NFS network drives

BATTERY	
Type	EN-EL4a
Runtime	1.5 hour recording
Charge Time	2 hours (0-80%) with in-camera charger

INPUTS/OUTPUTS	
Power Input	17-20V 40W (5.5 / 2.5mm barrel jack, positive tip)
Network	Gigabit Ethernet
Trigger	2 trigger inputs / frame strobe outputs (BNC & Aux) Adjustable input threshold 0 to 6.6V Electrically isolated trigger input (Aux connector)
Video	HDMI output 720p @ 60FPS
USB	USB type A (host) and micro-B (device)
SATA	eSATA 3Gbps to SATA 2.5" III SSD (5V power)

TRIGGER PORTS	
BNC	Female BNC connector
AUX	Phoenix 1778890 8-pin terminal block connector, including isolated trigger input.

NETWORK CONTROL
Through web page or REST interface with USB or Gigabit Ethernet.

ENVIRONMENTAL	
Operating Temperature	-20 °C to +40 °C (-4 °F to +104 °F)