




# Classification and testing of lasers and laser systems

## PROVE THE SAFETY OF YOUR LASER PRODUCTS

Whether you use lasers as components in your end products or are a laser manufacturer yourself, you must ensure conformity with the legal requirements when getting your products approved. We accompany you on your way to access new markets.

We support you with our highly professional classification, product testing and certification of your components or product according to international standards. With us, you receive all services from a single source.

## CLASSIFICATION OF CONTINUOUS WAVE LASERS (CW) ACCORDING TO IEC/ EN 60825-1

Class	1	1C	1M	2	2M	3R	3B	4
<b>Wave length <math>\lambda</math></b> 	180nm–1mm	180nm–1mm	302,5nm–4000nm	400nm–700nm (visible)	400nm–700nm (visible)	180nm–1mm	180nm–1mm	180nm–1mm
<b>Max. continuous wave power</b> 	0.39mW	0.39mW  (for stray light/leakage radiation)	0.5mW  (max. 0,25mW possible on retina)	1mW	0.5mW  (max. 1mW possible on retina)	400nm–700nm: 5mW  „Remaining“: 1.95mW	0.5W	> 0.5W

## THE CLASSIFICATION

The first step for the market approval of a laser is the classification according to the standard IEC/EN 60825-1. It places comprehensive requirements on the manufacturers of lasers and manufacturers who install lasers as components in their end products. Based on the classification, manufacturers must create a safety concept for the application of their products.

## THE ADDITIONAL SERVICES

Laser systems are used in the medical, industrial and consumer sectors. Therefore, further normative requirements have to be fulfilled. We are also at your disposal for further tests.

## A SINGLE PARTNER FOR ALL SERVICES!

In addition to our basic testing services, we offer competent support in other areas so you can bring your laser to market quickly and safely!

- ☑ Document management of product labeling and accompanying documents
- ☑ Information transfer in the context of technical meetings
- ☑ Standard research on the requirements of your target market

## PROVE IN GERMANY, EXPORT WORLDWIDE

A special highlight is our state-of-the-art laser testing laboratory in Berlin. It is accredited by DAkkS (ILAC) and also holds accreditation from CBTL (IECEE), so we can offer you certification according to the CB procedure. From there, we test your lasers for all of Europe and the world.

## Why TÜV Rheinland?

### GLOBAL BRAND

With more than 150 years in testing, inspection and certification, we are a longstanding respected and recognized company serving major brands around the world.



### EFFICIENT AND RELIABLE SOLUTIONS

Our team of qualified experts located worldwide provides clarity on regulations specific to your product and simplify the testing process for multi-market access needs.



### ONE TEAM

Our highly experienced experts have practical knowledge of the entire product development lifecycle in addition to the tests, and certification requirements.



### PARTNER

Our worldwide network of accredited laboratories offers our customers access to an extensive range of services with additional support in key manufacturing and destination markets.



### TAKE THE NEXT STEP

Do you want to learn more about our services for the testing of lasers? Visit our new website [www.tuv.com/laser-testing](http://www.tuv.com/laser-testing) to see our complete service portfolio.

Or take the next step and request your non-binding quote today! We support you to access a market with your high-quality lasers quickly and easily.

[CONTACT US NOW!](#)

TÜV Rheinland LGA Products GmbH  
Alboinstraße 56, 12103 Berlin, Germany  
Phone: +49 221 806 1414  
[solar-products@de.tuv.com](mailto:solar-products@de.tuv.com)  
[www.tuv.com/laser-testing](http://www.tuv.com/laser-testing)

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