

**photon**  
LITE

## Low Cost, Compact Fiber Laser

Designed and Manufactured in the UK



**ESPRIT**  
AUTOMATION





**photon**  
LITE

## High Precision Laser Cutting Made Affordable

Take control of your production with a British built, high quality and ultra compact fiber laser machine. Fully supported by our network of UK and Irish service engineers.

With the Photon Lite you can manage all your cutting requirements at an affordable price.

Produce laser-cut parts on demand, whenever you need them with our easy-to-use CNC.

## Don't Take The Risk. Choose Esprit

Esprit have been thermal cutting experts for nearly 40 years. The Photon Lite is manufactured entirely in the UK, with the best European components.

You can now own a British-built laser that comes with the backing of a team that understands that downtime is not an option. Like any other Esprit machine, spare parts are held in stock in our UK manufacturing facility.

The Photon Lite delivers excellent cutting capabilities at an affordable price with the certainty of Esprit back-up.

Vector Speed  
**70** m/min

**ESPRIT**  
AUTOMATION



## Compact & Productive

- 1g Acceleration
- 70 m/min vector velocity

The Photon Lite is one of the most compact lasers on the market. With sizes starting from 2.0m x 1.5m, making it ideal for prototyping; production cutting and profiling in a space constrained factory.

### Available bed sizes:

- 2.0m x 1.5m
- 3.0m x 1.5m
- 4.0m x 2.0m

## Easy To Use

Running a laser shouldn't require an expert. That's why the Photon Lite uses the same user-friendly CNC as the rest of the Photon range.

Developed by our software team in the UK, the CNC gives greater control to the operator. Offering features such as:

### LIVE▶CONTROL

Tired of running back to the CAD/CAM office to get a single item recut? With **LiveControl®** an operator can cut any single item from a historic job directly at the CNC, even on a piece of scrap metal.

### LIVE▶GUARD

Collisions? Avoid them thanks to **LiveGuard®**. With our priority software technology, during cutting the system will protect the cutting head with an automatic collision avoidance function.

**photon**  
LITE

## Safety First

Fully CE / UKCA Certified.

### ■ Enclosure and Integrated Safety System:

- Class 1, Laser Light Safe process area
- Gantry mounted enclosure

### ■ Dual-channel safety interlock switches:

- Safe access to laser head
- Secondary safety restriction

### ■ Active infrared light curtains:

- Deployed at all four corners of the machine

## Ideal for Fabricators

- Up to 30mm mild steel and 25mm stainless steel (with **12kW** laser source)
- Up to 25mm mild steel and 20mm stainless steel (with a **6kW** laser source)

## Ideal for HVAC

- Connect Photon Lite with a decoiler for increased productivity
- No need for secondary operations
- 1mm galvanised sheet will cut 3x faster with a 2kW source compared to 45amp plasma

**ESPRIT**  
AUTOMATION





|                              |                               |                               |                               |
|------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Nominal Cut Area             | 4,000 x 2,000 mm <sup>2</sup> | 3,000 x 1,500 mm <sup>2</sup> | 2,000 x 1,500 mm <sup>2</sup> |
| Overall Length x Width       | 5,432 x 2,920 mm <sup>2</sup> | 4,432 x 2,420 mm <sup>2</sup> | 3,432 x 2,420 mm <sup>2</sup> |
| Table Mass                   | 2,685 kg                      | 1,865 kg                      | 1,465 kg                      |
| Max. Workpiece Weight (50mm) | 2,512 kg                      | 1,770 kg                      | 1,180 kg                      |

|                          |   |                             |                            |  |
|--------------------------|---|-----------------------------|----------------------------|--|
| Enclosure Height         | 1,553 mm                                  | Fabrication                 | Esprit Automation          |  |
| Max. X-Y Vector Velocity | 70 m/min                                  | Mechanical Fitting          | Esprit Automation          |  |
| Acceleration             | 1 g                                       | Painting                    | Esprit Automation          |  |
| Supply Voltage           | Single Phase supply, 230VAC (±10%)        | Electrical Wiring & Testing | Esprit Automation          |  |
| Recommended Protection   | 13 A                                      | Cutting Head                | Precitec Thunder           |  |
| Supply Cable             | 1.5 mm <sup>2</sup> Core SY Control Cable | Motors & Drives             | Bosch / Rexroth            |  |
|                          |   | Gearboxes                   | Wittenstein                |  |
|                          |   | Rack / Pinion               | Wittenstein (Helical Rack) |  |

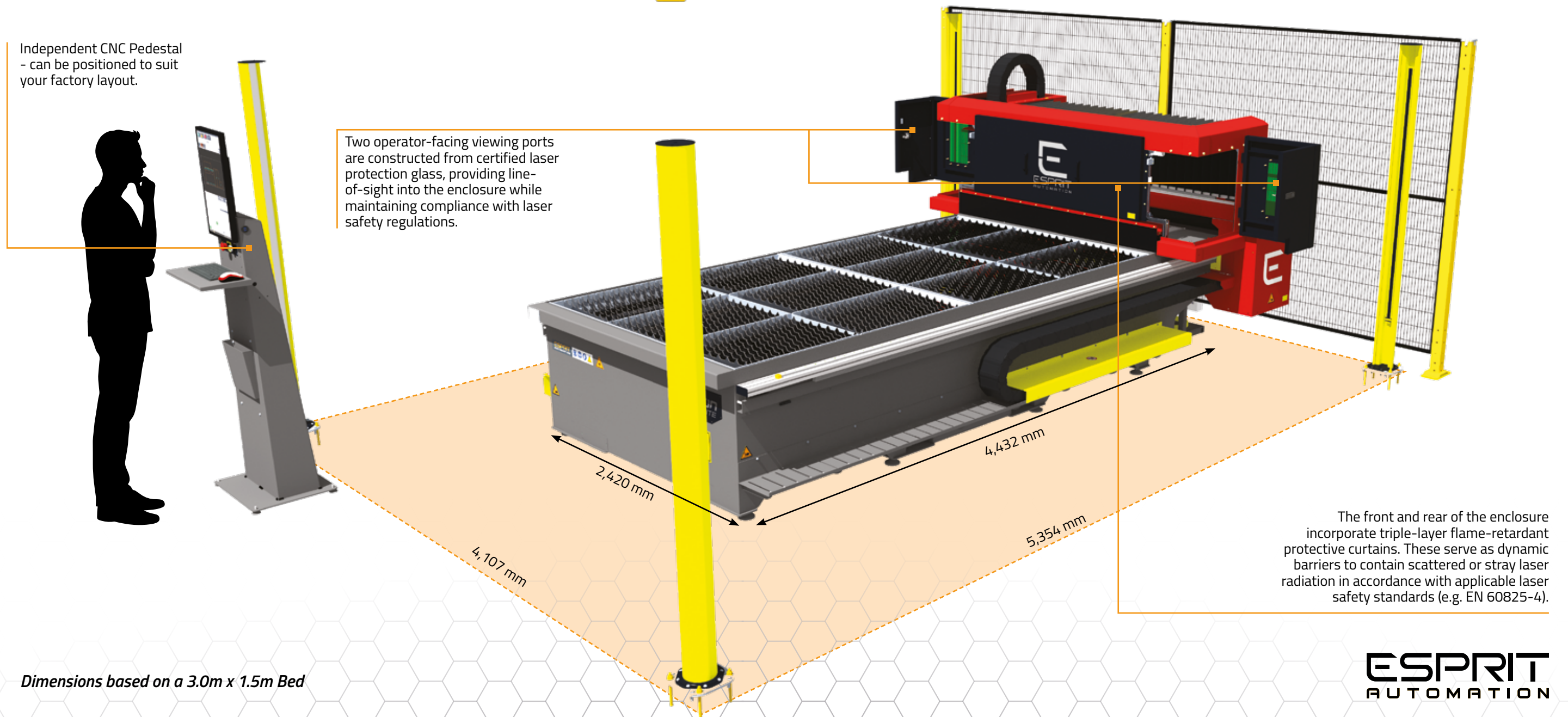
|                |                             |                            |       |
|----------------|-----------------------------|----------------------------|-------|
| Laser Rating   | 2 kW                        | 6 kW                       | 12 kW |
| Supply Voltage | Single Phase, 220VAC (±10%) | Three Phase, 380VAC (±15%) |       |
| Current Rating | 30 A                        | 60 A                       | 85 A  |
| Max. Power     | 6.5 kW                      | 23 kW                      | 32 kW |

Max cutting thickness (Production / Maximum in mm) vs power (kW)

|                              |            |                 |            |              |
|------------------------------|------------|-----------------|------------|--------------|
| Raycus CE fiber laser source | Mild Steel | Stainless Steel | Aluminium  | Copper/Brass |
| 2 kW                         | 12 / 15 mm | 6 / 8 mm        | 4 / 6 mm   | 3 / 4 mm     |
| 6 kW                         | 20 / 25 mm | 18 / 20 mm      | 12 / 15 mm | 6 / 8 mm     |
| 12 kW                        | 25 / 30 mm | 25 / 30 mm      | 20 / 25 mm | 8 / 12 mm    |

Independent CNC Pedestal  
- can be positioned to suit  
your factory layout.

Two operator-facing viewing ports  
are constructed from certified laser  
protection glass, providing line-  
of-sight into the enclosure while  
maintaining compliance with laser  
safety regulations.



## Procut CAD/CAM

Pair your Photon Lite industrial laser cutting machine with Esprit's Procut software to **unleash the full potential** of this powerful machine. This modular CAD/CAM software solution is celebrated for its user-friendliness and flexibility.

## PRO CUT

## IRIS Industry 4.0

Thanks to Esprit's very own IRIS (Intelligent Real-time Information Service) Industry 4.0 solution you can monitor your Photon Lite fiber laser cutter in real-time and track its impressive productivity statistics from any computer, tablet or phone **anywhere, any time.**



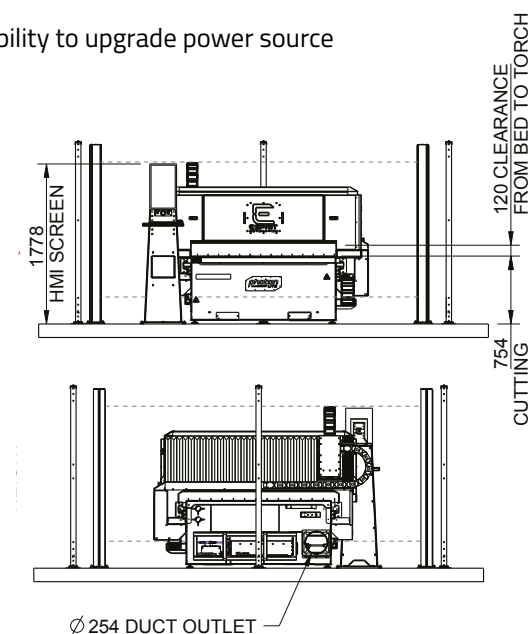
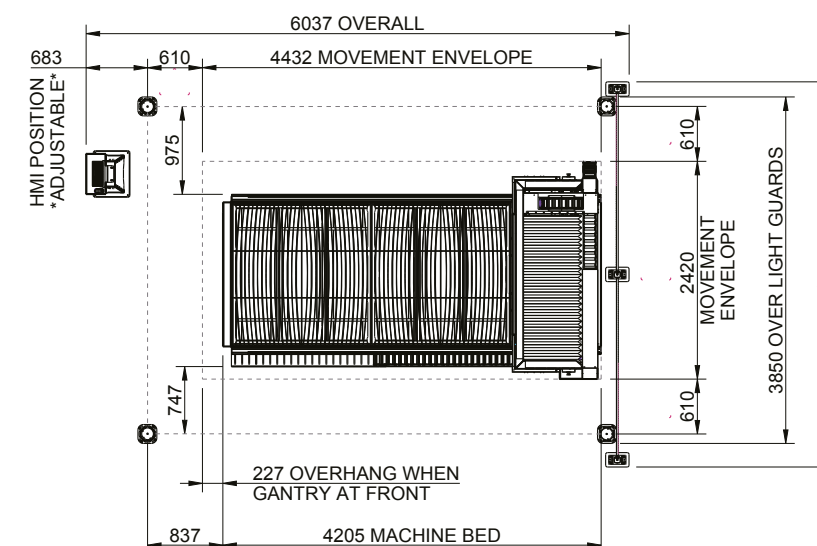
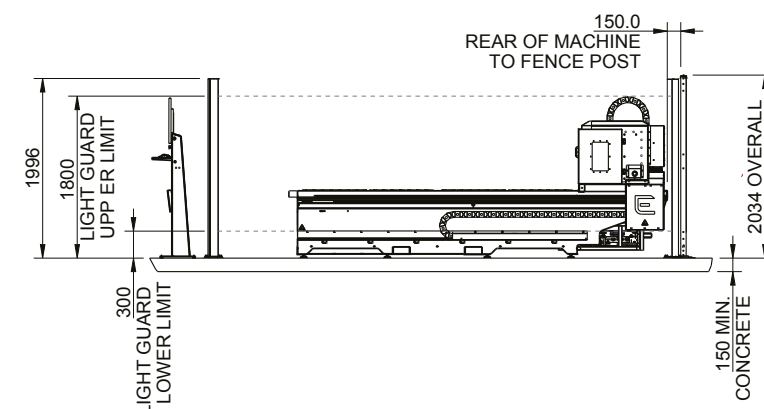
**photon**  
LITE

## All the benefits at your fingertips

- Easy access to the cutting head to change consumables
- Excellent edge quality and high precision in mild steel, stainless steel and aluminium
- Eliminate secondary operations
- Narrow kerf allows greater utilisation of plate and higher dimensional accuracy
- Using UK and European components we can ensure the highest level of service and support throughout the life of the machine

- Bosch Motors and Drives
- Precitec Head
- Wittenstein Gearbox
- Wittenstein Helical Rack+Pinion
- 2 years warranty on parts
- Ability to upgrade power source

## Photon Lite Plan Drawings



**ESPRIT**  
AUTOMATION



## Don't take our word for it!

*"The Photon is just a brilliant machine. The CNC - it's literally child's play, it takes you half an hour and you're away cutting. I bought local and British because I wanted someone who would look after me. Esprit's service has been even better than expected."*

*Paul Fletcher, Managing Director  
HTF Stainless Steel Fabrication Ltd*



*"We started with an Esprit Viper for thicker components, then purchased a Photon laser for the thinner mild and stainless. Both machines are well built, easy to use and meet all of our requirements and when anything goes wrong the service back up is excellent. If you are thinking of investing in a profiling machine, I would happily recommend Esprit."*

*Vehicle Weighing Solutions Ltd*



**photon**  
LITE

## Fast Return on Investment

Esprit engineered this machine to offer affordable laser cutting. When the investment cost is low and the uptime is high, you get rapid payback times! Pay back your Photon Lite in as quick as 2 years.

*Own a laser for less than you think.*

## Let us help you grow


■ **BOOK A DEMO** and see how this machine could change your business.

Machine trade-in options available. We can help you on the financing side as well.

**ESPRIT**  
AUTOMATION



 **Esprit Automation Ltd**  
Plackett Mill, Church Drive, Sandiacre,  
Nottingham, NG10 5EE, United Kingdom

 **+44 (0) 115 939 1888**

 **sales@espritautomation.com**

 **espritautomation.com**

 **Esprit Automation Ltd**

 **espritautomation**

 **@EspritAuto**

**photon**  
**LITE**



Copyright©2025 Esprit Automation Ltd. All Rights Reserved. E&OE  
LiveControl® and LiveGuard® are registered trademarks of Esprit Automation Ltd