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LASER CASTLE LITE

Laser Castle Lite - the low cost, self assembly, laser safety cabin for small laser robots and laser processes, while keeping you safe from laser radiation

- Low-cost
- Flat-pack for easy self-assembly
- Ideal for small laser robots
- Lightweight
- Fully interlocked
- Keeps you safe from laser radiation
- Laser only fires when door is closed
- LED warning sign changes from green to red when laser is on
- Laser is disabled if door is opened
- Laser Interlock Controller is dual channel for added safety

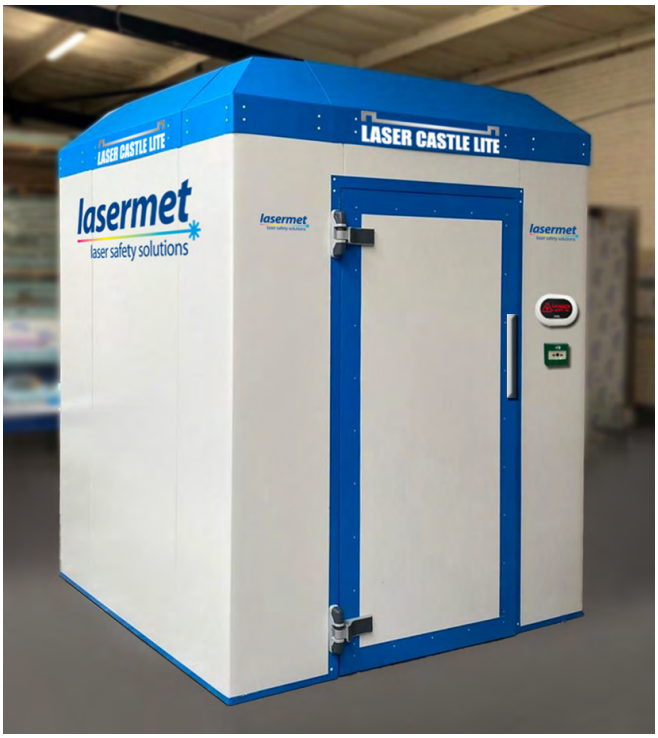
Laser Castle Lite is a small laser safety cabin which is specifically designed to enable users of small laser robots to acquire a low cost solution to protect workers from the escape of hazardous laser radiation.

It is supplied as a low cost cabin in flat-pack form to enable easy transport and assembly by the customer. It is supplied with a manually operated door, safety interlock switches, dual-message LED warning sign, emergency stop break glass, internal Emergency stop button and entry door maglock – all linked to the ICS-Solo interlock controller.

The Laser Castle Lite is built from the same laser blocking material as the current Laser Castle and to enable low cost ventilation, the cabin has an open roof void.

The modular wall panels are tested and certified to international laser safety standards (IEC 60825-4 Safety of Laser Products Part 4 – Laser Guards).

The Laser Castle Lite cabins are ideal for small Class 4 laser welding robots that need to be contained.



Laser Castle Lite

PEL ratings (Permissible Exposure Limits)

	PEL (T3) 10 s	PEL (T2) 100 s
Irradiated Area		
4 mm^2	62 MW/m^2	35 MW/m^2
2000 mm^2	3.1 MW/m^2	1.7 MW/m^2

www.lasermet.com/laser-castle-lite

lasermet
laser safety solutions

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UKAS TESTING
2682

ISO/IEC 17025:2005
Only for optical testing to:

BS EN 60825-1	Laser Testing - on or off-site
BS EN 60825-12	Free Space Optics
BS EN 60601-2-22	Medical Electrical Equipment
BS EN 62471	Non-laser light sources

QMS ISO 9001 : 2015 REGISTERED
Cert No. 14125056

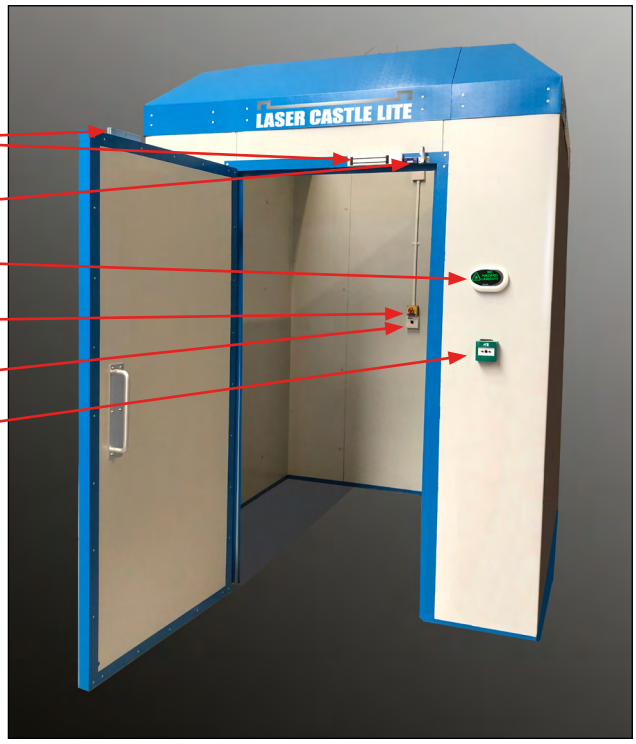
Laser Castle lite 05022021v2

Cabin System

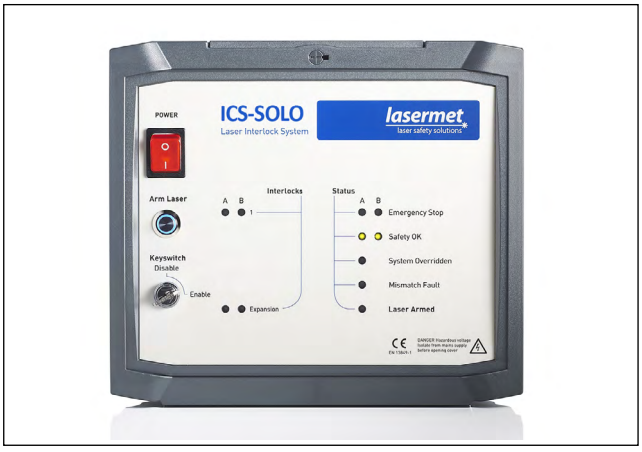
The Laser Castle Lite includes all of the equipment required to protect personnel from the potentially damaging effects of laser radiation.

It works by only permitting the laser to be armed once the door has been closed. In the event that the door is opened while the laser is active, the interlock will disable the laser thereby rendering it safe for personnel to enter the enclosure.

The ICS Solo Interlock Controller is the key part of the system that all of the components connect to.



Laser Castle Lite cabin



ICS-SOLO Interlock Controller

Dimensions

The cabins are available as:-

- 2m wide x 2m long x 2.4m high wall
- 2m wide x 3m long x 2.4m high wall
- 3m wide x 3m long x 2.4m high wall

Self Assembly

The Laser Castle Lite kit includes all of the components needed to build the fully interlock controlled laser safety cabin.

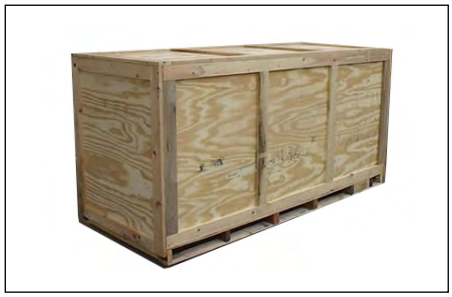
The wall panels contain camlocks which link into the adjacent panel with the turn of a standard hexagonal key.

The electrical items are pre-installed and electrical connections are made by simple plug in connectors.

The ICS-SOLO interlock controller is mounted externally. The mains voltage (230 or 110VAC) is connected to its 24VDC power supply and the customer's laser is connected to the interlock operator lead in the distribution box.

Operation

Once all connections are complete and power is supplied, ensure the door is closed securely and press the ICS-SOLO Power switch to ON and turn the keyswitch to "Enable". The two "Safety OK" LEDs illuminate. To arm the laser press the blue illuminated "Arm Laser" button. The "Laser Armed" LED illuminates enabling the user to fire the laser as required. If the door is forced open while the laser is armed the interlock will disable the laser and the system must be reset manually as above.



Typical Shipping Crate containing the complete Laser Castle Lite cabin including the control system

www.lasermet.com/laser-castle-lite

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UKAS TESTING 2682

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Laser Castle lite 05022021v3