

Manufacturer Declaration laser safety window P1N01

The laser safety window P1N01 is certified according to DIN EN 60825-4 with the following protection:

200-535nm | 37,7 kW/m² | T2 | t_{max} = 105s

It has passed the following laser tests that have been conducted by an independent institute according to DIN EN 207:

Wellenlänge [nm]	Prüfbedingung/Schutzstufe	Benötigte Leistungs- / Energiedichte	Strahldurchmesser d ₆₃	Pulsdauer t _p	Pulsfrequenz	Gemessene Durchschnittsleistung	Entspricht gemessener Schutzstufe
248	D LB6	1,0x10 ³ W/m ²	1,0 mm	40 ns	25 Hz	3,3 W	1,2 x D LB9
248	R LB3	3,0x10 ⁴ J/m ²	1,0 mm	40 ns	10 Hz	1,8 W	5,9 x R LB3
266	M LB6Y	3,0x10 ¹⁶ W/m ²	0,5 mm	120 fs	1kHz	80 mW	0,93 x M LB6Y
532	D LB5	1,0x10 ⁶ W/m ²	1,0 mm	10 ps	200 kHz	0,82 W	1,0 x D LB5
532	R LB6	5,0x10 ³ J/m ²	1,0 mm	9 ns	10 Hz	0,1 W	6,8 * R LB6
532	M LB6Y	1,5x10 ² J/m ²	0,5 mm	10 ps	50 kHz	250 mW	3,7 x M LB6

If the optical density (OD) is at least as high as the safety level, the tested and passed safety level can be used also for the surrounding wavelengths. Please take into account the OD specification of your laser safety window.

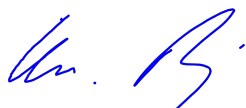
Furthermore, the safety levels can also be used for other wavelengths, as long as they are sufficiently backed by similar tests and the material does not show significantly deviating behavior during laser testing.

We therefore confirm the deduced protection levels for the laser safety window P1N01:

180-315 D LB6 + IR LB3 + M LB6Y	>535-538 DIRM LB4
>315-391 D LB5 + IR LB6 + M LB6Y	>538-541 DIRM LB3
>391-<445 DIRM LB5	>541-545 DIRM LB2
445-532 D LB5 + IR LB6 + M LB6Y	>545-550 DIRM LB1
>532-535 DIRM LB5	

Caution: While the underlying test report remains valid without expiration, the DIN EN 207 certificate for P1N01 has formally expired and not been renewed. Laservision confirms that the material has not been changed since testing and certification, nevertheless the here stated safety levels are not formally certified.

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i.V. Christian Penninger

Head of Product Development