Light-Curing Equipment
Selector Guide

SPOTS | FLOODS | CONVEYORS | RADIOMETERS | ACCESSORIES

DYMAX®

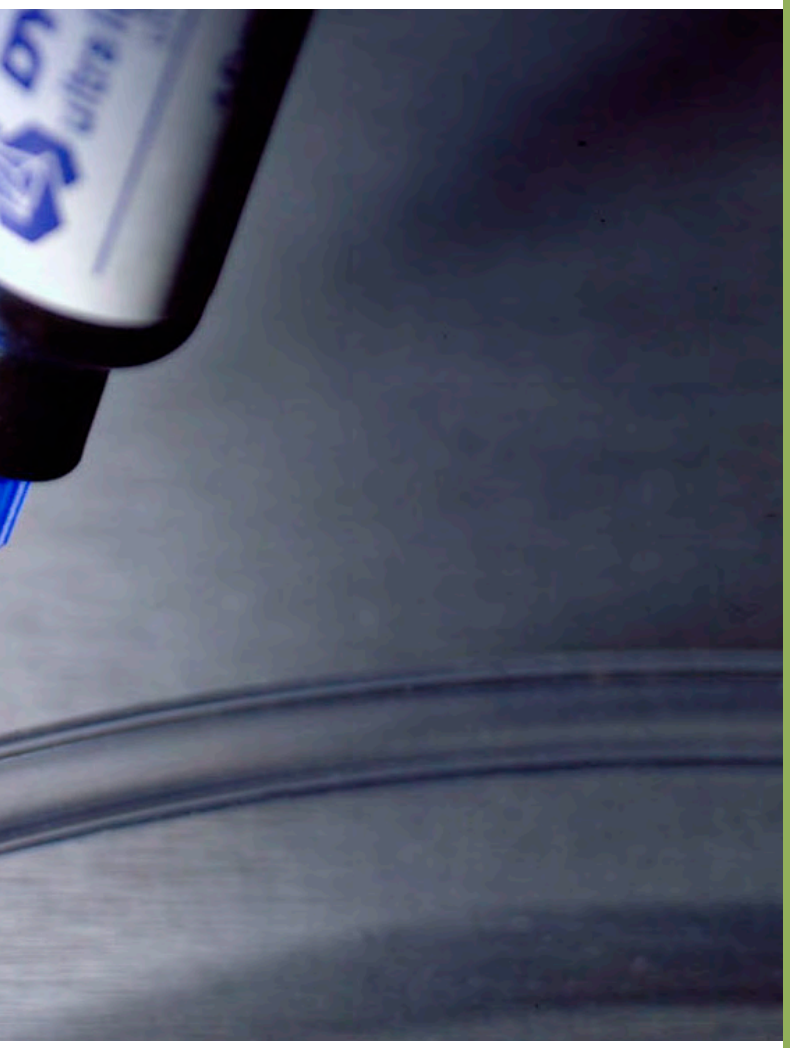
DYMAX LIGHT-CURING TECHNOLOGY

For more than 35 years, light-curing technology has allowed manufacturers to lower processing costs, produce higher quality products, and eliminate the use of harmful chemicals from the workplace. First introduced in the early 1980s for ink and thin coating applications, the technology has advanced tremendously over the last three decades, becoming the method of choice for many other industrial bonding, sealing, coating, potting, and tacking applications.

Light curing's popularity stems from its ability to deliver fast, durable bonds in seconds, on demand. Faster on-demand cures result in more efficient manufacturing processes by providing shorter cycle times, reduced labor costs, and reduced work-in progress. In addition to its efficiency, light-curing technology is also environmentally and worker friendly. It utilizes no explosive equipment, is associated with fewer health issues, and requires lower regulatory and disposal costs than other technologies.

Dymax has specialized in light-curing assembly solutions since the introduction of the technology. Today, we offer the broadest range of light-curable materials available and a complete line of conventional and LED light-curing equipment. Our light-curing equipment offers manufacturers safe, reliable curing in a number of different configurations including spot, flood, and conveyor systems.

Where other companies only supply products, we are committed to developing a true collaborative partnership, bringing our unsurpassed expertise in light cure technology and total process knowledge to our customers' specific application challenges. Because we understand the process



as a whole, and not just individual aspects of it, we can offer our customers a solution where chemistry and equipment work seamlessly together with maximum efficiency.

Our application engineering team works side-by-side with customers, providing assistance with product and process design, testing, evaluation, and pre-production trials throughout the life of the assembly process. That's the perfect combination of technology and expertise for a competitive advantage you can't get anywhere else.

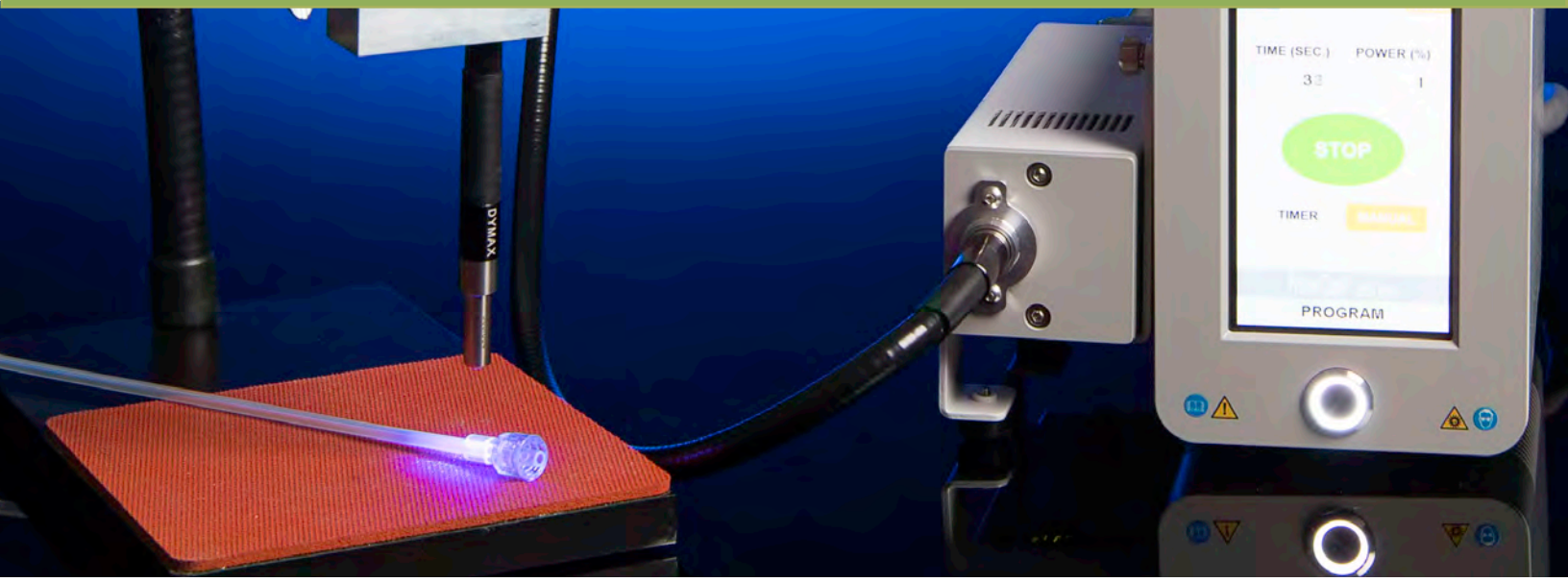
Our Technology.
Your Advantage.®

This selector guide provides an overview of Dymax light-curing systems. Additional information for all systems is available on our website at dymax.com. For answers to your specific application questions, please contact our Application Engineering team. They are available to help recommend a light-curable material and design a dispensing and curing process for your specific application. Whenever possible, our Application Engineers will also conduct testing on your specific parts to ensure the chosen products meet all application requirements. If testing indicates our standard formulations or light-curing systems are not suitable, our Application Engineers can also help you find an alternative solution for your assembly process.

Equipment Try-and-Buy Program

Take advantage of the opportunity to evaluate our light-curing systems for two weeks free of charge through our Try-and-Buy Program. This program is a low-risk way to evaluate Dymax equipment in your application. After the two week trial period, rental of the unit will be billed on a monthly basis. Typically after 6 payments the system is yours to keep. An assortment of conveyors, spot lamps, flood lamps, and focused-beam lamps have been allocated for this program for your in-house evaluation. Contact Dymax Customer Support for more information on this program.

UV BROAD-SPECTRUM & LED SPOT-CURING SYSTEMS



Spot-cure systems deliver optimized curing energy to a very precise location. They can be used manually by an operator in a turnkey bench-top system or incorporated into a high-speed automated assembly line. They are ideal for curing small areas quickly in R&D laboratory environments as well as low- and high-volume production applications in the medical, industrial, electronics, automotive, and optical industries.

Dymax spot systems are worker friendly, utilizing an integral timed/manual closure control and typically requiring little external shielding. Dymax systems also feature a patented intensity adjustment feature which aids users in both validating and controlling the light-curing process. Dymax spot systems are designed with either arc lamp or LED energy sources.

Conventional Arc Lamp Spot-Curing Systems

Dymax multi-spectrum spot lamps cure using high-pressure metal-halide lamps that produce light energy in the 300 to 450 nm range. These spot lamps can be equipped with rod lenses or single- or multiple-pole lightguides in various diameters (3, 5, and 8 mm) and lengths (up to 3 meters) for a variety of curing options.

LED (Light-Emitting Diode) Spot-Curing Systems

Dymax LED spot-curing systems generate curing energy using an array of surface-mounted LEDs instead of traditional metal halide or mercury bulbs. They are semiconductor energy sources that emit very discrete wavelengths of energy, resulting in a single, narrow, bell-shaped emission spectrum.

These units offer cooler cures compared to traditional lamp-style curing systems as well as longer service life that eliminates lamp replacement and reduces maintenance costs, higher electrical efficiency and instant on/off capability that lowers operating costs, and “green” attributes that eliminate mercury and ozone safety risks and handling costs.

BlueWave® 200 Version 3.0

The BlueWave® 200 3.0 is a high-intensity, light-curing spot-lamp system. This spot-curing lamp emits energy in the UVA and visible portion of the spectrum (300-450 nm) for light curing of adhesives, coatings, and encapsulants. Ideally suited for either manual or automated processes, the unit contains an integral shutter which can be actuated by a foot pedal or PLC and a universal power input (100-240 V, 50-60 Hz) that provides consistent performance at any voltage. A wide range of lightguides in various materials and configurations are available for use with this unit, providing application flexibility.

The BlueWave® 200's faceplate design features an improved operator interface with an easy-to-read LCD display. Also located on the faceplate is the unit's patented intensity adjustment control. This feature is important for validating an appropriate intensity range and maintaining that range during production. Users can manually adjust the unit's intensity to accommodate for bulb degradation and other factors that may affect intensity.

- Manual intensity adjustment, >17,000 mW/cm^2 initial intensity
- Large, easy-to-read front panel LCD display
- Improved user interface for easier operation
- Extended exposure time settings to 9,999.9 seconds
- Controlled power-up sequence ensures proper temperature

North American Version (120V Standard Plug)	41015
Asian Version (Type G Plug)	41014
Unit with No Power Cord*	41013

*The appropriate power cord is included for orders in Europe.

BlueWave® QX4®

The BlueWave® QX4® high-intensity spot-curing system features all the benefits of LED-curing technology in a smaller, more versatile unit. This system is comprised of a controller and up to four LED heads. LED heads are available in 365, 385, and 405 nm and can be outfitted with 3-, 5-, or 8-mm diameter focusing lenses. LED heads and focusing lenses can be used in any combination and can be controlled through the system's variable mode, a feature that allows each head to be individually programmed for intensity and cycle times. Individual exposure times and intensity settings can be set in 1% increments for each LED head, giving users maximum curing flexibility.

In addition to its curing flexibility, the system also features an easy-to-use control interface that allows flexibility in setup and use of the unit. The unit can be activated by front panel, foot pedal, or through an I/O interface connection, allowing it to be easily incorporated into automated systems.

- One controller controls up to four heads
- LED heads in 365, 385, or 405 nm wavelengths
- Variable mode allows each LED head to be programmed independently
- Interchangeable/Replaceable focusing lenses in 3-, 5-, and 8-mm diameters
- Instant on/off for a more energy efficient unit with no warm-up period
- Efficient LED-head temperature management
- PLC interface that is easily incorporated into automated systems

A complete BlueWave® QX4® system features a controller and up to four LED heads/lenses. Each LED head must have a lens in order to operate properly. Components are sold separately.

	PrimeCure® 385 nm	VisiCure® 405 nm	RediCure™ 365 nm
Controller Only	41572 Unit with No Power Cord* 41573 Asian Version (Type G Plug) 41571 North American Version (115V Standard Plug)		
LED Head	43162	43163	43161
Lens Only	43164 3-mm Lens 43165 5-mm Lens 43166 8-mm Lens		
Accessories & Spare Parts	41563 0.5 M Extension 41564 1.0 M Extension 41565 1.5 M Extension 41566 2.0 M Extension	41548 North American Power Cord (120V Standard Plug) 41549 Asian Power Cord	

*The appropriate power cord is included for orders in Europe.

BlueWave® MX-150

This curing system provides manufacturers with the curing flexibility they need, in a smaller, more efficient design. The unit is comprised of two main parts, a controller with an easy-to-use touchscreen interface and a high-intensity LED emitter which is uniquely designed to offer higher, more consistent curing intensity than traditional spot-curing systems. Curing energy is created using an LED chip in the emitter, unlike traditional spot-cure systems, where it is located in the controller. Locating the LED chip at the point-of-cure provides more consistent curing by addressing potential intensity loss caused by the use of long or bent lightguides.

With this new design, the system can be truly tailored to users' curing needs – allowing them to choose from three different wavelength LED emitters (365, 385, or 405 nm) so optimal cures are achieved. Users also have endless set up flexibility; for automated curing processes, the emitter can be easily mounted to robotic arms or further from the controller without fear of intensity variations. When used as a bench-top curing system, the unit can be paired with a stand and shielding or a Wolf-style lightguide can be connected to the system for specialized applications.

- High Intensity of up to 40 W/cm^2 for faster curing
- Touchscreen interface for easier operation
- Emitter design for set up flexibility and consistent intensity
- LED emitters in 365, 385, and 405 nm wavelengths
- Admin and production modes with the ability to save curing programs for repeated use
- Instant on/off for a more energy efficient unit with no warm-up period
- PLC interface that is easily incorporated into automated systems

A complete BlueWave® MX-150 system features a controller and an LED emitter. Components are sold separately. Wolf-style lightguides and other accessories can be added for specific applications. See pages 7 and 8 for additional accessories.

	PrimeCure® 385 nm	VisiCure® 405 nm	RediCure™ 365 nm
BlueWave® MX-Series 1-Channel Controller Only	42380 Unit with No Power Cord* 42379 Asian Version (Type G Plug) 42378 North American Version (115V Standard Plug)		
BlueWave® MX-Series 2-Channel Controller Only	43184 Unit with No Power Cord* 43186 Asian Version (Type G Plug) 43184 North American Version (115V Standard Plug)		
BlueWave® MX-Series 4-Channel Controller Only	43181 Unit with No Power Cord* 43183 Asian Version (Type G Plug) 43182 North American Version (115V Standard Plug)		
LED Emitter Note: 5-mm lightguide simulator comes with every emitter	42337	42338	42336
Accessories	36987 5-mm Lightguide Simulator 41148 Adjustable Taper Shoulder Focusing Lens (5 mm)		

*The appropriate power cord is included for orders in Europe.

Lightguides

Lightguides transmit UV and visible energy from a source mounted inside of a spot-curing unit to the curing area. When choosing a lightguide for your system, the following factors should be considered:

Length – Lightguides are commonly one meter long although other lengths are available.

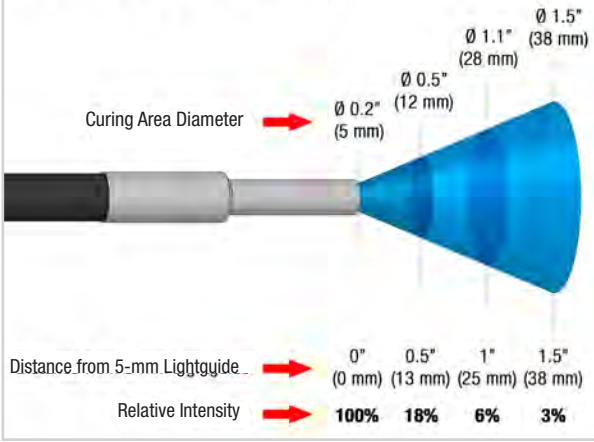
Diameter – Single-pole lightguides are available with 3-mm, 5-mm, or 8-mm inside diameters. Although the 5-mm lightguide will register a higher intensity, the 8-mm lightguide provides more curing power (intensity x area) because a larger lightguide opening captures more of the light emitted from the bulb. Each pole of a multi-pole lightguide has an inside diameter of 3 mm.

Multiple Poles – Light emitting from a spot lamp can be channeled through a single lightguide (single pole) or split between multiple lightguides (multiple poles). Each pole of a multi-pole lightguide emits equal intensity (typically ±10% for liquid-filled lightguides) and all share a common shutter. Both liquid-filled and quartz-fiber multi-pole lightguides are available from Dymax.

Connection – There are basically two types of connectors used in the spot lamp industry, "Wolf" and "D" connectors. Dymax provides lightguides with both connector types, although "D" connectors are an industry standard and compatible with current Dymax lamp designs (older Dymax designs utilized "Wolf" connectors).

Curing Area/Intensity vs. Distance – The UV and visible light emitted from a lightguide diverges. As a result, intensity decreases and curing area increases with distance from the end of the light guide. The chart to the right describes this relationship clearly for the 5-mm liquid lightguide.

Curing Area/Intensity vs. Distance Using a 5-mm Lightguide



Part Number	Lightguide Description (all noted are liquid filled; quartz fiber are also available)		Compatible Dymax Systems
5720	Single Pole	5 mm x 1 M	BlueWave® 75 BlueWave® 200 BlueWave® LED Prime UVA BlueWave® LED VisiCure® BlueWave® DX-1000 BlueWave® DX-1000 VisiCure®
5721	Single Pole	5 mm x 1.5 M	
5722	Single Pole	8 mm x 1 M	
38476	Two Pole	3 mm x 1 M	
38477	Three Pole	3 mm x 1 M	
38478*	Four Pole - Fiber Optic	3 mm x 1 M	Compatible with All BlueWave® Spot Lamps
36619	Single Pole - Wolf Style	3 mm x 1 M	BlueWave® MX-150
37043	Two Pole - Wolf Style	3 mm x 1 M	
35101	Single Pole - Wolf Style	5 mm x 0.5 M	
35102	Single Pole - Wolf Style	5 mm x 1 M	
36238	Single Pole - Wolf Style	5 mm x 1.5 M	
38998	Single Pole - Wolf Style	5 mm x 2 M	
38676*	Four Pole - Extended Range	3 mm x 1.5 M	
38851*	Four Pole	3 mm x 1.5 M	
39791*	Four Pole - Fiber Optic	3 mm x 1 M	

*Lightguide adapter conversion kit (PN 42942) required for use with BlueWave® MX-150.

Accessories

Lightguide Mounting Stands

39700 - Single Lightguide Mounting Stand
Utilizes a 24" flexible arm for mounting 3, 5, and 8-mm lightguides. This stand offers a 5" x 5" (127 mm x 127 mm) working area and allows repeatable, hands-free spot curing.

41325 - Acrylic Lightguide Mounting Stand
Multiple lightguides can be securely mounted on this stand for repeatable, hand-free spot curing.

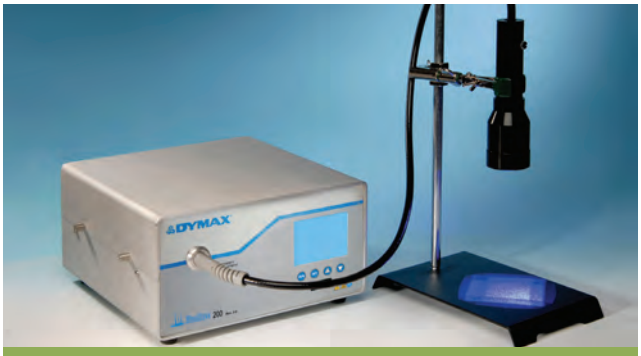
41595 - Lightguide Stand Expansion Kit
Allows the Dymax acrylic lightguide mounting stand to hold up to four lightguide poles.

Mounting Stands: PN 39700 (Left) & PN 41325 (Right)

Rod Lenses

Turn a spot into a flood lamp with shutter! A rod lens re-focuses the UV light emitted from a spot lamp to create a very uniform (<5% variation) 2" x 2" (50.8 mm x 50.8 mm) or 5" x 5" (127 mm x 127 mm) curing area. These rod lenses attach to the UV light-curing spot system using an 8-mm lightguide (sold separately).

38699 - Rod Lens, 2" x 2" (50.8 x 50.8 mm) Area
38698 - Rod Lens, 5" x 5" (127 x 127 mm) Area



BlueWave® 200 with Rod Lens

Lightguide Terminators

Lightguide terminators can be attached to the end of a lightguide to help users get UV light to those difficult-to-reach locations.

39029 – 3 mm/60°
39030 – 3 mm/90°
38042 – 5 mm/60°
38049 – 5 mm/90°
39334 – 8 mm/60°
39333 – 8 mm/90°

Lightguide Simulators

A lightguide simulator can be used to accurately measure the direct light intensity from the system's energy source.

38408 - Lightguide Simulator, 7-mm Diameter
36987 - Lightguide Simulator, 5-mm Diameter

Emitter Stands & Shields

42390 - BlueWave® MX-Series Mounting Stand
Mounting stand with adjustable height for a single MX-series emitter.

42909 - BlueWave® MX-Series Single Emitter Mounting Kit
Mounting adapter for attaching MX-series emitters.

43108 - BlueWave® MX-Series Multi-Array Mounting Stand
Accommodates up to 4 MX-series emitters.

42426 - Emitter Holder Assembly Bracket
Securely mount an emitter to the side of the BlueWave® MX-150 controller for configurations using a lightguide.

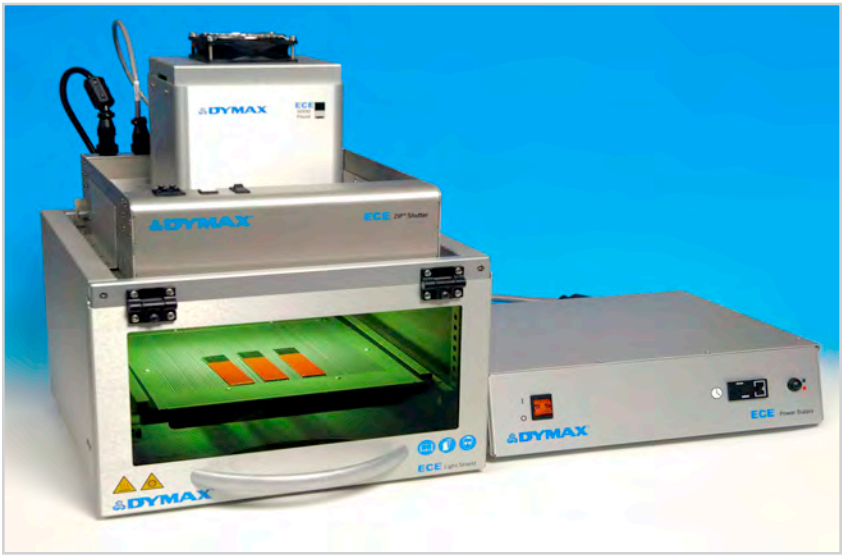
41395 - Three-Sided Acrylic Shield
Compatible with the BlueWave® MX-150. A simple and cost effective three-sided shield that is removed manually.

Emitter Mounting Stand with Three-Sided Acrylic Shield (Left) & Holder Assembly Bracket (Right)

BROAD-SPECTRUM & LED FLOOD-CURING SYSTEMS

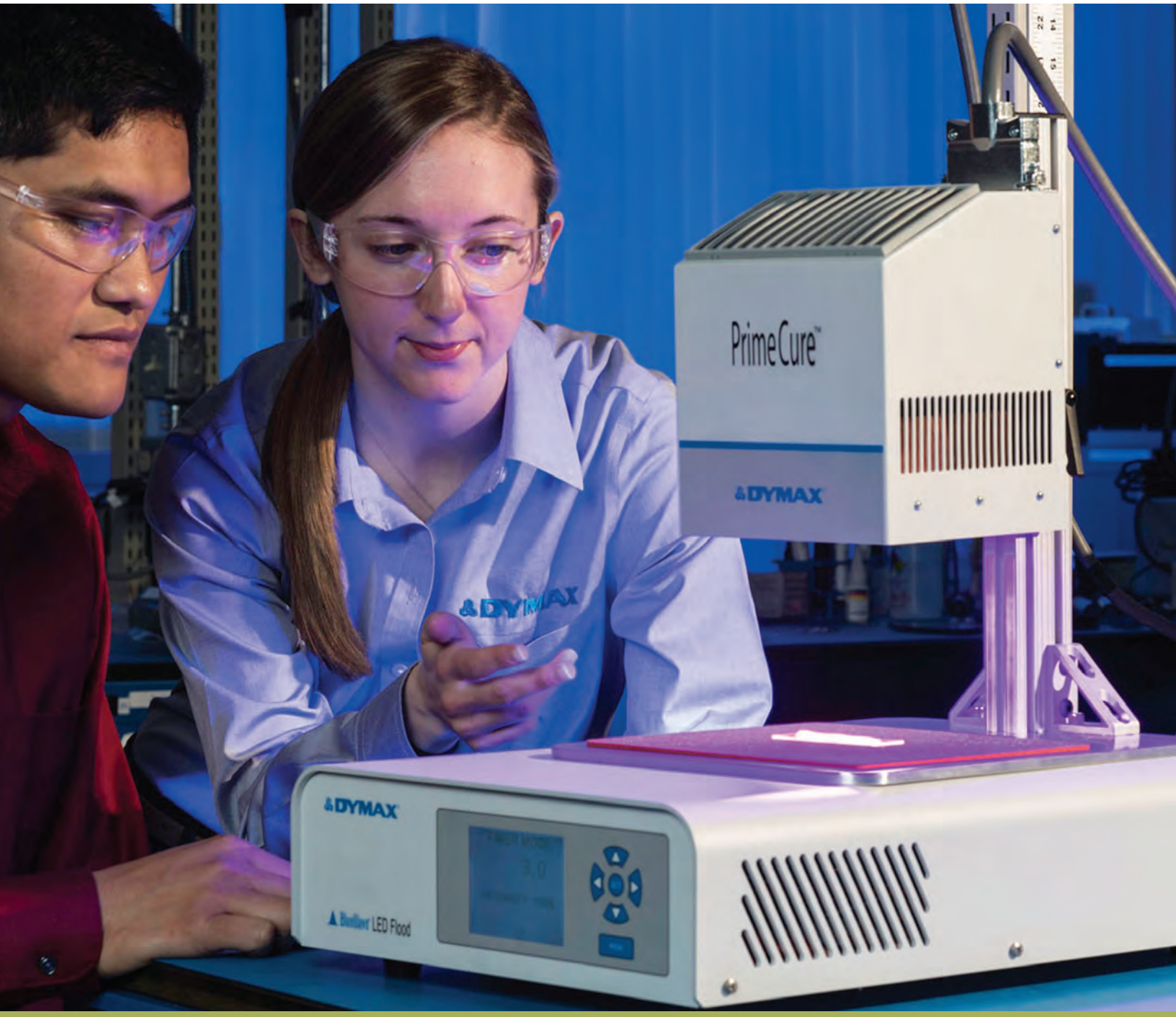
Flood-style curing systems usually provide moderate to high-intensity light. These units have the advantage of being able to cure a tray of parts, or parts with large bonded or coated areas. These kinds of lamps are commonly integrated into existing manufacturing processes by mounting them above high-speed assembly lines. Fairly deep cures can be achieved by these relatively inexpensive units at 10- to 30-second exposure times. Wide-area flood lamps are used successfully to cure substrates that are somewhat heat-sensitive, such as certain plastics.

Dymax currently offers both broad-spectrum and LED flood curing systems to fit a wide variety of curing applications. Shutter assemblies, mounting stands, shields, and other accessories are available to order to create custom bench-top curing systems. CE marked units are available for manufacturers in Europe.



Broad-Spectrum Flood Lamps

Dymax broad-spectrum flood curing systems use moderate- to high-intensity (105-225 mW/cm^2) UV/visible light to cure UV light-curable adhesives, coatings, and inks in as little as 5-30 seconds. Systems are available with 5" x 5" (127 mm x 127 mm) or 8" x 8" (203 mm x 203 mm) curing areas. They come standard with a 400 watt metal-halide bulb but can be outfitted with longwave, shortwave, UV, and visible replacement bulbs to fit unique applications. All bulbs have a long service life and come with a 2,000 hour warranty.



LED Flood Curing Systems

Dymax LED flood lamp systems use high-intensity LEDs to cure a 5" x 5" (12.7 cm x 12.7 cm) area. Because these flood systems use a high-intensity LED as the curing source they produce faster cure times, more consistent frequency and intensity output, a cooler curing environment for thermally sensitive substrates, and longer bulb life than conventional arc lamps. Systems are available in three different wavelength arrays (365, 385, and 405 nm) so users can fully optimize the curing process between their light-curable material and the curing system.

EC-Series Flood Lamp Systems

EC-series flood-lamp systems are ideal for light curing large parts or curing many small parts simultaneously. With intensities ranging from 105-225 mW/cm^2, Dymax flood lamps are capable of curing most UV light-curable adhesives, sealants, and coatings, tack free in 30 seconds or less. These flood lamps can be incorporated into automated assembly systems or mounted onto conveyors. Dymax flood units can also be used as turnkey bench-top units (with optional shutters).

- Large curing area, 5" x 5" (12.7 cm) or 8" x 8" (20.3 cm)
- Adjustable lamp height
- 100% shielding with safety interlock kit
- Two bulb options: shortwave or longwave

	1200-EC	2000-EC	5000-EC
Typical Intensity Output, mW/cm^2*	350	105	225
Curing Area	1" x 6" (2.5 cm x 15.2 cm)	8" x 8" (20.3 cm)	5" x 5" (12.7 cm)
Working Distance	2"-6" (5.08 cm - 15.24 cm)		
Typical Degradation	<20% over 2,000 hours		
Power Requirements	90-264V, 47-63 Hz		

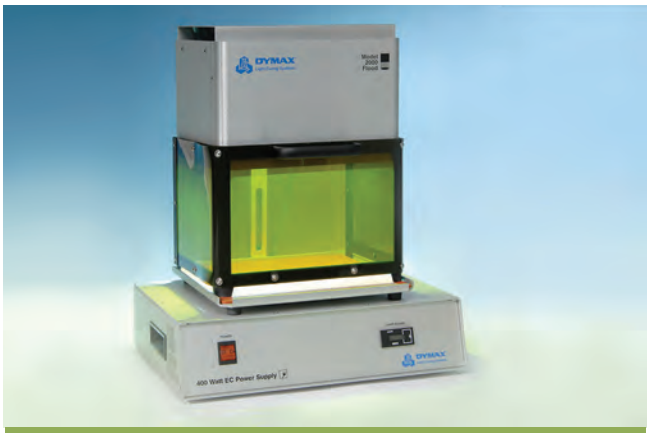
* Measured with a Dymax ACCU-CAL™ 50 Radiometer (320-395 nm) at a lamp height of 3" using a standard metal halide bulb.

System Options**	1200-EC	2000-EC	5000-EC
Modular (No Shielding or Shutter)	38110	38105	38100
With Mounting Stand	39930	39730	39830
With EC Light Shield	39920	39720	39820
With EC Light Shield & Manual Shutter	-	39723	39823
With EC Light Shield & ZIP™ Shutter	-	39721	39821

**All part numbers include a North American power cord (120V plug)

5000-EC Shown with ZIP™ Shutter & Light Shield

Modular 2000-EC Flood



2000-EC Shown with Mounting Shield

ECE-Series Flood Lamp Systems

Dymax UV light-curing flood-lamp systems are ideal for light curing large parts or curing many small parts simultaneously. With intensities ranging from 105-225 mW/cm^2, Dymax flood lamps are capable of curing most UV light-curable adhesives, sealants, and coatings, tack free in 30 seconds or less. These flood lamps can be incorporated into automated assembly systems or mounted onto conveyors. Dymax flood units can also be used as turnkey bench-top units (with optional shutters).

- Large curing area, 5" x 5" (12.7 cm) or 8" x 8" (20.3 cm)
- Adjustable lamp height
- 100% shielding with safety interlock kit
- Two bulb options: shortwave or longwave
- Extended exposure time settings to 9,999.9 seconds
- Controlled power-up sequence ensures proper temperature

ECE 2000 Shown with ZIP™ Shutter & Light Shield

Modular ECE 5000

	ECE 2000	ECE 5000
Typical Intensity Output*	105 mW/cm^2	225 mW/cm^2
Curing Area	8" x 8" (20.3 cm)	5" x 5" (12.7 cm)
Working Distance	2"-6" (5.08 cm - 15.24 cm)	
Typical Degradation	<20% over 2,000 hours	
Power Requirements	100-240 VAC, +/- Single Phase 50-60 Hz	

* Intensity readings vary widely depending on the make and model of the radiometer. These intensities were measured with the ACCU-CAL™ 50 radiometer

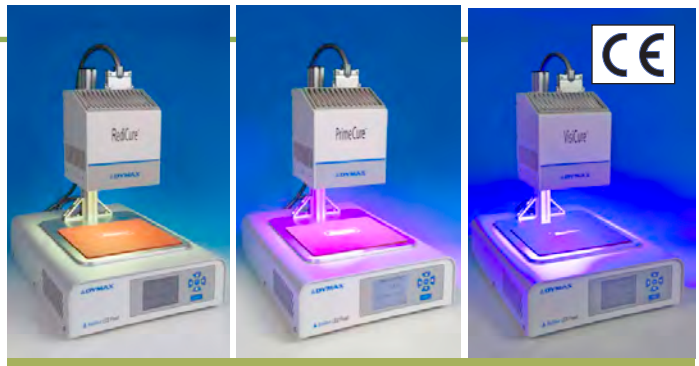
	ECE 2000 (8" x 8" (20.3 cm x 20.3 cm))	ECE 5000 (5" x 5" (12.7cm x 12.7cm))
Modular (No Shielding or Shutter)	40985 - North American Version (120V Plug) 40995 - Asian Version (Type G Plug) 40965 - No Power Cord*	40925 - North American Version (120V Plug) 40935 - Asian Version (Type G Plug) 40915 - No Power Cord*
With Mounting Stand	41170 - North American Version (120V Plug) 41180 - Asian Version (Type G Plug) 40920 - No Power Cord*	41130 - North American Version (120V Plug) 41140 - Asian Version (Type G Plug) 40970 - No Power Cord*
With ECE Light Shield	41190 - North American Version (120V Plug) 41200 - Asian Version (Type G Plug) 40870 - No Power Cord*	41150 - North American Version (120V Plug) 41160 - Asian Version (Type G Plug) 40900 - No Power Cord*
With ECE Light Shield & Manual Shutter	40810 - North American Version (120V Plug) 40860 - Asian Version (Type G Plug) 40790 - No Power Cord*	40940 - North American Version (120V Plug) 41100 - Asian Version (Type G Plug) 40850 - No Power Cord*
With ECE Light Shield & ECE ZIP™ Shutter	41040 - North American Version (120V Plug) 41060- Asian Version (Type G Plug) 40830- No Power Cord*	41030 - North American Version (120V Plug) 41050 - Asian Version (Type G Plug) 40840 - No Power Cord*

*The appropriate power cord is included for orders in Europe.

BlueWave® LED Flood

The BlueWave® LED Flood System offers high-intensity curing energy over a 5" x 5" (12.7 cm x 12.7 cm) area. Cure times in the 5-30 second range are typical when using Dymax light-curable materials. This unit is simple to operate and can be used as a stand-alone system or easily integrated into automated assembly systems. Dymax offers the system with three different wavelength arrays (365, 385, and 405 nm) so users can fully optimize the curing process between their light-curable material and the curing system.

The BlueWave LED Flood System offers all the benefits of LED light-curing technology including more consistent intensity, less energy consumption, a shutter-free design, instant on/off, and cooler curing temperatures.



BlueWave® LED Flood (From left: RediCure™, PrimeCure®, & VisiCure®)

- Large curing area, 5" x 5" (12.7 cm) active area
- More consistent frequency and intensity for better process control
- Greener technology - no ozone generation, mercury free, & lower energy consumption than conventional lamps
- Shutter-free design for reliable operation with lower mainenance costs (no moving parts)
- LED flood array available in 365, 385, and 405 nm wavelengths
- Unit can be used as a bench-top cure system or incorporated into an automated process or conveyor

	RediCure® 365 nm	PrimeCure® 385 nm	VisiCure® 405 nm
Typical Intensity Output, mW/cm²*	500	850	950
Static Uniformity	0.4	0.35	0.4
Curing Area	5" x 5" (12.7 cm - 12.7 cm)		
Power Requirements	100 – 240 VAC 50/60Hz (Auto-Ranging)		

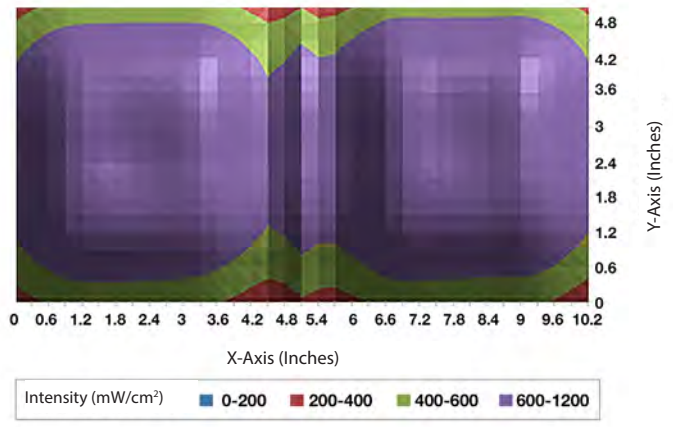
* When measured at 25 mm distance with an ACCU-CAL™ 50-LED radiometer in flood mode.

SYSTEM UNIFORMITY

When compared to other LED units, the BlueWave LED Flood provides much higher intensity and more overall uniformity across the active area. These benefits allow shorter cure times, and in turn, faster manufacturing throughput.

The graph to the right illustrates the Dymax BlueWave LED Flood's high uniformity when multiple arrays are positioned next to each other. This is especially important in conveyor applications to ensure a consistent cure across the entire substrate.

BlueWave® LED Flood with Two VisiCure® Arrays (Mounted Face-to-Face)



	RediCure® (365 nm)	PrimeCure® (385 nm)	VisiCure® (405 nm)
North American Version (120V Standard Plug)	41292	41287	41288
Asian Version (Type G Plug)	41289	41290	41291
Unit with No Power Cord*	41262	41261	41260

*The appropriate power cord is included for orders in Europe.

BlueWave® MX-250

This curing system provides manufacturers with the curing flexibility of past systems but with new expansion capabilities. The unit is comprised of two main parts, a controller with an easy-to-use touchscreen interface and a uniquely designed, high-intensity LED emitter. The LED emitter provides better uniformity and more consistent curing-energy emissions than traditional flood-curing systems over a 50 mm x 50 mm curing area. Curing energy is created using a micro-processor-controlled LED chip set in the emitter. Multiple systems can be grouped together to create larger curing pattern matrixes as needed.

With this new design, the system can be truly tailored to users' curing needs – allowing them to choose from three different wavelength LED emitters (365, 385, or 405 nm) and providing additional flexibility with the size and pattern of the active curing area. Users also have endless set up flexibility, as this system can be set up as a bench-top unit, or for automated curing processes, the emitter can be easily mounted to robotic arms or further from the controller without fear of intensity losses.

BlueWave® MX-250 with Emitter Mounting Stand

- 1.97" x 1.97" (50 mm) curing area with the option for multiple systems to be grouped together to create larger curing patterns
- Touchscreen interface for easier operation
- Emitter design for set up flexibility and consistent intensity
- LED emitters in 365, 385, and 405 nm wavelengths
- Admin and production modes with the ability to save curing programs for repeated use
- Instant on/off for a more energy efficient unit with no warm-up period
- PLC interface that is easily incorporated into automated systems

	RediCure® 365 nm	PrimeCure® 385 nm	VisiCure® 405 nm
Typical Intensity Output, mW/cm²*	255	355	375
Curing Area	1.97" x 1.97" (50 mm - 50 mm)		
Typical Degradation	8% per 1,000 hours		
Power Requirements	100 – 240 VAC ≈ 2.5 A, 50-60Hz		

* Measured at 25 mm distance with an ACCU-CAL™ 50-LED radiometer.

A complete BlueWave® MX-250 system features a controller and an LED emitter. Components are sold separately. Other accessories can be added for specific applications. See page 15 for additional accessories.

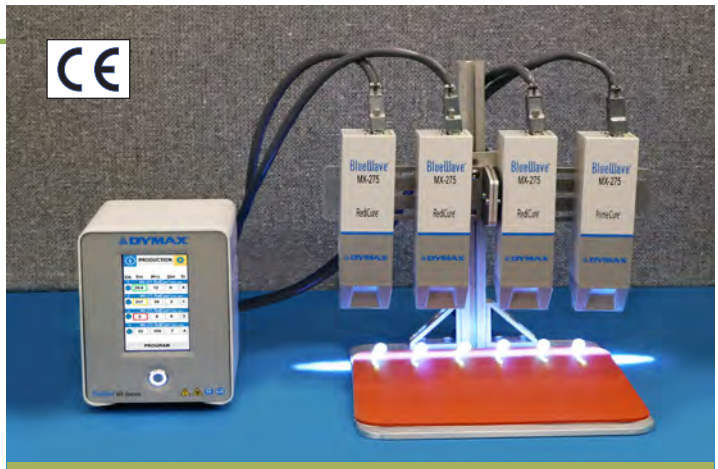
	RediCure® (365 nm)	PrimeCure® (385 nm)	VisiCure® (405 nm)
BlueWave® MX-Series 1-Channel Controller Only	42380 Unit with No Power Cord* 42379 Asian Version (Type G Plug) 42378 North American Version (115V Standard Plug)		
BlueWave® MX-Series 2-Channel Controller Only	43184 Unit with No Power Cord* 43186 Asian Version (Type G Plug) 43184 North American Version (115V Standard Plug)		
BlueWave® MX-Series 4-Channel Controller Only	43181 Unit with No Power Cord* 43183 Asian Version (Type G Plug) 43182 North American Version (115V Standard Plug)		
LED Emitter	42806	42807	42808
Accessories	42287 Interconnect Calve Assembly 42390 Emitter Mounting Stand		

*The appropriate power cord is included for orders in Europe.

BlueWave® MX-275

The BlueWave® MX-275 curing system is a high-intensity LED flood-curing system. Light energy is delivered in a line pattern instead of the traditional rectangular pattern. A single BlueWave® MX-275 emitter provides a 5 mm x 50 mm curing area, but when paired with a multichannel controller, up to four emitters can be used to produce a curing area as large as 5 mm x 200 mm.

BlueWave® MX-275 system emitters are available in three different wavelengths: 365, 385 and 405 nm. Emitters can be set up as a bench-top unit, on an array stand to create extended line patterns, or installed on automated curing processing equipment for maximum flexibility.



BlueWave® MX-275 System
Shown with Multiple Emitter Mounting Stand & 4-Channel Controller

	RediCure® 365 nm	PrimeCure® 385 nm	VisiCure® 405 nm
Typical Intensity Output, mW/cm²*	1,460	1,870	1,750
Curing Area	0.20" x 1.97" (5 mm x 50 mm)		
Power Requirements	100 – 240 VAC ≈ 2.5 A, 50-60Hz		

* Measured at a working distance of 10 mm using a Dymax ACCU-CAL™ 50-LED Radiometer with 3-mm aperture set to corresponding light measurement mode. This is preliminary intensity data for reference, tests using flood mode without an aperture will yield different results.

- Delivers high-intensity light energy in a line pattern
- 5 mm X 50 mm cure area can be scaled up by placing emitters side-by-side to provide a large, continuous band of UV LED energy
- Up to 5 mm X 200 mm cure area when paired with 4-channel controller
- Wavelength flexibility allows co-optimization of adhesive and curing system
- Can be set up as bench-top unit, on array stand, or in automated system for maximum flexibility
- Well-suited for conveyor applications where products move under light

A complete BlueWave® MX-275 system features a controller and an LED emitter. Each emitter requires an interconnect cable. Components are sold separately.

	RediCure® (365 nm)	PrimeCure® (385 nm)	VisiCure® (405 nm)
Line Pattern LED Emitters	43094	43098	43102
BlueWave® MX-Series 2-Channel Controller Only	43184 Unit with No Power Cord* 43186 Asian Version (Type G Plug) 43185 North American Version (115V Standard Plug)		
BlueWave® MX-Series 4-Channel Controller Only	43181 Unit with No Power Cord* 43183 Asian Power Cord (Type G) 43182 North American Version (115V Standard Plug)		
Interconnect Cables	42287 Interconnect Cable Assembly (2 meter) 42889 Interconnect Cable Assembly (5 meter) 43010 Interconnect Cable Assembly (10 meter) 43011 Interconnect Cable Assembly (20 meter)		

*The appropriate power cord is included for orders in Europe.

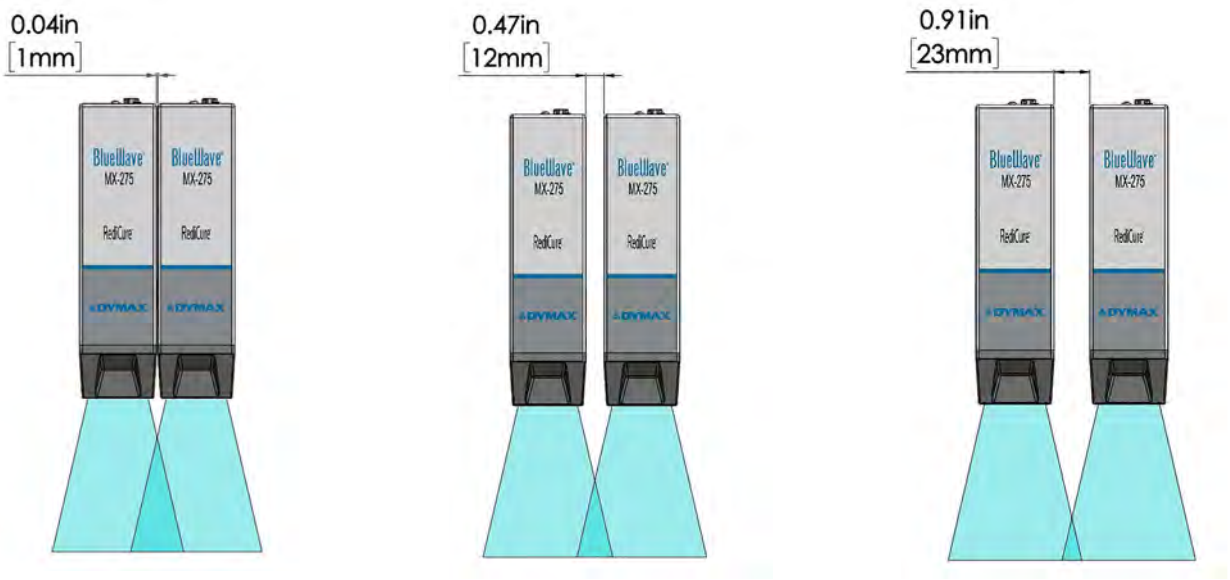
MULTI-EMITTER PERFORMANCE

The following graphs illustrate the BlueWave® MX-275's performance when multiple emitters are positioned next to each other. We recommend positioning emitters a minimum of 1 mm apart with vents on two outside units facing out.

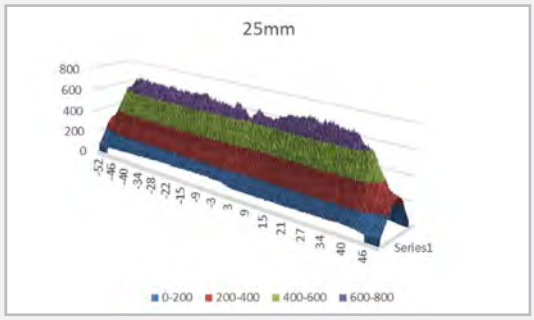
Mounting Gap vs. Intensity Response with Two RediCure® Arrays Side-by-Side

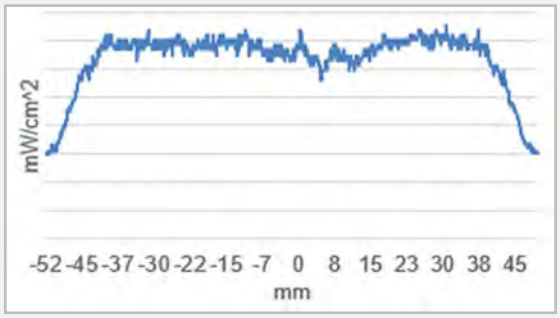
Working Distance	Uniform Response Gap
25 mm	1 mm
50 mm	12 mm
75 mm	23 mm

Uniformity at Various Working Distances* – RediCure® Emitters (365 nm) Mounted Side-by-Side



Intensity Response at 25-mm Working Distance, 1-mm Mounting Gap

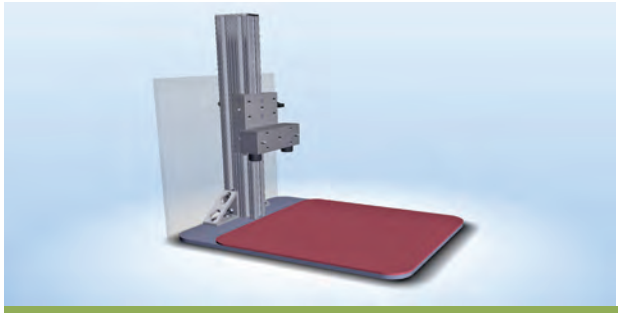




Accessories

Dymax light-curing flood lamps can be outfitted with the shutters and shielding shown below. Additional shutters, enclosures, and accessories may be available.

Mounting Stands



Standard BlueWave® LED Mounting Stand

41268 - BlueWave® LED Flood Mounting Stand
A simple and cost effective mounting stand with adjustable height.

43108 - BlueWave® MX-Series Multi-Array Mounting Stand
Accommodates up to 4 MX-series emitters.

42390 - BlueWave® MX-Series Single Emitter Mounting Stand
Mounting stand with adjustable height for a single MX-series emitter.

BlueWave® MX-Series Multiple Emitter Mounting Kit

43019 - BlueWave® MX-Series Multiple Emitter Mounting Kit
Works with LED Flood Stand 41268.

42909 - BlueWave® MX-Series Single Emitter Mounting Kit
Mounting adapter for attaching MX-series emitters.

BlueWave® Single Emitter Mounting Stand (Left), MX-Series Multiple Emitter Mounting Kit (Right)

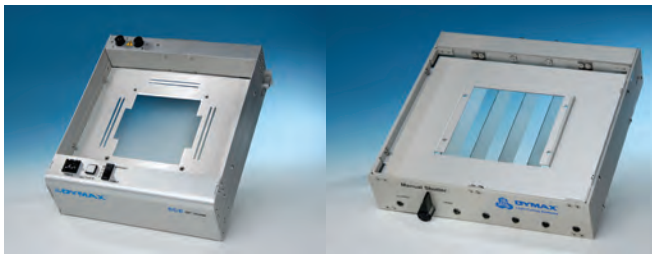
43070 - BlueWave® MX-Series Multiple Emitter Mounting Stand with Acrylic Back Shield
Mounting stand with acrylic back shield for multiple MX-series emitters. Works with Stand 41395.

Shutters

Turning a bulb off and on between cycles is not practical since each off/on cycle shortens bulb life and requires a five minute warm-up period. A shutter, however, can be used to shield a flood system between cycles. Shutters control exposure time, reduce heat on the work surface, and shield operators from exposure to UV light. Dymax carries two types of shutters, ZIP™ and manual.

37863 – ZIP™ Shutter (EC Floods)
Timed and manual modes. Foot pedal or PLC controlled.

40885 – ZIP™ Shutter (ECE Floods)
Timed and manual modes. Foot pedal or PLC controlled.



ECE ZIP™ Shutter (Left) & Manual Shutter (Right)

35572 – Manual Shutter (EC & ECE Floods)
Most cost-effective shutter system.

Shielding

Dymax offers several standard shielding options for flood lamps. All shields are 100% UVA blocking and visibly tinted.

41175 - EC Flood Light Shield

360° shielding with lifting door and sliding curing shelf. Compatible with Dymax shutters.

40785 - ECE Flood Light Shield

360° shielding with lifting door and sliding curing shelf. Safety Interlock feature included. Compatible with Dymax shutters.

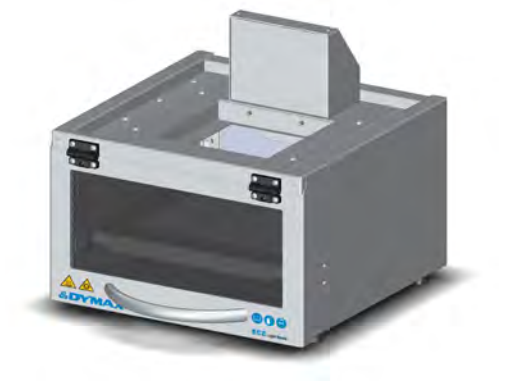
41321 - BlueWave® LED Flood Light Shield

360° shielding with a swing-up door and slide-out shelf. Not compatible with Dymax shutters.

(Note: This light shield requires version 3.0 or greater BlueWave® LED flood software. Dymax can determine software version based on the BlueWave® LED flood serial number.)

41395 - 3-Sided Acrylic Shield

A simple and cost effective 3-sided shield that is removed manually. Compatible with the BlueWave® LED Flood and BlueWave® MX-250 systems.



BlueWave® LED Flood Light Shield

EC Flood Light Shield

ECE Light Shield

3-Sided Acrylic Shield

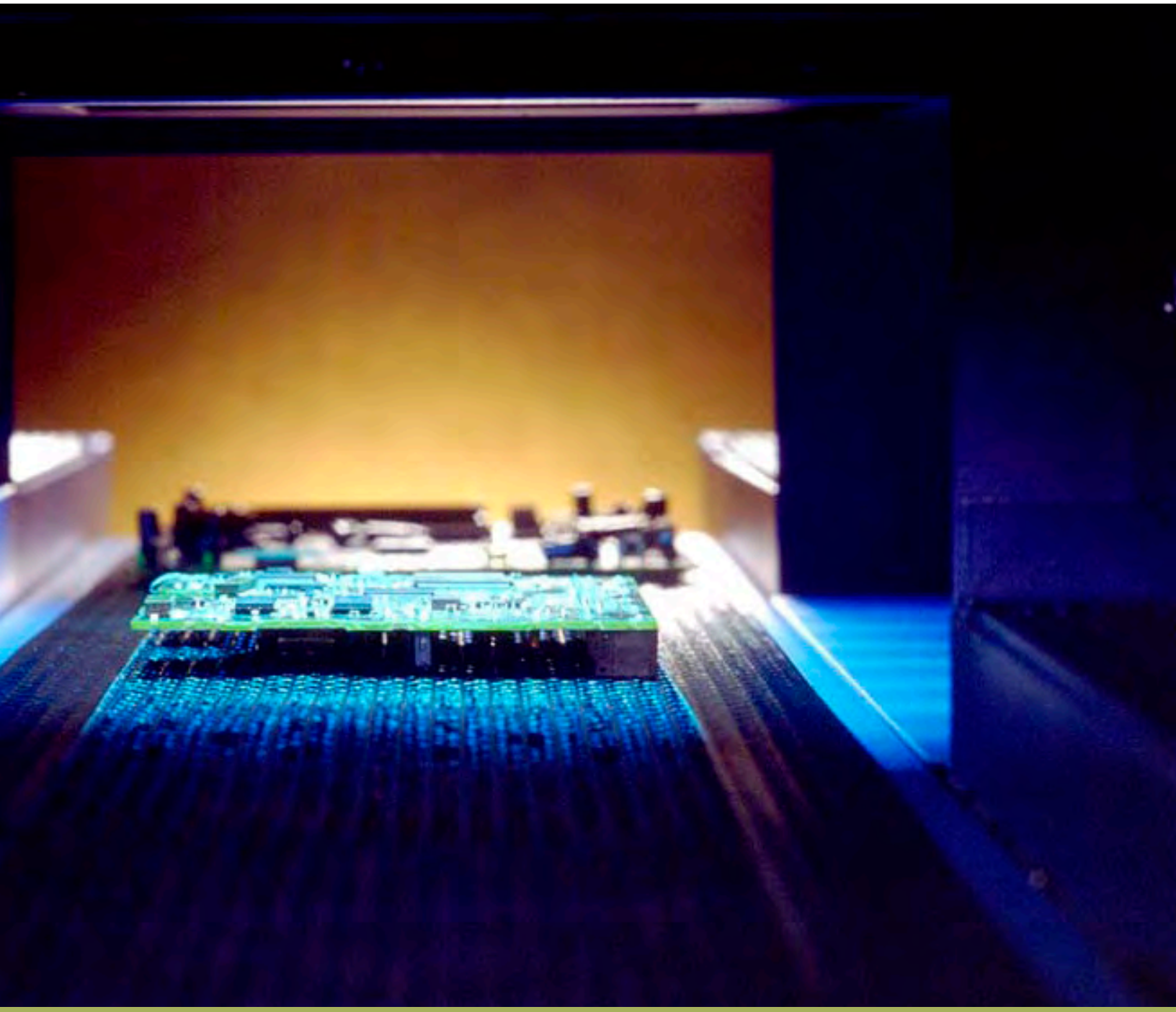
UV BROAD-SPECTRUM & LED CONVEYOR SYSTEMS

Dymax UVCS-series conveyor systems are an ideal choice for manufacturers who need to cure light-curable adhesives, coatings, and inks on larger parts or on large quantities of smaller parts. Standard UVCS systems consist of a 12”-wide belt that can be outfitted with a variety of broad-spectrum and LED curing flood lamps. Conveyors outfitted with broad-spectrum flood lamps are available with standard metal halide (longwave UV), mercury (shortwave UV), or visible bulbs to accommodate various applications. Conveyors that utilize LED floods are available in 365, 385, and 405 nm curing wavelengths. Specialty conveyors are available for applications that require a wider belt or for parts that need to be cured from the sides and/or the bottom.

All Dymax conveyor systems are designed to offer consistent, fast, and safe curing. The systems are extremely easy to use and keep users safe by offering complete shielding from UV light. Consistent belt transport speed, adjustable lamp height, and stable lamp intensity provide a consistent light-curing process for repeatable process and optimized throughput.

Custom Conveyor Systems

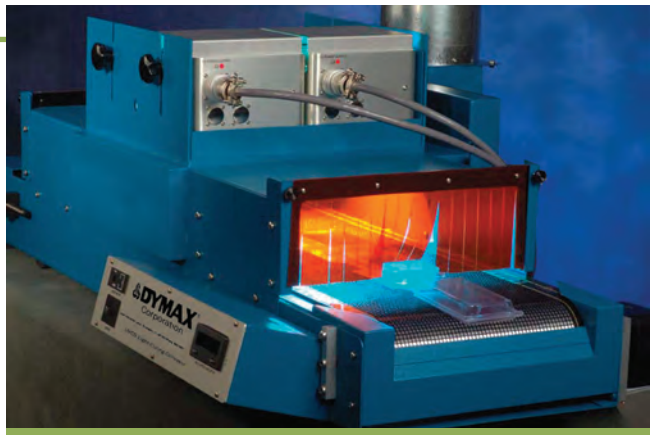
Looking for a wider conveyor, shorter conveyor, or one with more clearance? Dymax can custom design a conveyor to your specifications. Contact Dymax for more information on customized conveyors.

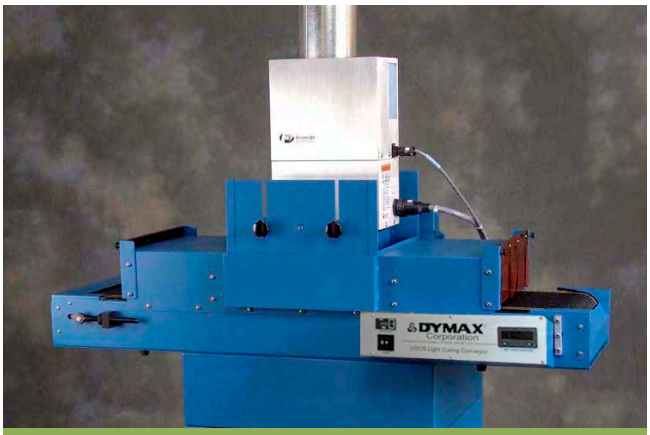


UVCS 2.0 Conveyors

The standard Dymax conveyor platform, the UVCS series, has a belt width of 12" (304.8 mm) and can be outfitted with a number of different UV light-curing systems. Belt speed is accurately measured using an optical encoder and displayed on a digital LCD. The UVCS series conveyors are completely shielded from UV light for user protection. The standard UVCS 2.0 conveyor is most commonly outfitted with Dymax 5000-EC or Fusion® F300S curing lamps.

- Multiple flood or focused-beam configurations available
- Up to 10" clearance available (with optional risers)
- Accurate belt speed (using an optical encoder)





	5000-EC Lamps								Fusion F300S Lamps	
	One 5000-EC (CM)*		Two 5000-ECs (CM)*		Two 5000-ECs (FW)**		Four 5000-ECs (FW)**		One Fusion F300S (CM)*	Two Fusion F300S (FW)**
North American Version (120V Standard Plug)	39060	39065	39070	39075	39080	39085	39100	39105	39150	39160
Asian Version (Type G Plug)	-		-		-		-		42006	42007
Conveyor Voltage	120V	220/230V	120V	220/230V	120V	220/230V	120V	220/230V	220/230V	
Amperage (With Lamps)	4.8A	2.4A	4.8A	2.4A	4.8A	2.4A	4.8A	2.4A	2.4A	
Belt Width	12" (30 cm)									
Belt Speed	1-27 feet per minute									
Cure Width	6" (15 cm)				12" (30 cm)				6" (15 cm)	12" (30 cm)
Lamp Adjustment Range	1.7" to 5.5" (4.3 cm to 14 cm)									
Max. Parts Height	4.25" (10.8 cm) | Adding risers increases to 10" (25.4 cm)									
Overall Dimensions (L x W x H) (Not Including Lamps)	50.5" x 29.8" x 16.4" (128 cm x 76 cm x 42 cm)									
Shipping Weight (With Crates & Lamps)	350-400 lbs. (159-181 kg)									
Crated Dimensions (L x W x H)	69" x 44" x 29" (175 cm x 112 cm x 74 cm)									

* CW (Center Mounted) - These conveyors have center-mounted lamps and are supplied with removable guides to channel parts into the middle 6" of conveyor.
** FW (Full Width) - These conveyors have lamps that span the full width of the conveyor.

UVCS LED Conveyors

Dymax LED light-curing conveyor systems offer consistent, fast, safe, and efficient LED curing of widths up to 10" in a 12" wide parts width platform. These conveyors are designed for curing LED-curable adhesives, coatings, and inks that react in the UVA and/or UVV spectral ranges.

Consistent line speed, lamp height, and intensity together provide a consistent curing process. These conveyors do not emit stray light and can be outfitted with up to four 365, 385, or 405 nm lamps positioned in either in-line or side-by-side configurations as required by the application.

- Consistent LED curing
- Complete LED shielding
- Adjustable lamp-to-belt distance
- Conveyor speeds of 1-32 feet per minute
- Integral cooling and vacuum hold-down

	1 LED Array		2 LED Arrays		4 LED Arrays**	
North American Version (120V Standard Plug)	41343 RediCure® 41353 PrimeCure® 41363 VisiCure®	41345 RediCure® 41355 PrimeCure® 41365 VisiCure®	41344 RediCure® 41354 PrimeCure® 41364 VisiCure®	41346 RediCure® 41356 PrimeCure® 41366 VisiCure®	41995 RediCure® 41996 PrimeCure® 41997 VisiCure®	42003 RediCure® 42004 PrimeCure® 42005 VisiCure®
Asian Version (Type G Plug)	-	41347 RediCure® 41357 PrimeCure® 41367 VisiCure®	-	41348 RediCure® 41358 PrimeCure® 41368 VisiCure®	-	42010 RediCure® 42011 PrimeCure® 42012 VisiCure®
Conveyor Voltage (VAC)	120V	230V	120V	230V	120V	230V
Amperage (With Lamps)	14.8A	8.4A	24.8A	14.4A	44.8A	26.4A
Belt Width	12" (30 cm)					
Belt Speed	1-32 feet per minute					
Cure Width*	5" (12.7 cm)	5" (12.7 cm) - CM 10" (25.4 cm) - FW	5" (12.7 cm)	5" (12.7 cm) - CM 10" (25.4 cm) - FW	5" (12.7 cm)	5" (12.7 cm) - CM 10" (25.4 cm) - FW
Lamp Adjustment Range	1.7" - 5.5" (4.3 cm - 14 cm)					
Max. Parts Height	4.25" (10.8 cm)					
Overall Dimensions (L x W x H) (Not Including Lamps)	50.5" x 29.8" x 16.4" (128 cm x 76 cm x 72 cm)					
Shipping Weight (With Crates & Lamps)	450 - 500 lbs. (204 - 227 kg)					
Crated Dimensions (L x W x H)	72" x 52" x 31" (183 cm x 132 cm x 79 cm)					
Retro-Fit Kits (Change an UVCS using an EC Flood Lamp to LED)	41340				41990	

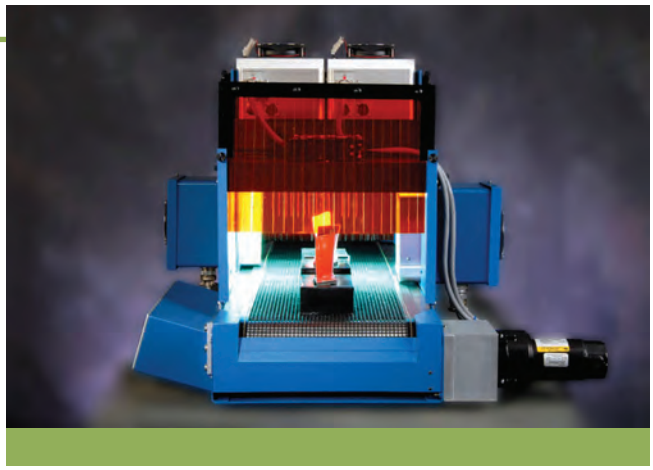
* CW (Center Mounted) - These conveyors have center-mounted lamps and are supplied with removable guides to channel parts into the middle 6" of conveyor.
FW (Full Width) - These conveyors have lamps that span the full width of the conveyor.

** Requires additional validation prior to order acceptance.

UVCS SideCure Conveyor

The UVCS SideCure conveyor system is designed for the UV curing of adhesives and coatings from the sides and/or top. The SideCure conveyor can be outfitted with up to eight 5000-EC UV curing flood lamps that offer complete shielding from UV light and consistent exposure times. The conveyor's 12" wide belt and 5" high side-curing capability makes the SideCure a very versatile UV curing solution. The SideCure conveyor is ideal for masking, medical, and electronic applications where 180° UV curing is required.

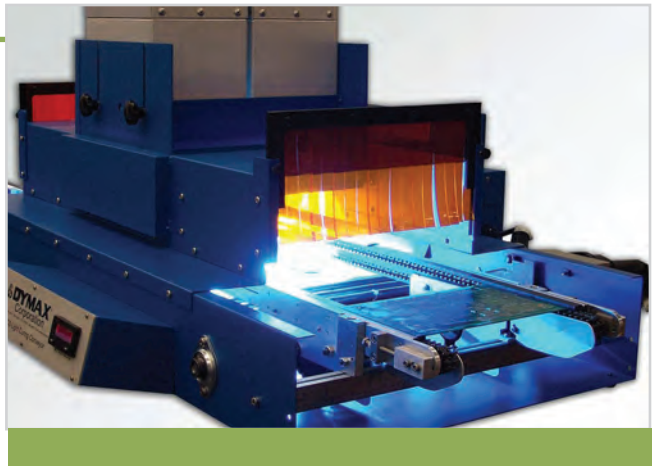
- Left, right, and top curing capability
- Adjustable top lamp height and side lamp position
- Accurate digital belt control and readout
- Controlled and consistent cure times
- Accepts parts up to 36" x 12" x 7" (L x W x H)



	UVCS SideCure with TWO Side Lamps (lamps sold separately)		UVCS SideCure with FOUR Side Lamps (lamps sold separately)	
Lamps (SideCure 5000-ECs PN 39798)	Up to six (sold separately)		Up to eight	
Part Number	39767	39766	39939	39941
Conveyor Voltage	115V	220/230V	115V	220/230V
Amperage (With Lamps)	1.6A	0.9A	1.6A	0.9A
Belt Width	12" (30 cm)			
Belt Speed	1-27.5 feet per minute			
Cure Width	6" (15 cm) or 12" (30 cm) depending upon number and orientation of lamps			
Lamp Adjustment Range	Top Lamps: From 6.25" to 9" off the belt (16 cm to 23 cm) Side Lamps: From 3.5" to 6" off center (9 cm to 15 cm)			
Max. Parts Height	7" (17.8 cm)			
Overall Dimensions (L x W x H) (Not Including Lamps)	51" x 30" x 21.5" (130 cm x 76 cm x 55 cm)			
Shipping Weight (With Crates & Lamps)	450-500 lbs. (204-227 kg)			
Crated Dimensions (L x W x H)	72" x 52" x 31" (183 cm x 132 cm x 79 cm)			

Edge-Carry Conveyor

Dymax Edge-Carry conveyors are designed for efficient curing of UV and/or visible light-sensitive adhesives, inks, and coatings. These conveyors can be outfitted with a variety of lamp configurations to address a variety of application specific requirements. They offer complete shielding from UV light and consistent cure times. Configuration options allow flexibility when defining intensity requirements to keep operating costs to a minimum. Standard height clearance is 0.75" across the entire 18" width, which is ideal for low profile parts such as PCBs, and up to 6 inches across a 13.75" width, which can be increased to either 8" or 12" with optional risers installed.



- Multiple flood or focused-beam configurations available
- Chain rail width is easily adjusted to accommodate parts widths up to 12"
- Adjustable lamp-to-part distance

	5000-EC Lamps								2000/1200-EC Lamps		Fusion F300 Lamps	
	One Lamp (CM)*		Two Lamps (CM)*		Two Lamps (FW)**		Four Lamps (FW)**		One Lamp (CM)*		One Lamp (CM)*	Two Lamps (FW)*
Part Number	40324	40328	40325	40329	40326	40275	40327	40331	40334 40335	40332 40333	40336	40280
Conveyor Voltage	120V	230V	120V	230V	120V	230V	120V	230V	115 or 208-240V		208-240V	
Amperage (With Lamps)	9.6A	4.8A	17.6A	8.8A	17.6A	8.8A	33.6A	16.8A	TBD	TBD	16A	32.6A
Max. Chain Spacing	18" (45.7 cm)											
Conveyor Speed	1-32 feet per minute											
Cure Width	6" (15 cm)				12" (30 cm)				9" (23 cm)		6" (15 cm)	12" (30 cm)
Lamp Adjustment Range	3.5" - 7.3" (8.9 cm - 18.5 cm)											
Max. Parts Height	6.25" (15.86 cm)											
Overall Dimensions (L x W x H) (Not Including Lamps)	59" x 35" x 39.5" (150 cm x 89 cm x 100 cm)											
Shipping Weight (With Crates & Lamps)	390 lbs. (177 kg)		410 lbs. (186 kg)				450 lbs. (204 kg)		390 lbs. (177 kg)		475 lbs. (215 kg)	580 lbs. (263 kg)
Crated Dimensions (L x W x H)	TBD											

* CW (Center Mounted) - These conveyors have center-mounted lamps and are supplied with removable guides to channel parts into the middle 6" of conveyor.
** FW (Full Width) - These conveyors have lamps that span the full width of the conveyor.

WIDECURE® Conveyor

The WIDECURE® conveyor system is designed to offer consistent, fast, and safe curing. Equipped with a 25" (63.5 cm) wide belt, this system is ideal for curing light-curable materials on larger parts, or larger quantities of smaller parts. It can be outfitted with either a longwave (metal halide, UVA/Visible) bulb or a shortwave (mercury, UVB/UVC) bulb and delivers up to 700 mW/cm^2 of curing energy.

Designed to help manufacturers build a more reliable cure process, the WIDECURE® allows users to easily control various curing parameters through a touch-screen control panel. This feature gives users greater curing flexibility and enables them to tailor the curing conditions to their specific application. The system's tightly controlled belt speed and minimal bulb degradation also allow better control over cure. This provides repeatable curing profiles and a more reliable process with less risk of variance.

- 25" (63.5 cm) wide belt with 24" (61 cm) curing width
- Touchscreen control panel
- Line speeds from 4-30 fpm, adjustable in 0.1 fpm increments
- Easily adjustable lamp-to-belt distance (4"-24")
- Integral vacuum hold-down and cooling system

	WIDECURE® UV Light-Curing Conveyor System
Part Number	41245-L Standard WIDECURE® Conveyor where belt travels left-to-right 41245-R Optional WIDECURE® Conveyor where belt travels right-to-left. Requires modification charge and additional lead-time.
Conveyor Voltage	480V
Amperage (With Lamps)	30A
Belt Width	25" (63.5 cm)
Belt Speed	Adjustable 4 - 30 feet per minute
Cure Width	24" (61 cm)
Lamp Adjustment Range	4" to 24" (10.16 cm to 61 cm)
Max. Parts Height	18" (45.7cm)
Overall Dimensions (L x W x H) (Not including Lamps)	113.5" x 46" x 76" (288.3 cm x 116.8 cm x 193 cm)
Shipping Weight (With Crate)	1,700 lbs. (771 kg)
Crated Dimensions (L x W x H)	120" x 56" x 90" (305cm x 142cm x 229cm)

Accessories

Carts

39215 – Transportation Cart
Easily move your conveyor with one of these durable, rolling carts.

Conveyor Bulbs

UVCS, SideCure, & Edge-Carry Conveyors

38560 - Metal-Halide Bulb (Standard, UVA, Longwave)
For use with UVCS, SideCure, & Edge-Carry conveyors outfitted with Dymax EC-series flood lamps.

36970 - Mercury Bulb (UVB, Shortwave)
For use with UVCS, SideCure, & Edge-Carry conveyors outfitted with Dymax EC-series flood lamps. These bulbs are primarily designed for curing UV inks and cationic epoxies.

36658 - Visible Bulb
For use with UVCS, SideCure, & Edge-Carry conveyors outfitted with Dymax EC-series flood lamps. The bulbs are primarily designed for curing UV/visible curing adhesives through UV-blocked, but transparent substrates.

36399 - "D" Bulb (Standard)
For use with UVCS, SideCure, & Edge-Carry conveyors outfitted with Fusion lamps.

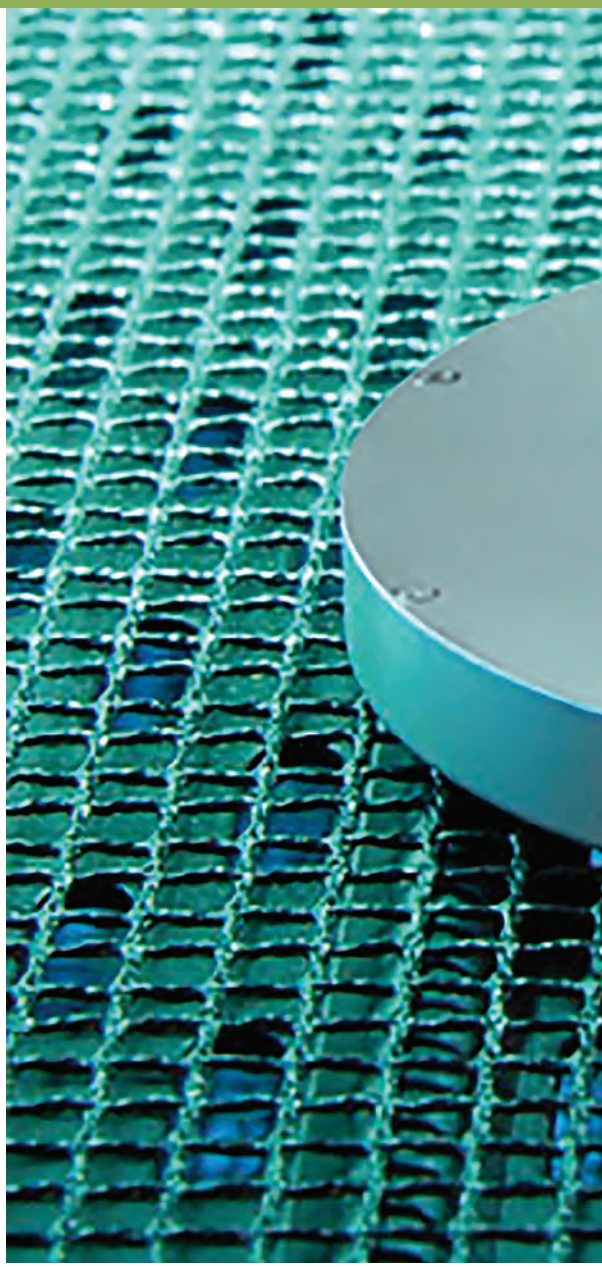
36441 - "H" Bulb
For use with UVCS, SideCure, & Edge-Carry conveyors outfitted with Fusion lamps. These bulbs are primarily designed for curing UV inks and cationic epoxies.

38146 - "V" Bulb
For use with UVCS, SideCure, & Edge-Carry conveyors outfitted with Fusion lamps. The bulbs are primarily designed for curing UV/visible curing adhesives through UV-blocked, but transparent substrates.

WIDECURE® Conveyors

41248 - Replacement Belt
41247 - Metal-Halide Bulb
41246 - Mercury Bulb

RADIOMETERS FOR SPOT, FLOOD, AND CONVEYOR SYSTEMS



Radiometers measure the intensity of energy at specific wavelengths. UV light is, by definition, not visible to the human eye, so a radiometer is required to determine the amount of UV energy. The ability to measure light intensity is useful for three reasons:

- **Maintaining a light-curing process** – A radiometer can measure whether a light-curing system is providing intensity above the "bulb change" intensity. A radiometer is to a light-curing process what a thermometer is to a heat-curing process.
- **Providing a worker-friendly light-curing process** – A radiometer is required to determine if any UV light is reaching operators or bystanders.
- **Measuring transmission rates through substrates** – A radiometer can be used to measure the transmission rates of various wavelengths through substrates that absorb UV and/or visible light. To assure an effective curing process it is critical to measure the light intensity reaching the light-curable material below the intervening substrate.

Dymax ACCU-CAL™ Radiometers

Dymax offers ACCU-CAL™ radiometers for spots, floods, and conveyors. Kits for spot lamps include the complete radiometer with 3, 5, and 8-mm lightguide adapters and a lightguide simulator. Adapter kits are available separately for users who have an existing flood/conveyor kit and need to use it for spot systems. All radiometer kits include a storage/carrying case. ACCU-CAL™ radiometers are calibrated to measure either UV-A (320-390 nm), LED (~ 350-450 nm), or visible (395 nm to 465 nm) light intensity.

Radiometer Calibration

To ensure accurate readings, radiometers should be periodically calibrated. Calibration requirements differ from one model to another but calibration is typically required every six or twelve months. Please refer the Dymax Radiometer Calibration Schedule, available for download on our website, for the calibration requirements for your specific radiometer model. Calibration services are available through Dymax and can be scheduled by submitting the Calibration Request Form found on the dymax website or by contacting your local Dymax Customer Support Team.

ACCU-CAL™ 50

The ACCU-CAL™ 50 radiometer is simple to operate and offers repeatable measurement of UV light. The ACCU-CAL™ 50 can measure UV light emitted from lightguides (3 mm, 5 mm, and 8 mm), UV flood systems, and UV conveyors. With a spectral sensitivity from 320 to 395 nm (UVA), the ACCU-CAL™ 50 measures intensities from 1 mW/cm^2 to 40 W/cm^2. A specially designed photo-sensor assembly protects the photo-sensor from the high temperatures sometimes associated with today's high intensity UV spot lamps.

Part Numbers

39561 - **ACCU-CAL™ 50 for flood lamps and conveyors**
Complete radiometer (without lightguide adapters or lightguide simulator*); includes storage/carrying case

39560 - **ACCU-CAL™ 50 for spot and flood lamps and conveyors**
Complete radiometer with lightguide adapters (3 mm, 5 mm, and 8 mm) and lightguide simulator*; includes storage/carrying case

*A lightguide simulator is used to measure direct spot lamp intensity (required to calculate lightguide transmission)

- Spectral sensitivity of 320-395 nm
- 12 month calibration cycle
- Can be used to test spot or flood lamps, as well as conveyor systems
- Set screw locks lightguide in place
- PTB and NIST traceable

ACCU-CAL™ 50V

The ACCU-CAL™ 50V radiometer is simple to operate and offers repeatable measurement of visible light. The ACCU-CAL™ 50V can measure visible light energy emitted from lightguides (3 mm, 5 mm, and 8 mm), flood systems, and conveyors. With a spectral sensitivity from 400 to 470 nm (blue portion of the visible spectrum), the ACCU-CAL™ 50V measures intensities from 1 mW/cm^2 to 40 W/cm^2. A specially designed photo sensor assembly protects the photo sensor from the high temperatures sometimes associated with today's high-intensity spot lamps.

- Spectral sensitivity of 400-470 nm (visible)
- 12 month calibration cycle
- Can be used to test spot or flood lamps, as well as conveyor systems
- Set screw locks lightguide in place
- PTB and NIST traceable

Part Numbers

40044 - **ACCU-CAL™ 50V for flood lamps and conveyors**
Complete radiometer (without lightguide adapters or lightguide simulator*); includes storage/carrying case

40043 - **ACCU-CAL™ 50V for spot and flood lamps and conveyors**
Complete radiometer with lightguide adapters (3 mm, 5 mm, and 8 mm) and lightguide simulator*; includes storage/carrying case

*A lightguide simulator is used to measure direct spot lamp intensity (required to calculate lightguide transmission)

ACCU-CAL™ 50-LED

The ACCU-CAL™ 50-LED radiometer is simple to operate and offers accurate measurement of curing energy. The ACCU-CAL™ 50-LED can measure energy levels emitted from lightguides (3 mm, 5 mm, and 8 mm), BlueWave® QX4™ LED heads, and LED flood lamps. A spectral sensitivity range of 350 - 450 nm and intensity measurement from 1 mW/cm^2 to 40 W/cm^2, makes this unit ideal for measuring LED curing source energy levels. A specially designed photo-sensor assembly provides repeatable measurements and protection from high temperatures associated with some LED systems on the market.

- Spectral sensitivity of 360-450 nm
- 12 month calibration cycle
- Can be used to test spot or flood lamps, as well as conveyor systems
- Set screw locks lightguide in place
- PTB and NIST traceable

Part Numbers

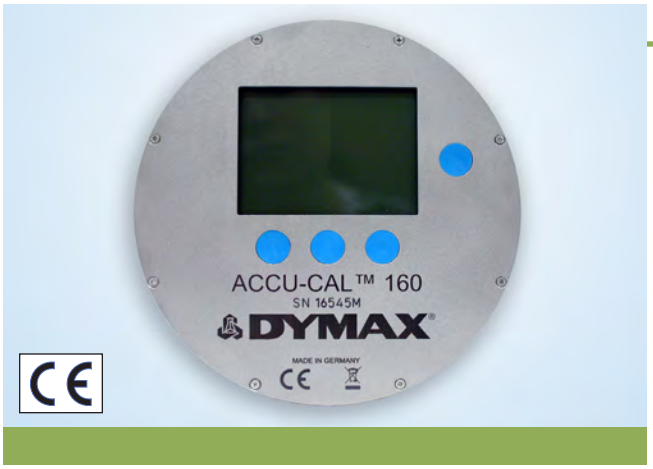
40505 - ACCU-CAL™ 50-LED for LED spot and flood units
Complete radiometer with 3 mm, 5 mm, and 8 mm lightguide adapters, lightguide simulator*, and an optical adapter for use with the BlueWave® QX4®; includes storage/carrying case.

40519 - ACCU-CAL™ 50-LED for LED floods and conveyors
Complete radiometer (without lightguide adapters or lightguide simulator*); includes storage/carrying case.

39554 - Flood-to-Spot Adapter Kit
Kit includes three lightguide adapters (3, 5, and 8 mm) and a lightguide simulator.

42218 - BlueWave® QX4® Optic Adapter Upgrade Kit
Kit includes the optic adapter and updated software and calibration for an existing radiometer. The customer's radiometer must be returned to Dymax for programming and calibration.

*A lightguide simulator is used to measure direct spot lamp intensity (required to calculate lightguide transmission)



ACCU-CAL™ 160

The ACCU-CAL™ 160 radiometer is available in both a UV and LED model and can measure UV or LED light up to 10 W/cm^2 emitted from stationary light-curing flood lamps or lamps used in conveyorized processes. This radiometer can be used to determine intensity (measured in mW/cm^2) or total energy as derived from intensity and exposure time (measured in mJ/cm^2). The ACCU-CAL™ 160 offers a number of improved features and benefits including a longer calibration cycle (12 months instead of 6), an easier-to-use set-up screen, and a graphical display that is clearer and easier-to-read. The unit is simple to operate and can be controlled via four buttons on the faceplate. Measurement results are displayed on the integrated LCD display or transmitted by the USB interface to a computer. A data download kit is included with each radiometer at no charge and downloads easily into Microsoft Excel.

- LED or UVA models available
- Spectral sensitivity of 328-382 nm (UVA model) or 350-460 nm (LED model)
- 12 month calibration cycle
- +/- 0.5 accuracy
- Clear, easy-to-read graphical display
- For use with flood lamp or conveyor systems

Part Numbers

41590 - ACCU-CAL™ 160 UVA
41585 - ACCU-CAL™ 160 LED

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Dymax Corporation
+1.860.482.1010 | info@dymax.com | www.dymax.com

Dymax Europe GmbH
+49 (0) 611.962.7900 | info_de@dymax.com | www.dymax.de

Dymax Engineering Adhesives Ireland Ltd.
+353 21.237.3016 | info_ie@dymax.com | www.dymax.ie

Dymax Oligomers & Coatings
+1.860.626.7006 | info_oc@dymax.com | www.dymax-oc.com

Dymax UV Adhesives & Equipment (Shanghai) Co. Ltd.
+86.21.37285759 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax UV Adhesives & Equipment (Shenzhen) Co. Ltd.
+86.755.83485759 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax Asia (H.K.) Limited
+852.2460.7038 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax Asia Pacific Pte. Ltd.
+65.6752.2887 | info_ap@dymax.com | www.dymax-ap.com

Dymax Korea LLC
+82.2.784.3434 | info_kr@dymax.com | www.dymax.com/kr