# LASER SYSTEMS

# XLS10MWH Revolutionary Technology

The XLS10MWH MultiWave Hybrid<sup>™</sup> is the first and only laser system to combine multiple laser wavelengths and power levels into a single coaxial beam focused to a common focal plane. The XLS10 MultiWave Hybrid accommodates a fixed fiber laser source and two different CO<sub>2</sub> laser wavelength sources that can be independently or simultaneously controlled for a virtually infinite number of wavelength and power combinations. As a result, the MultiWave Hybrid can process any material – even notoriously difficult multi-layered materials with conductive and non-conductive layers.

The unique laser materials processing capability provided by MultiWave Hybrid technology make the XLS10MHW the ideal system for materials R&D and for rapid prototyping.

#### **Advanced Frictionless Motion System**

Our rigid, frictionless, non-contact, hydrostatic bearings have self-cleaning properties and dramatically reduce the "noise" and chatter found in traditional mechanical load bearings. This system provides the smoothest, fastest and most precise movements over the processing area available on the market and dramatically improves throughput and accuracy, to a mechanical tolerance of  $\pm$  0.002".

### High Performance Features

#### ULR Laser Sources

ULS's patented air-cooled, free-space, gas slab lasers produce an excellent quality beam with even power distribution and excellent near- and far-field characteristics, making them ideal for precise laser material processing.

#### Modular Architecture

Unique "building block" architecture easily reconfigures field-upgradable platforms, laser sources and focusing optics, offering unsurpassed flexibility as material needs change and businesses evolve.

#### SuperSpeed™

Produces two independently controlled laser beams, increasing productivity. It is the ultimate solution for high-throughput raster marking applications.

#### ► Rapid Reconfiguration<sup>™</sup>

A full range of factory-aligned laser sources are designed to be field-interchangeable, with no special tools or training needed.

#### ► Laser System Manager<sup>™</sup>

The feature-rich Laser System Manager (LSM) software provides an easy-to-use, three-step process, providing unsurpassed workflow optimization in any environment, from R&D to production.

#### Class 4 Material Pass-Through

This patented accessory provides the hardware and safety features necessary to convert the laser system into an open Class 4 laser device, allowing the user to process continuous rolls of material or objects that are too large to fit entirely on the work surface.

## **System Specifications**

	XLS10MWH
Work Surface Area (W x H)	<b>40 x 24 in</b> (1016 x 610 mm)
Maximum Part Size <sup>1</sup> (W x H x D)	Within laser platform enclosure: 61 x 33 x 12 in (1550 x 838 x 305 mm). Class 4 Pass-Through mode <sup>3</sup> : $\infty$ x 33 x 12 in ( $\infty$ x 838 x 305 mm).
Material Support	Up to 80 lbs (36 kg) lift capacity.
Laser Configurations Supported	Multiple: (1) fixed fiber laser and up to (2) CO <sub>2</sub> lasers.
Laser Power Range Supported	CO <sub>2</sub> (10.6 $\mu$ m) 10, 25, 30, 40, 50, 60, 75, 250 W; up to 150 W with dual lasers; CO <sub>2</sub> (9.3 $\mu$ m): 30, 50, 75 W; Fiber (1.06 $\mu$ m): 40, 50 W
Laser Safety <sup>2</sup>	CO <sub>2</sub> and Fiber Laser: Class 1 Diode Pointer: Class 2 Pass-Through mode: Class 4 <i>(optional module required)</i>
Optics Protection	Ready for compressed-air-based optics protection.
Available Focus Lenses	2.0 / 3.0
Overall Dimensions (W x H x D)	69.2 x 61 x 55.5 in (1758 x 1550 x 1410 mm)
Weight	Approximately 850 lbs (386 kg) excluding lasers.
Power Requirements	Dual receptacle 220-240V/30A.
Exhaust Requirements	External exhaust or air cleaner required. (consult factory for specifications)
Computer Requirements	Requires dedicated PC with Windows® 7/8/10 32/64 bit and one available USB port (2.0 or higher).

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+43 1-402-22-50 eurosales@ulsinc.com CDRH Class 1 safety enclosure for CO2 laser<sup>2</sup>. Class 2 for red laser pointer.

- <sup>1</sup> Maximum part size defined as used with 2.0 lens
- <sup>2</sup>CDRH Class 1 laser safety enclosure provides for safe operation without the need for an interlocked room or protective evewear.
- <sup>3</sup>Class 4 with optional Class 4 safety module.

WARNING: UNIVERSAL LASER SYSTEMS PRODUCTS ARE NOT DESIGNED, TESTED, INTENDED OR AUTHORIZED FOR USE IN ANY MEDICAL APPLICATIONS, SURGICAL APPLICATIONS, MEDICAL DEVICE MANUFACTURING, OR ANY SIMILAR PROCEDURE OR PROCESS REQUIRING APPROVAL, TESTING, OR CERTIFICATION BY THE UNITED STATES FOOD AND DRUG ADMINISTRATION OR OTHER SIMILAR GOVERNMENTAL ENTITIES, FOR FURTHER INFORMATION REGARDING THIS WARNING CONTACT UNIVERSAL LASER SYSTEMS OR VISIT WWW.ULSINC.COM.

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