



## Worker assistance with laser visualisation

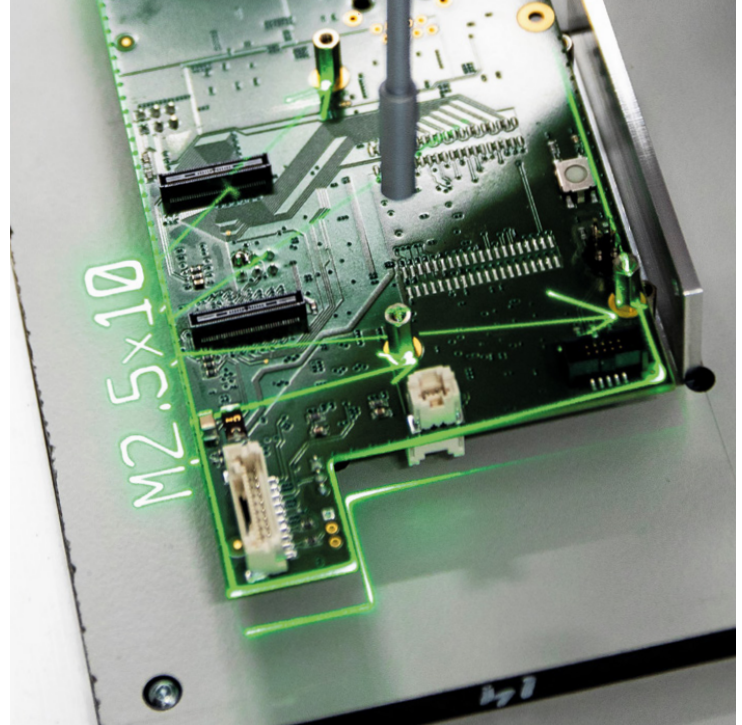
Navigation through complex  
production processes with the  
innovative ZLP1 laser system

"With a laser-based assistance system,  
the time required for manual tasks  
can be cut by up to 30 %"

- Manuel Gomez, Sales Manager  
Z-LASER GmbH

Man and machine work hand-in-hand to increase quality and productivity. Worker guidance plays a major role in flexible and individual process optimisation and error avoidance in industrial manufacturing.

In many cases, process costs make up almost 80 % of manufacturing costs in production. Increasing individualisation leads to multi-variant production, often from a batch size of just 1. This is precisely where laser-assisted worker guidance comes in.



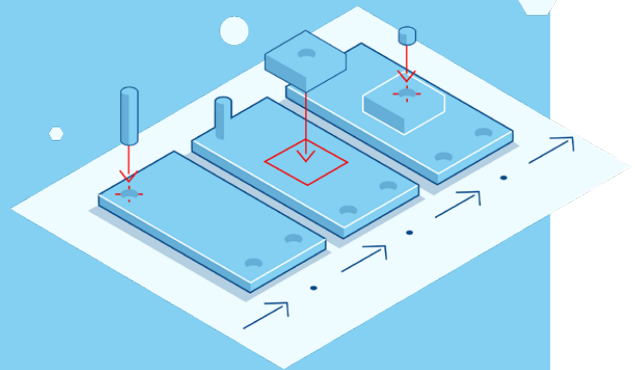
### Intuitive working with the ZLP-Manager

The ZLP-Manager projection software guides the operator reliably through all work steps. With the ZLP-Manager, data can be imported directly from CAD programmes, edited where necessary, and displayed. The job data is imported before work begins, e.g. using a barcode scanner, and the associated projection file starts automatically. Additional information such as texts or part numbers can also be projected easily. This makes it possible to react quickly to changes in work plans and individual customer requests, providing an intelligent assistance system in keeping with the ideals of Industry 4.0.

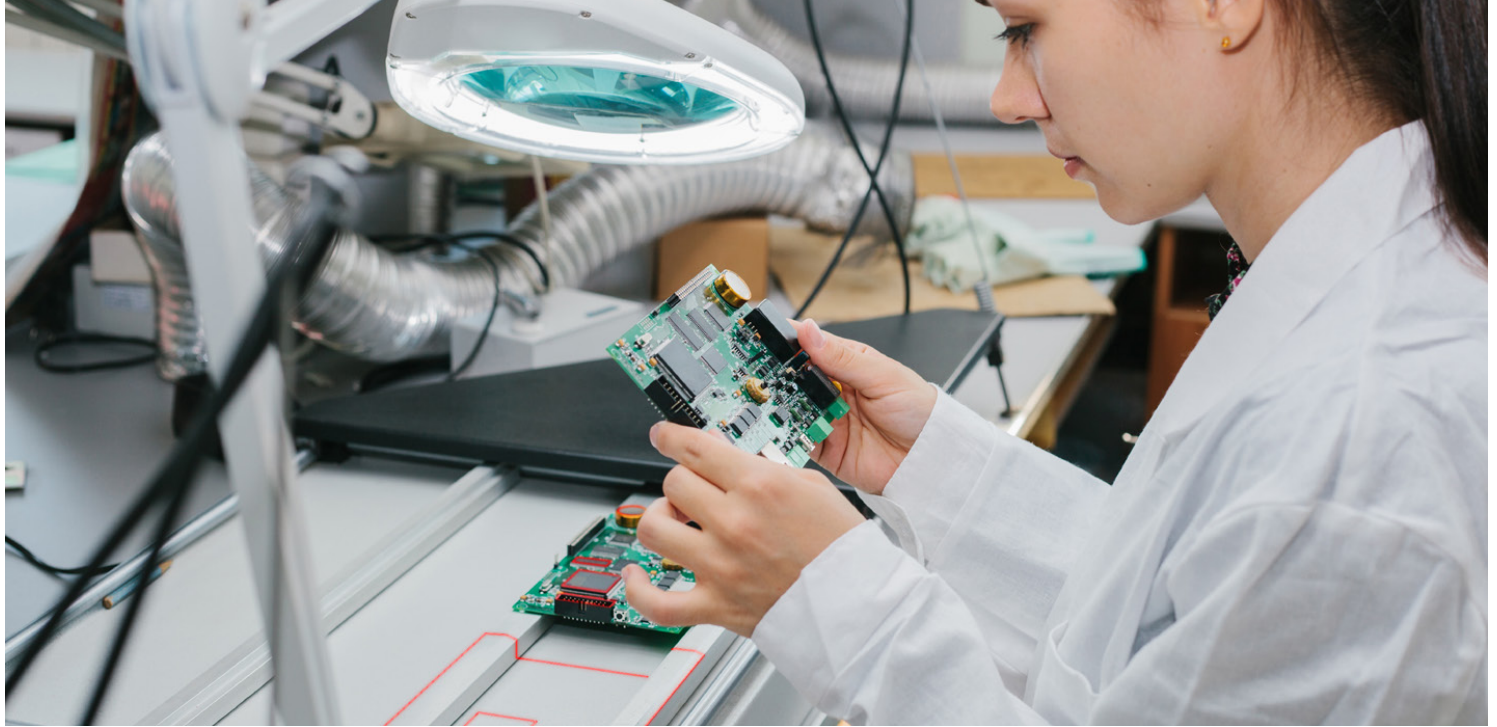
### Our system partner DE software offers a modular assistance system for individual processes

Today's production is characterised by ever growing variance and ever decreasing batch sizes. Employees need to adapt to constantly changing work instructions and boundary conditions. The DESC worker assistance system from DE software & control navigates the employee through the production process individually and efficiently together with the innovative ZLP1 laser system from Z-LASER.

The DESC worker assistance system provides production employees with all the necessary information at their workplace, supports and guides them step by step through complex workflows. With DESC, this information is prepared in a way that corresponds with the current work step and the respective knowledge level and personal needs of the employee.







The ZLP1 laser system is integrated as a component in DESC and can not only visualise geometric shapes and texts directly on the workpiece, but also confirm the visualised intervention points.

This means that the assembly steps performed are monitored along with the correct removal of materials from the displayed provisioning trays. As such, the DE picking solution, Pick-by-X, can now also use Pick-by-Laser as an additional visual output system.

With DESC, DE software & control provides an IT platform that enables real-time communication at shop-floor level, making it

possible to communicate things such as error messages, material requirements, visual information, or suggestions for improvement.

This system is used to train employees as well as to guide through, check, and approve the assembly steps. At the same time, all steps performed, materials used, and all necessary quality and process values are reliably documented. This ensures seamless traceability at no additional effort and the collected raw data is made available for KPIs and big data analyses.

# Model ZLP1

Compact, powerful,  
and easy to use

The ZLP1 is the ideal optical positioning system for applications in picking, logistics, and worker guidance. Optimise your production flows by guiding employees through the manufacturing process with optical work instructions. The ZLP1 is eye-safe (laser class 2M) and is optimised for smaller work fields and short working distances.



Intuitive  
software



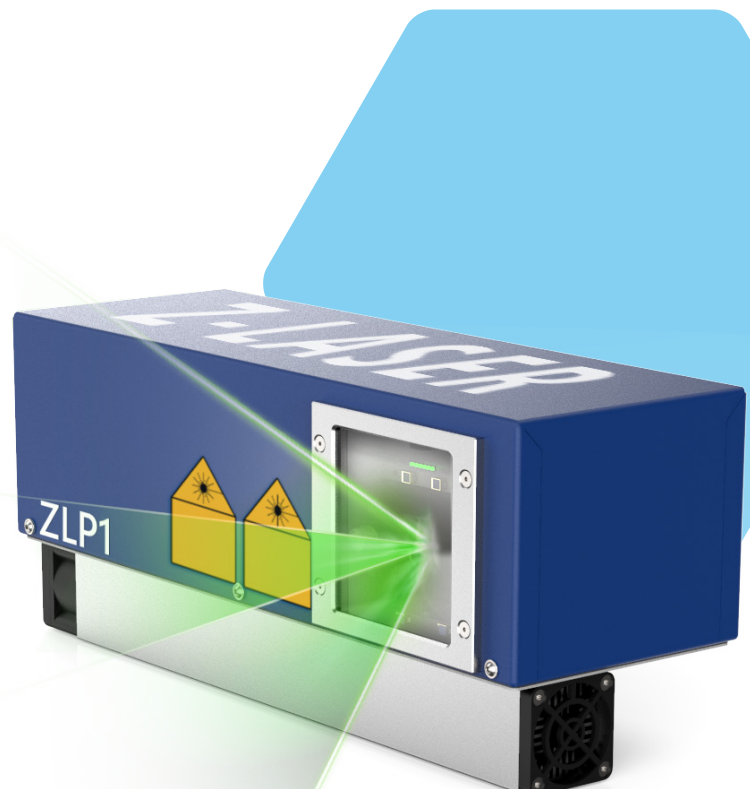
Fan angle 60°



Designed for  
multi-projection  
systems



IP54



„Quality is when customers return to us  
- not lasers.“

- Kurt-Michael Zimmermann,  
Founder Z-LASER GmbH

Our mission is to develop laser sources and laser projectors of the highest quality for our customers. Since founding Z-LASER in 1985 in Freiburg, we supply the industry with top functional and easy-to-use laser systems.

Z-LASER is a socially responsible company that cares about the well-being of people and its environment. A significant part of the energy requirement is gained through the in-house solar system. Furthermore, we only supply civil applications.

Lasertechnology  
from Freiburg  
made in Germany

Contact us.  
We would be happy  
to advise you!



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