# LED2000 SERIES S

SERIES STROBOSCOPIC INSPECTION

## CONFIRM QUALITY INSTANTLY ACROSS THE LINE



See your process in crisp, clear detail at full production speed with LED2000 Series Wide Web Inspection Systems featuring Smart Assist controls.

- On-screen help and instructions are provided for every setting, reducing the time needed to configure the system
- Available in multiple languages to accommodate global operations
- Control settings like intensity, frequency and duration with scientific precision
- Simple dashboard screen shows all critical settings at a single glance
- Full color display, high-contrast text and multi-function smart keys make it easy to move through the customization of each setting when needed
- Easily access advanced configurations like <u>Cross Light</u> <u>Inspection</u> for surface quality or the ability to view standard and UV-visible inks on the same line

For direct observation of defects at full production speed, stroboscopic inspection can't be beat. After the work of selecting the proper strobes, setup and operation become the greatest hurdles to efficient operation. Smart Assist makes it easy to adjust settings for factors such as line speed and type of process (print quality or surface quality) so that an inspector can view fine detail in any high-speed process as if it's standing still.





### **APPLICATIONS**

- Print quality and registration
- Cut quality
- Adhesive and coating coverage
- Surface quality



# ACCESSORIES



#### **REMOTE CONTROL**

Have the same functionality as the LED2000 Series control panel in the palm of your hand.

#### ANALOG LINE SPEED CABLE

Synchronize the flash rate to your line speed using industry standard 0-10V or 4-20mA signaling.

#### **ROTARY ENCODER**

Instantly and automatically synchronize flash rate to material speed. The rotary encoder provides a signal to the strobe that is proportional to the speed of the web.

#### INTERCONNECT CABLE

Use the Interconnect Cable to create a network of multiple strobes and enable control of those strobes from a common master or from an optional remote control.

#### TRIGGER INPUT CABLE

Use the Trigger Input Cable to synchronize a strobe's flash to an external trigger signal from devices such as gap or registry sensors, etc.

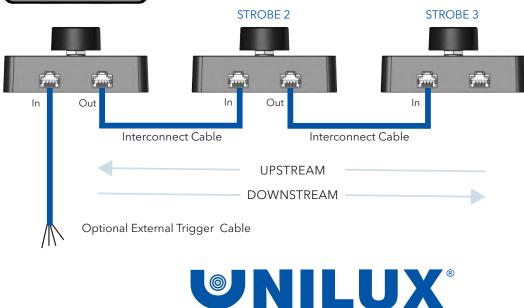
## MULTI-STROBE CONFIGURATION

#### STROBE 1



Unilux LED2000 Series strobes can be chained together in a network with or without a remote control for advanced inspection techniques like Cross Light Inspection or the ability to view standard and UV-visible inks on the same line.

Networking allows the strobes to operate synchronously with each other and enables control of all of the strobes from a single point on the network.





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The Power To See



# THREE TYPES OF LENSES



### WIDE HORIZONTAL FLOOD COVERAGE

THE LED2000 series with standard flood coverage is designed for applications where the web is wider than the stroboscope installed. The coverage is up to 400 mm wider (at 1 m distance) than the installed stroboscope.

### HIGH VERTICAL FLOOD COVERAGE

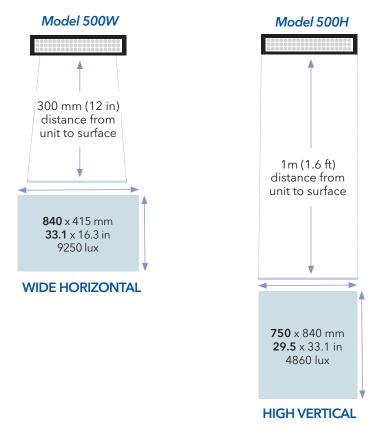
The LED2000 series with vertical flood coverage is designed for applications that require a large field of inspection in the direction of movement. The covered width is only slightly wider than the width of the stroboscope.



### SPOT COVERAGE

The LED2000 series with spot coverage is designed to illuminate surfaces at a larger distance. The focused lenses result is a concentrated light with higher output at a distance.

For an example, coverage of model 500 in all three versions:

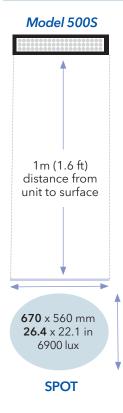


STANDARD









**NOTE** - Larger areas can be illuminated by placing the light further away and controlling ambient lighting. Unilux recommends strobe lighting levels be at least 4 times brighter than the ambient lighting to avoid ghosting.

AVAILABLE SIZES/MODELS	WIDE	HIGH	SPOT		
The LED2000 family includes many models covering widths of 250 mm to 2.9 meters.	COVERAGE AREA AND ILLUMINATION				
ILLUMINATION AT A DISTANCE OF >>	300 mm (1.6 ft)		600 mm ( <i>2 ft</i> )		
MODEL 250	<b>450</b> x 360 mm <b>17.7</b> x 14.2 in 8230 lux	N/A	<b>470</b> x 380 mm <b>18.5</b> x 15.0 in 7210 Lux		
ILLUMINATION AT A DISTANCE OF >>	1 m (3.3 ft)	1 m (3.3 ft)	1 m (3.3 ft)		
MODEL 500	<b>1035</b> x 600 mm	<b>750</b> x 840 mm	<b>670</b> x 560 mm		
	<b>40.7</b> x 23.6 in	<b>29.5</b> x 33.1 in	<b>26.4</b> x 22.1 in		
	5550 lux	4860 lux	6900 lux		
MODEL 1000	<b>1585</b> x 675 mm	<b>1200</b> x 1065 mm	<b>1220</b> x 650 mm		
	<b>62.4</b> x 26.6 in	<b>47.2</b> x 41.9 in	<b>48.1</b> x 25.6 in		
	6950 lux	6230 lux	7120 lux		
MODEL 1500	<b>2040</b> x 725 mm	<b>1625</b> x 1190 mm	<b>1680</b> x 680 mm		
	<b>80.3</b> x 28.5 in	<b>63.9</b> x 46.9 in	<b>66.1</b> x 26.7 in		
	7050 lux	6630 lux	7150 lux		
MODEL 2000	<b>2455</b> x 765 mm	<b>2090</b> x 1260 mm	<b>2105</b> x 700 mm		
	<b>96.6</b> x 30.1 in	<b>92.3</b> x 49.6 in	<b>82.9</b> x 27.5 in		
	7125 lux	6850 lux	7200 lux		
MODEL 2500	<b>2835</b> x 795 mm	<b>2560</b> x 1300 mm	<b>2530</b> x 715 mm		
	<b>111.6</b> x 31.3 in	<b>100.8</b> x 51.2 in	<b>99.6</b> x 28.1 in		
	7175 lux	6930 lux	7200 lux		

Note: LED2000 series also available as UV version.

### **SPECIFICATIONS**

Model/Part Number	250	500	1000	1500	2000	2500		
Wide Horizontal	03-1283-250	03-1283-500	03-1283-1000	03-1283-1500	03-1283-2000	03-1283-2500		
(H) High Vertical	N/A	03-1283-500H	03-1283-1000H	03-1283-1500H	03-1283-2000H	03-1283-2500		
(S) Spot	03-1283-250S	03-1283-500S	03-1283-10005	03-1283-1500S	03-1283-20005	03-1283-2500		
Power Requirements	100 to 240 VAC 50/60 Hz							
Watts Max	65	135	270	405	540	675		
Amps Max @100V)	0.85	1.5	3.0	4.5	6.0	7.5		
Flash Rates								
Internal Mode	30 - 99999 F/M							
External Trigger Mode	0-99999 F/M							
Encoder Mode	0-99999 F/M							
Flash Duration	2 $\mu$ s to 1% of the flash period capped at 100 $\mu$ s							
External Trigger Source	0 - 1666.65 Hz							
Pulse TTL) & Open Collector	4.5V min - 40V max @ 10 mA 500μSec min pulse width							
Contact Closure	15V and Ground Supplied 500 μs min pulse width							
Physical Dimensions	250	500	1000	1500	2000	2500		
Length	285 mm 11.2 in	513 mm 20.2 in	970 mm 38.2 in	1428 mm 56.2 in	1885 mm 74.2 in	2342 mm 92.2 in		
Width	99 mm 3.9 in	114 mm 4.5 in	114 mm 4.5 in	114 mm 4.5 in	114 mm 4.5 in	114 mm 4.5 in		
Height	155 mm 6.1 in	155 mm 6.1 in	155 mm 6.1 in	155 mm 6.1 in	155 mm 6.1 in	155 mm 6.1 in		
Weight	2.5kg 5.5 lbs	4.2kg 9.2 lbs	7.6kg 16.7 lbs	11.0kg 24.2 lbs	14.4kg 31.7 lbs	17.8kg 39.2 lbs		
Environmental								
Operating Temperature	32°F to 104°F/0°C to 40°C							
Humidity	0-95% noncondensing							