



MONARCH
INSTRUMENT

illumiNova®

Fixed Mount LED Stroboscopic Inspection System

Features:

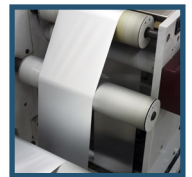
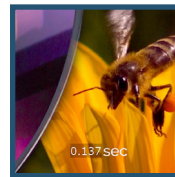
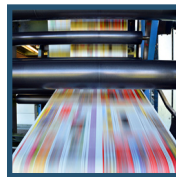
- Ultra bright LEDs with uniform white light output
- Continuous AC operation
- TTL compatible input/output jacks
- Housing is compatible with 80/20 mounting systems
- Available in lengths from 6 inches to 8 feet
- Integrated controller
- Choice of three lens types to best suit your application
- Includes NIST Traceable Calibration Certificate
- Two-year limited hardware warranty

Typical Uses:

- **Printing** — color quality, registration, special packaging, UV security markings
- **Converting** — slitting (cut quality), rewinding, lamination inspection, coating
- **Paper Processing** — finishing, embossing, coating, die cut quality, perforation
- **Special Effects/Entertainment** — interactive water displays, high-speed video/photography
- **Metal Processing** — rolled steel finishing, foils, aluminum, cut quality
- **Production Line Inspection** — cooling fans, tires, pumps
- Ideal for task lighting or visual inspection



illumiNova 800 - 8-foot fixed mount strobe with 864 bright white LEDs



Available in 9 lengths - 6 inches to 8 feet (@1 foot increments)

The illumiNova fixed mount LED visual/stroboscopic inspection systems are designed for continuous use in high-speed applications requiring crisp, clear, stop-motion quality inspection.

The ultra bright, energy-efficient LEDs provide uniform white spectrum light coverage. Available in a six-inch model or one-foot lengths up to 8 feet, with 3 lens options to ensure optimal light coverage for any job.

The onboard intuitive digital controller allows the user to quickly set flash rates, flash duration, brightness levels, and other advanced features. Flash rates can also be triggered remotely using machine-mounted sensors connected directly to illumiNova's digital input or use the optional remote controller to extend the operating distance up to 100 feet.



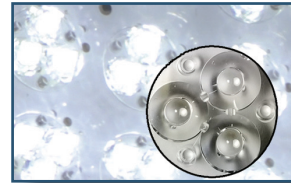
illumiNova® Fixed Mount LED Stroboscope



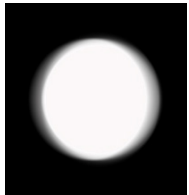
Flexible Illumination

The illumiNova® is available with three lens options.

- **Spot (1)** provides the brightest, most concentrated light pattern over a greater distance. The narrow focal width allows the strobe to be mounted further away from the process while providing bright, uniform lighting.
- **Flood (2)** illuminates a longer linear distance on the process.
- **Wide (3)** illuminates a narrow band over a much wider area for applications that are wider than the length of the strobe.



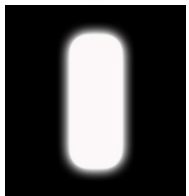
Spot (1)



Distance to target			
39.5" (100 cm) Pulse Width 3.6/100 mSec @ 6K High Setting			
Model	Lux	Width x Height (inches)	Width x Height (cm)
Effective Illumination Area			
50	3700	14 x 14	36 x 36
100	7250	18 x 14	46 x 36
200	8150	30 x 14	76 x 36
300	8430	42 x 14	107 x 36
400	8500	54 x 14	137 x 36
500	8570	66 x 14	168 x 36
600	8600	78 x 14	198 x 36
700	8660	90 x 14	229 x 36
800	8660	102 x 14	259 x 36

Distance to target			
78.74" (200 cm) Pulse Width 3.6/100 mSec @ 6K High Setting			
Model	Lux	Width x Height (inches)	Width x Height (cm)
Effective Illumination Area			
50	1000	24 x 28	61 x 71
100	2290	30 x 28	76 x 71
200	3760	42 x 28	107 x 71
300	4190	54 x 28	137 x 71
400	4350	66 x 28	168 x 71
500	4430	78 x 28	198 x 71
600	4450	90 x 28	229 x 71
700	4520	102 x 28	259 x 71
800	4500	114 x 28	290 x 71

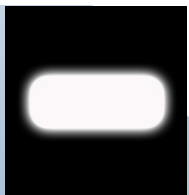
Flood (2)



Distance to target			
39.5" (100 cm) Pulse Width 3.6/100 mSec @ 6K High Setting			
Model	Lux	Width x Height (inches)	Width x Height (cm)
Effective Illumination Area			
50	1465	11 x 36	28 x 91
100	2865	20 x 36	51 x 91
200	3480	32 x 36	81 x 91
300	3735	44 x 36	112 x 91
400	3810	56 x 36	142 x 91
500	3925	68 x 36	173 x 91
600	3960	80 x 36	203 x 91
700	3980	92 x 36	234 x 91
800	4000	104 x 36	264 x 91

Distance to target			
78.74" (100 cm) Pulse Width 3.6/100 mSec @ 6K High Setting			
Model	Lux	Width x Height (inches)	Width x Height (cm)
Effective Illumination Area			
50	389	13 x 72	33 x 183
100	858	18 x 72	46 x 183
200	1360	30 x 72	76 x 183
300	1675	42 x 72	107 x 183
400	1745	54 x 72	137 x 183
500	1805	66 x 72	168 x 183
600	1850	78 x 72	198 x 183
700	1910	90 x 72	229 x 183
800	1895	102 x 72	259 x 183

Wide (3)



Distance to target			
39.5" (100 cm) Pulse Width 3.6/100 mSec @ 6K High Setting			
Model	Lux	Width x Height (inches)	Width x Height (cm)
Effective Illumination Area			
50	1627	36 x 18	91 x 46
100	3100	42 x 18	107 x 46
200	5690	54 x 18	137 x 46
300	6890	66 x 18	168 x 46
400	7380	78 x 18	198 x 46
500	7550	90 x 18	229 x 46
600	7640	102 x 18	259 x 46
700	7690	114 x 18	290 x 46
800	7690	126 x 18	320 x 46

Distance to target			
78.74" (100 cm) Pulse Width 3.6/100 mSec @ 6K High Setting			
Model	Lux	Width x Height (inches)	Width x Height (cm)
Effective Illumination Area			
50	427	72 x 32	183 x 81
100	800	78 x 32	198 x 81
200	1587	90 x 32	229 x 81
300	2240	102 x 32	256 x 81
400	2810	114 x 32	290 x 81
500	3210	126 x 32	320 x 81
600	3500	138 x 32	351 x 81
700	3695	150 x 32	381 x 81
800	3790	160 x 32	406 x 81



	illumiNova®Fixed Mount LED Stroboscopes - Models								
Specifications*	50 (6 in.)	100 (1 ft.)	200 (2 ft.)	300 (3 ft.)	400 (4 ft.)	500 (5 ft.)	600 (6 ft.)	700 (7 ft.)	800 (8 ft.)
Controller/Display	6-digit numeric and 5-digit alphanumeric LCD with touch keypad and rotary tuning knob high-contrast blue background with backlight								
Flash Rate	30 to 999,999 FPM								
Accuracy	0.001% of setting or +/- 1 lsd								
Resolution	6 digits to 0.001								
Flash Duration (pulse width)									
Degrees	0.1-3.0°	0.1 to 4.0°							
Percent	0.1 to 0.8%	0.1 to 1.1%							
Time	Adjustable in 1-150 µSecs								
LED Array Size	6"	12"	24"	36"	48"	60"	72"	84"	96"
Number of LEDs	54	108	216	324	432	540	648	756	864
Lux Output @ 6000 FPM/Spot Lens									
@100cm (39.37")	3700	7250	8150	8430	8500	8570	8600	8660	8600
@200cm (78.74")	1000	2290	3760	4190	4350	4430	4450	4500	4500
Available Lens Types	Spot (1): provides narrowest, brightest illumination area Flood (2): produces a horizontally wide light output allowing smaller strobes to illuminate wider processes Wide (3): produces a vertically wide light output to illuminate a larger linear process area								
External Trigger Input	Open collector, dry contact input for sensors (3-5 Vdc pulse) provides 5 Vdc sensor power isolated input 5-12 Vdc 50 mA max								
Prescaler Input	Adjustable from 0-5000 pulses per revolution								
Digital Output	Provides 3.3 Vdc TTL output								
Programmable Memory	10 setpoints								
Phase Delay/Time Delay	-360° to +360°/±50 mSecs								
Input Power	115 or 230 Vac ±50 mSecs								
VA max	37	60	110	160	260	325	360	430	470
Dimensions									
Height	4.374 in. / 11.11 cm								
Width	4.375 in. / 11.12 cm								
Length (inch/cm)	9.43 23.97	15.44 39.21	27.43 69.69	39.93 101.44	51.93 131.92	63.96 162.38	75.93 192.88	87.93 223.34	99.93 253.84
Weight (lbs./kg)	4.78 21.68	7.42 3.37	13.26 6.02	19.18 8.70	25.02 11.35	30.10 13.65	36.69 16.64	42.53 19.29	48.36 21.94
Housing Material	Extruded and die-cast aluminum, powder coated								
Housing Rating	IP20								
Safety	This product is designed to be safe for indoor use under the following conditions (per IEC61010-1).								
Environmental									
Operating Temperature	32-104 °F (0-40 °C)								
Operating Humidity	Maximum relative humidity 80% for temperature up to 88 °F (31 °C) decreasing linearly to 50% relative humidity at 104 °F (40 °C), non-condensing								
Humidity	Maximum relative humidity 80% for temperature up to 88 °F (31 °C) decreasing linearly to 50% relative humidity at 104 °F (40 °C)								

*Specifications are subject to change without notice.

illumiNova® Fixed Mount LED Stroboscope

Advanced Features/Benefits:

- **Digital Input/Output for Synchronizing Pulse**
Connect your signal to the input jack and the flash will be synchronized with your equipment; for large or irregular light area, multiple illumiNovas can be connected in series
- **Phase/Time Delay**
Adjust or “position” the virtually stopped image to suit visual inspection needs
- **Memory**
Ten (10) memory presets allow for quick change from one process speed to another
- **Adjustable intensity levels**
Three (3) adjustable light intensity levels give you complete control of the amount of illumination; low level settings can be used for highly reflective surfaces while high light settings can be used for darker or high contrast materials
- **Intuitive Control**
Optional remote controller can be mounted up to 100 feet away putting full control and real-time information where it's needed



Remote Control with the illumiNova® Remote Controller

The optional wired remote controller can be mounted up to 100 feet away putting full control and real-time information directly where you need it. Includes a 25 ft. Cat 5E interconnect/power cable.



Stroboscope Accessories

Each installation and use case of our handheld or fixed mount stroboscopes is unique. That's why we manufacture a full set of accessories to ensure our strobes will exceed your needs. From protective cases and pouches to sensors and batteries, we have the right tool and the perfect accessory for your stroboscope needs.

[Visit Accessory webpage for details.](#)



illumiNova Remote Controller
PN: 6280-090



Spare Mounting Hardware
PN: 6280-093



Input Cable [5 m]
PN: 6280-091



Input Connector Set
for Input Cable
PN: 6280-095



Output Connector Set
for Output Cable
PN: 6280-094



Output Cable [5 m]
PN: 6280-092

Compatible Sensors



ROS-Remote
Optical Sensor



RLS-Rugged
Laser Sensor



ROLS-Remote
Optical Laser
Sensor



ROSM-Modulated
Remote Optical LED
Sensor



Magnetic Sensor



IRS- Infrared Sensor



CSLS-Compact
Smart Laser Sensor



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