BlueWave® LED DX-1000

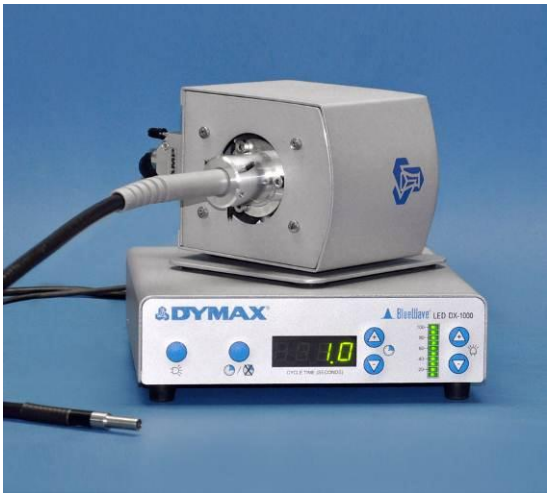
Flexible LED UV Light-Curing System

The Dymax BlueWave® LED DX-1000 is a flexible LED light-curing system that utilizes liquid-filled or fiber-optic quartz lightguides to deliver up to 15 W/cm^2 of curing energy in a spot-cure configuration. The flexibility of the DX-1000 also allows it to be configured to deliver up to 1 W/cm^2 of energy over a 1" x 1" (2.5 cm x 2.5 cm) area for applications that require larger exposure area.

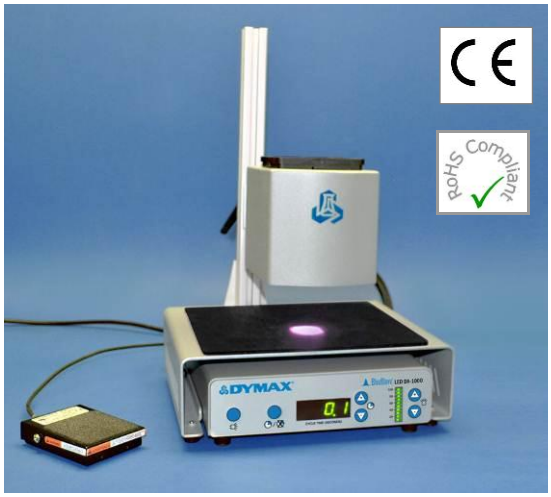
The *BlueWave LED DX-1000* provides all the benefits of Dymax's advanced LED light-curing technology in a flexible system design that can adapt to meet changing business and application needs.

Spot-Lamp Configuration with Optional Adjustable Stand and Work Platform, Lightguide Adaptor, and Lightguide
PN 40560, 40725, 40743, 5720

Spot-Lamp Configuration with Optional Adjustable Stand and Work Platform, Lightguide Adaptor, Lightguide, and Lightguide Mounting Stand **PN 40560, 40725, 5720, 40743, 39700**



Spot-Lamp Configuration with Optional Base, Lightguide Adaptor, and Lightguide
PN 40560, 40755, 40743, 5720



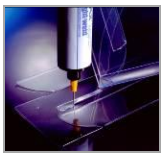
Flood Configuration with Optional Adjustable Stand and Work Platform
PN 40560, 40725

FEATURES	BENEFITS
Single or multi-pole lightguide and dual-lens optical accessory	▪ Flexible, configurable light delivery options ▪ High-intensity spot cure ▪ Small-area [1"x1" (2.5 cm x 2.5 cm)] cure capability to ~3" (7.6 cm) distance
High-intensity LED with efficient cooling	▪ Consistent LED frequency and intensity output for better process control ▪ Longer life than mercury-arc lamps and other LED curing systems ▪ Lower consumables and on-hand "spare" inventory costs (light source & lightguides)
LED with 385 nm narrow-spectrum output	▪ Cooler cure environment for thermally sensitive substrates ▪ Replaces hazardous mercury-arc lamp with environmentally friendly LED
Lower energy consumption than conventional UV lamps (<100 watts)	▪ Reduce electrical consumption by up to 80%
Instant On/Off with 100% duty-cycle capability	▪ Highest throughput (exposure cycles "at the speed of light") ▪ Significantly reduced maintenance downtime as compared to conventional lamp replacement
Shutter-free design	▪ Reliable operation with lower maintenance costs (no moving parts)
Adjustable intensity (0 - 100% in 1% steps)	▪ Superior accuracy (versus "closed loop feedback") for optimum process control
Co-optimized to cure a variety of Dymax LED adhesive formulations	▪ Compatible with a variety of Dymax light-curable formulations (see table below)
Self-contained, lightweight irradiator head with cable interface	▪ Flexibility to mount the irradiator head remotely from controller for automated process equipment integration, or to free up valuable workstation surface space (up to 10 ft [3 M] from controller to irradiator)

Adhesives Compatible with the BlueWave® LED DX-1000

With the combination of expertise in LED light-curing equipment technology design and adhesive formulation development, there is an ever-growing list of formulations optimized to cure with the *BlueWave LED DX-1000* at lightning speeds for a multitude of applications in any industry segment.





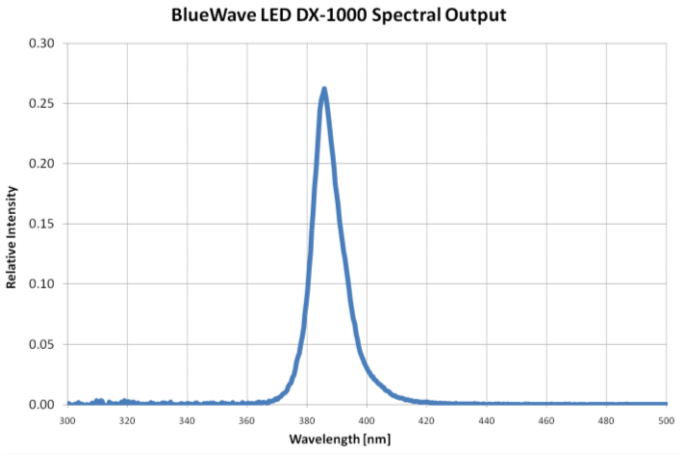

Dymax Product	Interfacial Cure Time, Glass to Glass*
Electronics Adhesives and Coatings	
9001-E-V3.0	1.0 sec
9001-E-V3.5	≤2.0 sec
9-20557	3.0 sec
9-20557-LV	≤4.0 sec
9422-SC	0.2 sec
9422-T-SC	0.2 sec
9481-E	4.0 sec
984-LVUF	0.2 sec
9-911-REV-A	1.0 sec
Glass Bonding Adhesives	
429	≤5.0 sec
Plastic Bonding Adhesives	
3030	0.2 sec
3031	0.2 sec
3069-GEL	0.2 sec
3094	0.2 sec
3130-UR	0.2 sec
3227-UR	0.2 sec

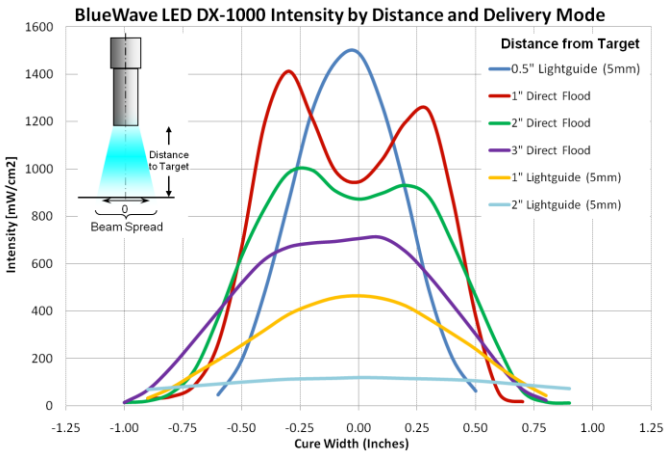
Dymax Product	Interfacial Cure Time, Glass to Glass*
SPEEDMASK® Masking Resins	
726-SC	0.2 sec
Structural Bonding Adhesives	
6-621	≤1.0 sec
6-625-SV01-REV-A	≤3.0 sec
MD® Medical Device Adhesives	
210-CTH	0.2 sec
211-CTH	0.2 sec
1120-M-UR	0.2 sec
1128-A-M	≤3.0 sec
1161-M	0.2 sec
1163-M	0.2 sec
1165-M	0.2 sec
1168-M	0.2 sec
1180-M	0.2 sec
1187-M	0.2 sec
1201-M-SC	0.2 sec

* Interfacial cure time is based on glass-to-glass bonding with the *BlueWave LED DX-1000* (flood or spot mode) or the *BlueWave LED Prime UVA*; minimum intensity of 675 mW/cm^2.

System Specifications

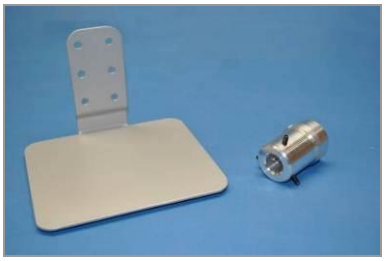
SPECIFICATIONS	
Part Number	 **PN 40560** Base System for Custom Mounting and System Integration (Mount Supplied by Customer)
Output (measured by ACCU-CAL™ 50-LED)	1.0 [W/cm^2] at 1.0" in direct emission (flood mode) 15.0 [W/cm^2] at 0.5" with 5 mm x 1 M liquid lightguide (spot mode)
Power Requirements	100-240V, 47-63 Hz (auto ranging); 100 watts maximum
LED Timer	0.1 to 999.9 seconds
LED Activation	Foot switch, front panel, or PLC
Cooling	Forced air / fan (controller and irradiator head)
Hour Meter	Digital LCD; total unit life time (non-resettable) and total LED exposure time
Controller Dimensions / Weight	6.5" x 9.0" x 2.25" [16.5 cm x 22.9 cm x 5.7 cm] (W x D x H) / 2.4 lbs [1.1 kg]
Irradiator Head Dimensions / Weight	4.0" x 5.0" x 4.5" [10.2 cm x 12.7 cm x 11.4 cm] (W x D x H) / 2.9 lbs [1.3 kg]
Interface Cable Length	Choice of 18" [45 cm], 3 ft [0.91 M], 6 ft [1.82 M], or 10 ft [3.04 M] lengths
Unit Warranty	Operation warranted for 3 years from purchase
Recommended Accessories	**PN 40519** ACCU-CAL™ 50-LED Radiometer





Accessories

Adjustable Stand with Work Platform **PN 40725**



Benchtop Base and Lightguide Adapter Kit **PN 40755**

2 Lens Collimating Optic #1 **PN 40581**

Lightguide Adapter **PN 40743**

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