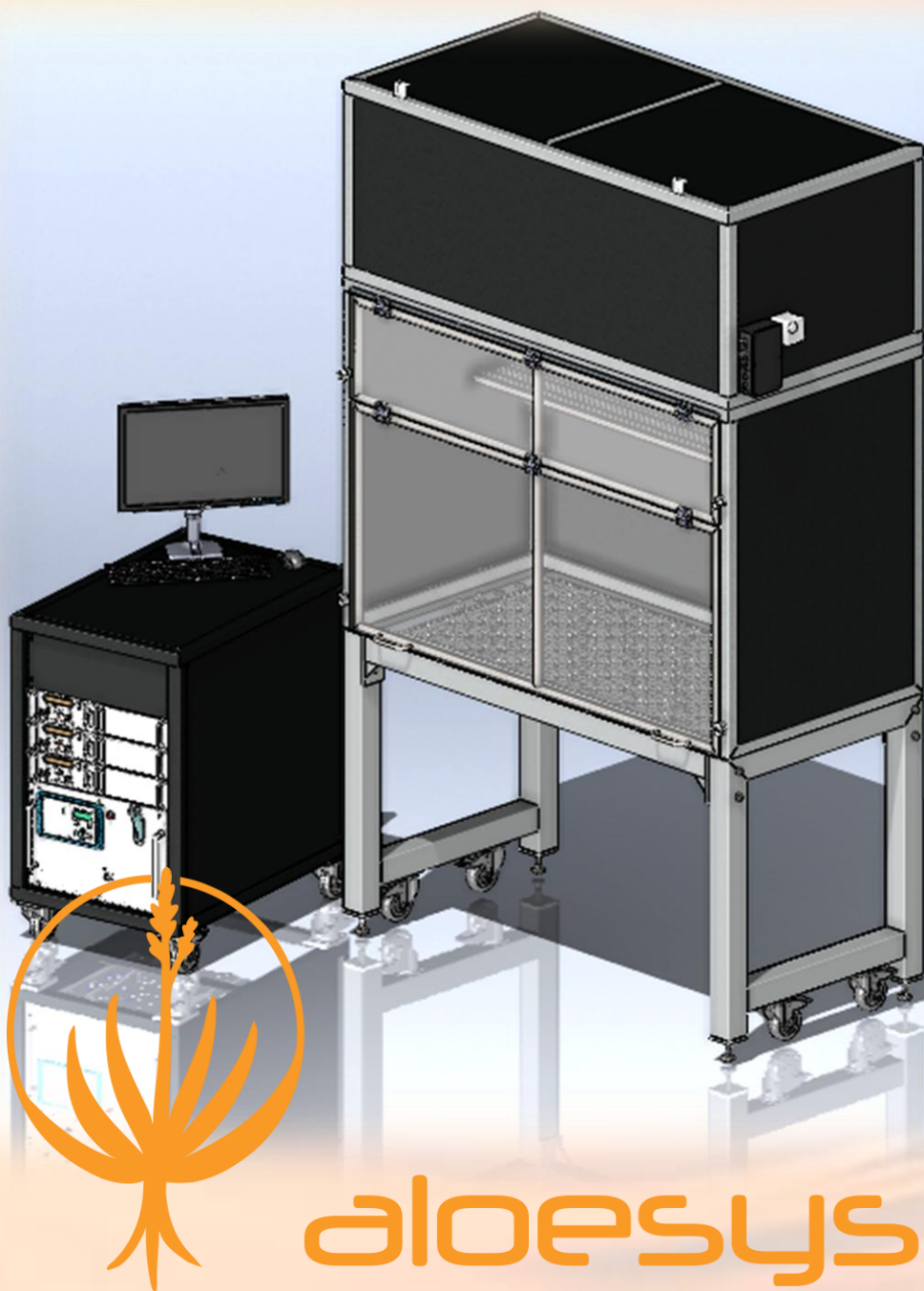


LazWorX

Optical Work Bench

Compact HEPA-filtered laminar-flow work bench for advanced laser and opto-mechanical systems assembly



Product Overview

The LazWorX Optical Work Bench streamlines the assembly and testing of advanced lasers and opto-mechanical systems. Its compact, modular architecture and excellent workspace-to-footprint ratio enable multiple benches to be co-located within a limited space, allowing a single operator to assemble and test several systems in parallel.

To maintain pristine assembly conditions, the bench features energy-efficient, full-volume HEPA-grade (H14) vertical laminar airflow, significantly reducing the risk of dust intrusion. Optional integrated interlocks and monitoring systems support unattended qualification and long-duration lifetime testing of systems.

At its core, a rigid, damped optical breadboard with integrated passive vibration isolation provides a stable platform for the assembly, alignment, and testing of lasers and opto-mechanical systems in R&D environments.

Designed for controlled, repeatable workflows, LazWorX combines clean-air protection, mechanical stability, integrated services, and configurable safety interfaces in a single compact work bench platform.

Key Features

High workspace-to-footprint ratio for efficient use of cleanroom, laboratory, or production space.

Full-volume laminar airflow with HEPA filtration to reduce dust and particulate contamination.

Rigid damped optical breadboard with passive vibration isolation for stable alignment, assembly, and test workflows.

Optional modular trolley-based integration for power supplies, diagnostics, chillers, and client-specific instrumentation.

Interlocked architecture for safe unattended qualification, burn-in, and long-duration lifetime testing.



Typical Applications

- Laser module assembly, alignment, and verification
- Opto-mechanical prototype development and R&D testing
- Long-duration laser qualification and lifetime testing
- Clean optical sub-assembly preparation and inspection
- Compact multi-bench production or engineering test environments

System Specifications

Category	Dimensions (Width × Depth × Height), Mass
Bench dimensions	1590 mm × 810 mm × 2540 mm, 255 kg
Work area	1200 mm × 600 mm
Trolley dimensions	560 mm × 836 mm × 980 mm, 40 kg unpopulated

Environmental Control and Filtration

Feature	Description
Filtration	HEPA H14 filtration with integrated pre-filter
Laminar airflow	Vertical full-volume airflow, up to $0.3\text{--}0.5\text{ m}\cdot\text{s}^{-1}$
Pressure range	150–200 Pa
Filter monitoring	Filter replacement sensing and indicator

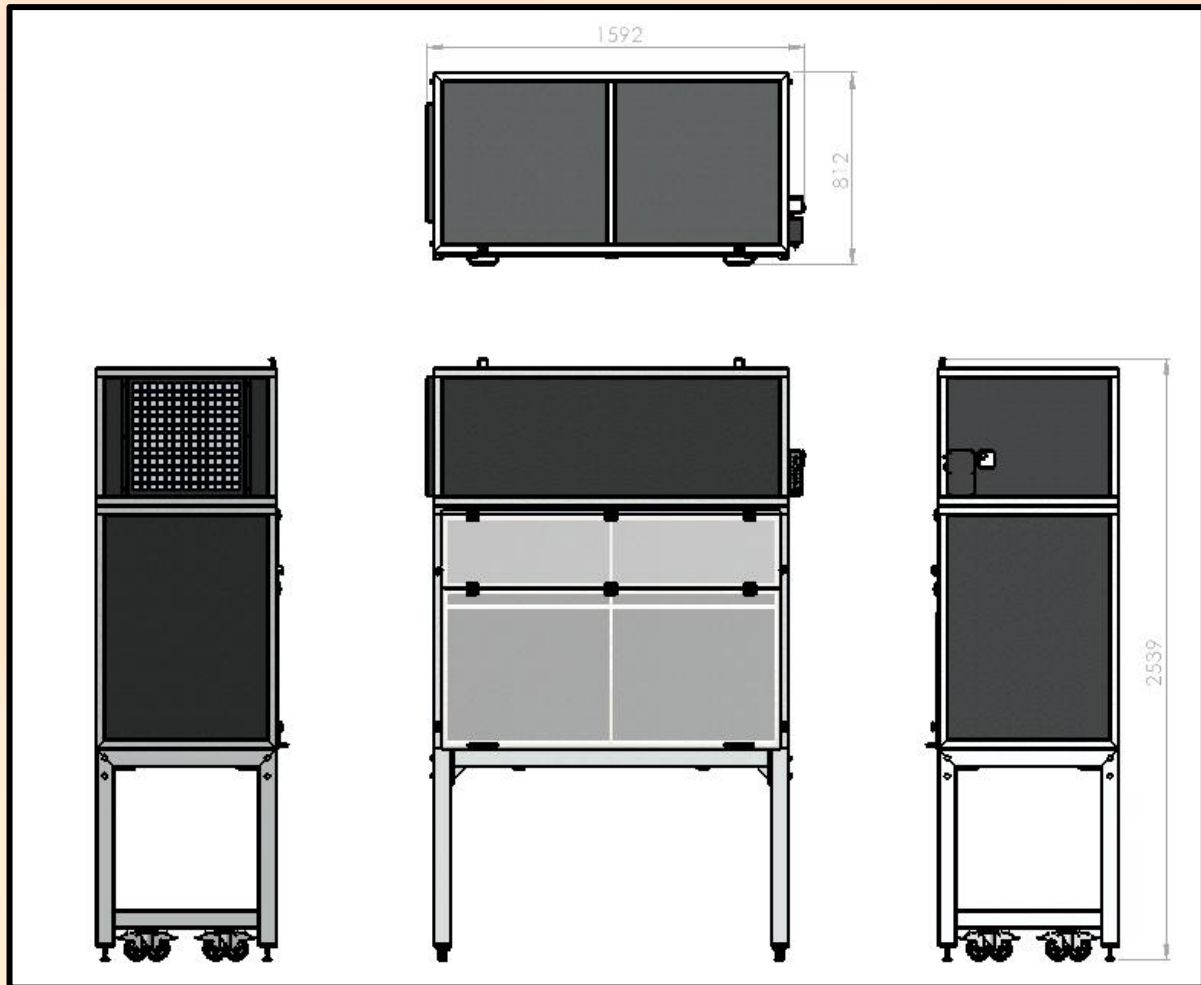
Lighting and Electrical

Item	Specification
Lighting	LED dot-less strip illumination
Bench supply	220–240 Vac, 50 Hz, 170 W motor, 45 W lights
Trolley supply	Dependent on selected options

Finish

Powder-coated black, white and charcoal *Ferrograin* finish for a durable, professional laboratory appearance.

Available Options



Option	Description
Integrated chiller	Integrated cooling system with water-flow interlocks for protection and process reliability.
Diagnostic PC	Integrated computer platform for diagnostics, test automation, monitoring and data capture.
Power supply units	Integrated or trolley-mounted power supply units configured to suit the laser system under test.
Front laser barrier	Front barrier with interlocks and status indicator for controlled laser operation.

Contact

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