

DYM 41013



Dymax BlueWave® 200 UV Curing Spot Lamp with Intensity Adjustment

Description

The Dymax **BlueWave 200 UV curing spot lamp** offers very high intensity and simple operation – the most versatile, user-friendly and reliable UV spot curing lamp available.

The **BlueWave 200** 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, from the front panel, or from PLC/automation and a universal power input that provides consistent performance at any voltage. A wide range of lightguides in various materials and configurations is available for use with this unit, providing application flexibility.

The new faceplate design features an improved operator interface with an easy-to-read LCD display, which is suitable for use in cleanrooms. The unit also features a patented intensity adjustment control. This feature is important for validating an appropriate intensity range and maintaining that range during production. Intensity measurement is easily accomplished with the [Dymax ACCU-CAL 50 radiometer](#). Scheduled intensity measurements taken during the production process will indicate whether additional intensity adjustments are required. This method of measurement provides the most accurate readings as they are taken through the lightguide in the actual production setting.

Control & Intensity Adjustment

Validation of a UV curing process identifies a minimum acceptable intensity range which ensures complete cure in an acceptable cycle time. Users can choose to operate at full intensity (intensity

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adjusted to 100%) or maintain a constant intensity (at some lower level) through periodic manual adjustments. The average BlueWave 200 bulb will typically degrade <1% per eight hours of normal use. The good manufacturing practice of routine intensity measurement with a [calibrated radiometer](#) will determine when and if any adjustments are required.



Dymax Bluewave 200 UV curing spot lamp intensity adjustment

Features & Benefits

- More than 17,000 mW/cm² initial intensity – for fast, reliable cures
- Patented intensity adjustment feature – giving you full control
- Easy-to-read, back-lit front panel LCD display with enhanced unit status and notification displays
- Improved user interface for easier operation
- Up to 2,000 hours useful bulb life, 2,000 hours bulb warranty

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- Integral shutter with digital timer
- Foot pedal or PLC integration
- Proprietary “Cool Blue™” filter virtually eliminates lightguide degradation
- Wide range of lightguides available (liquid/fibre, single/multi-pole, various lengths)
- Bulb changes in less than one minute
- Universal power input operates worldwide
- Controlled power-up sequence ensures correct intensity is achieved before use
- Smooth front panel surface that is easy to clean, suitable for cleanroom use

Recommended Lightguides			
Part number	Description (liquid filled, quartz fibre also available)	Minimum initial intensity (W/cm ²)	Typical intensity at 2000 hours (W/cm ²)
DYM5720	Single pole 5mm x 1m	17.0	8.0
DYM5721	Single pole 5mm x 1.5m	16.0	7.5
DYM5722	Single pole 8mm x 1m	13.0	6.5
DYM38476	Two pole 3mm x 1m	10.5	5.2

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Recommended Lightguides

DYM38477	Three pole 3mm x 1m	9.0	4.5
DYM38478	Four pole 3mm x 1m	7.4	3.7

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Dymax lightguide single pole



Dymax lightguide two pole



Dymax lightguide three pole



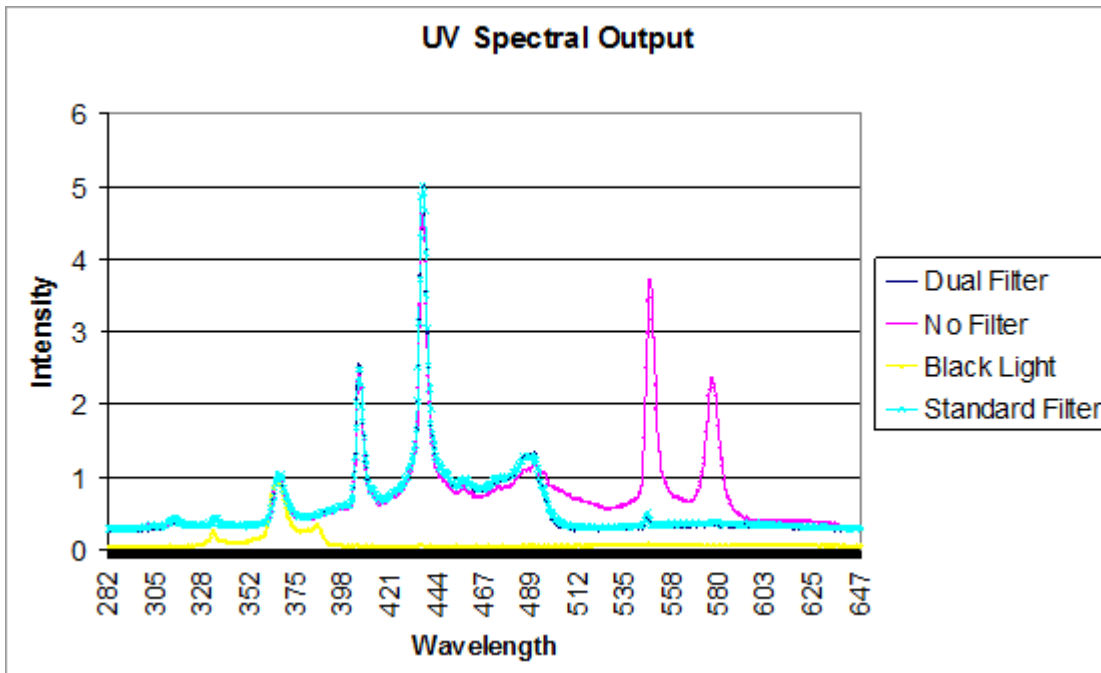
Dymax lightguide four pole

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Specifications



Dymax BlueWave 200 spectral output chart

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Intensities	Total (280-450nm) 40+ W/cm ² Visible (400-450nm) 17+ W/cm ² UVA* (320-395nm) 17+ W/cm ² UVB (280-320nm) 7 W/cm ²
Intensity adjustment	Manual from 1% to 100% output
Power requirements	100-220 VAC, 50-60 Hz, 2.5 amps
Power supply	Solid state, 200 Watt
Bulb	200 Watt metal-halide bulb included; replacement in less than one minute
Shutter timer	Digital LCD timer up to 9,999.99 seconds; also simple manual open/close operation
Shutter activation	Foot switch, panel switch or PLC
Reflector	Elliptical; glass with dichroic coating to reflect UV and minimize IR
I/O Port	15 pin D – sub-miniature connector

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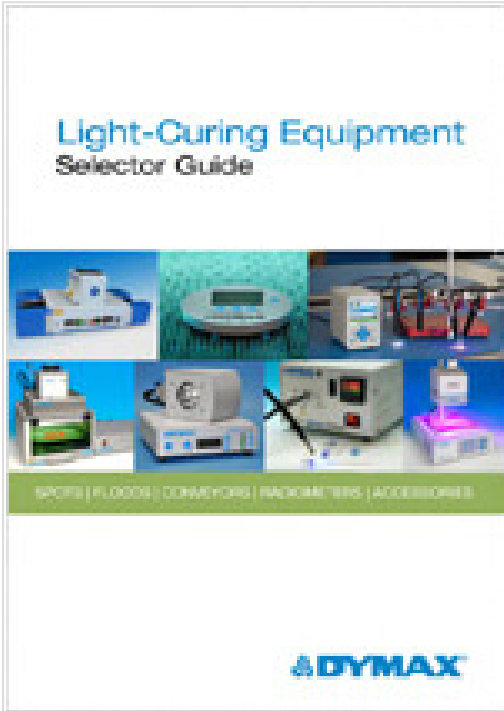
Signals (PLC integration)	Inputs: Shutter activate, shutter deactivate, lamp control, PLC enable Outputs: Unit status, temperature fault, shutter fault, lamp status, power status, shutter status, lightguide status, bulb life warning, bulb life expired
Cooling	Filtered, fan arrangement; thermally controlled to maintain proper lamp temperature
Dimensions (L x W x H)	305 x 318 x 165 mm
Weight	5.78 kg
* Measured through a lightguide simulator with a DYNAMAX ACCU-CAL 50 Radiometer Optional filters available	

Other Information

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[Download the Dymax Light Curing Equipment Selector Guide](#)

Ordering Information

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Dymax BlueWave® 200 UV Curing Spot Lamp with Intensity Adjustment

Part number	Description
DYM41013	BlueWave 200 3.0 UV Curing Spot Lamp
DYM38465	200 Watt replacement bulb

Supplied by:

intertronics

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